



Daffodil International University

Department Of Software Engineering, FSIT

SWE-431 Project/Thesis

Project Documentation

Audit Application

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I am very grateful to my father, he always inspires me and always gives value to my opinion. My mother, who is an ideal women to me and my favourite person, has always given me courage and immense love. I am very thankful to parents for their immense love and affection.

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Chapter-1

Introduction

1.1 Overview:

Audit application, totally web based software, is a running project of Bangladesh police women network (BPWN). I am very privileged to work with this project. By keeping the records of accounting information and member's information in online, this project will help BPWN organization. Before this project, they need to keep their records on paper or on something else. To keep record on paper is so expensive as well as time-consuming. By the help of this project they will get rid from both of the problem.

This project is only usable for BPWN'S members and audit person, who will maintain project this project by keeping the records. To use this project both of the person, audit person and BPWN'S members need to log In with separate username and password. If audit person log in with BPWN'S members username and password he will not able to log in. So he need his username and password to log in and maintain the project. BPWN'S members can only see the account summary, transaction details etc. and can also print a record. But he will not able to insert or update any data in this project. System will get automatically a financial year by the time of users log in. Then at the time of inserting any record, all the records will save on the basis of that financial year. If any financial year will not open, system will automatically redirect to the financial open page. After opening a financial year, audit person will able to insert their records. A summary will generate against a financial year.

Audit person will not be able to update the previous year record. At the end of the year, by closing the financial year, that financial year will be a previous year. In member's info part, users will able to see all the members' details. And also see due subscription member's name. There is a subscription fee, help BPWN organization to run and develop. Subscription fee, denoted as their income, is a fixed amount of money for all the members of BPWN order by their police post. In this way this project will help BPWN organization to keep records safe and secure.

1.2 Purpose

Audit application is for keeping records of incomes, expenses and member info, in a word this application is for accounting purpose.

1.2.1 Background:

BPWN organization, has income from different source, has expense in arranging different programs and doing many productive things. They have to keep this income and expense on the papers. In a traditional way, to keep records on papers is very expensive and is also time-consuming. To get rid from this problem, they proposed a software for them to my supervisor Iftekhar Alam Efat, then my teacher has given me an opportunity to work with this project.

1.2.2 Benefits:

Audit application is very beneficial for BPWN organization because:-

1. It consume time and money.
2. It will generate reports automatically.
3. BPWN members can see their income and expenses anytime.
4. If their income is less expense, they can be aware.
5. Easy to find out any members details at any time.
6. Easy to find out which members did not reimburse their subscription fees.
7. This software is easy to use.
8. This software is safe and secure.

1.3 Stakeholders:

There are many members associate with this project. They have helped to develop the system directly or indirectly.

Internal Stakeholders:

1. Audit person
2. BPWN members
3. Technical engineers

External Stakeholders:

1. Bangladesh Police

1.4 Propose System Model

For developing audit application system I have proposed a system model. This model will clarify the system in a brief.

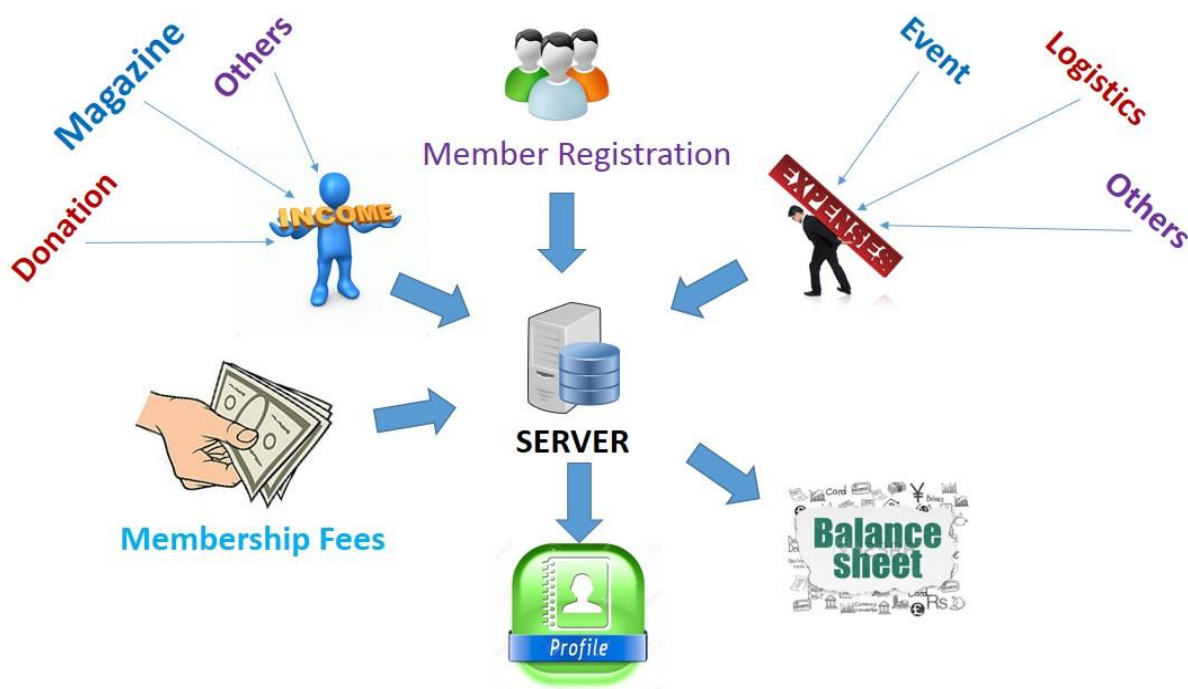


Figure-1.1: Propose System Model

In this system income will come from different category. To input an amount first audit person should select the category first. And user also need to a financial year. All the income data will save against a financial year. Membership fees is denoted as an income. In membership fees one or many members can reimburse their fixed amount of money at a time. If total amount of money will not match with selected members amount system will give any chance to save. So, the income account will not be at sixes and sevens. In expense, members can expense in different category. This system will allow user to insert categories wise amount at a time. After inserting income and expense data, users see a summary based on incomes and expenses data. Users will be notified if the income amount is less than expense amount. And users will also see the transaction details and print them in a pdf format. Audit person and the members of BPWN will able to see registered members profile only. If a new member come she need to register herself first. After that she will able to see her profile. Members will see ID, Name, Picture, Working area, Post, Rank.

1.5 System process:

The following model depicts, how this audit application work and also show its process.

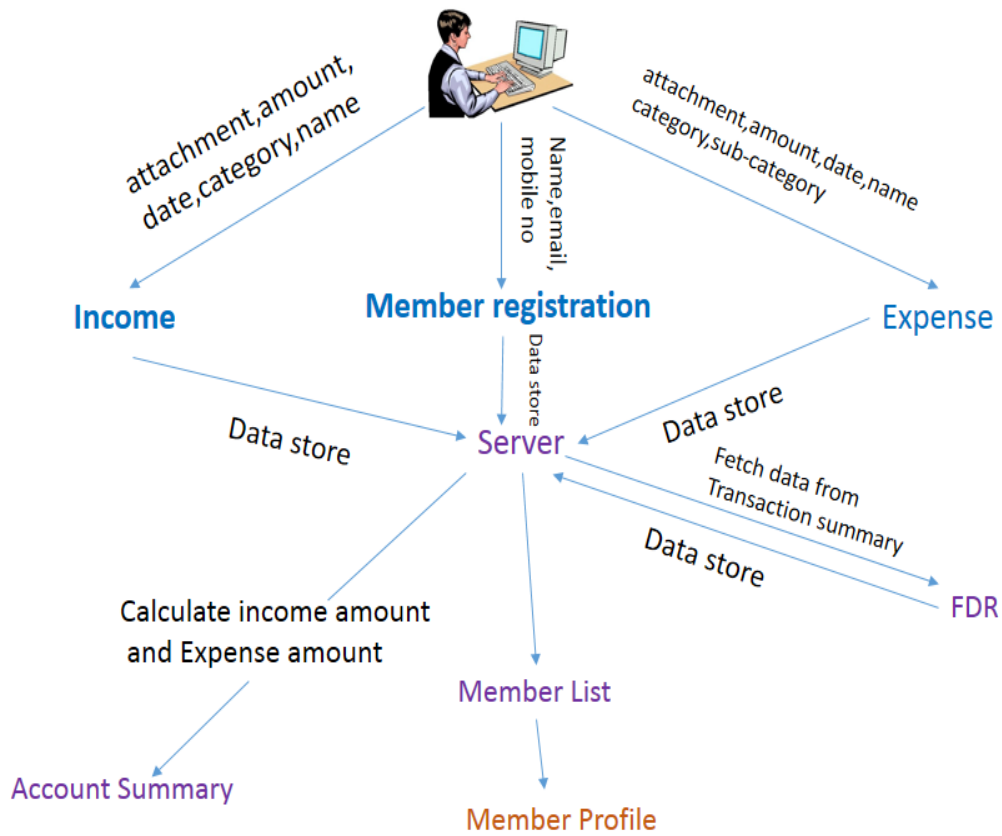


Figure 1.2: System Process Model

1.6 Project Schedule

For developing project or something else, schedule helps for proper planning. I also make a schedule for developing and executing my project properly.

1.6.1 Gantt chart

Stakeholders will get a clear view of this project, about its completion time by seeing the following gantt chart.

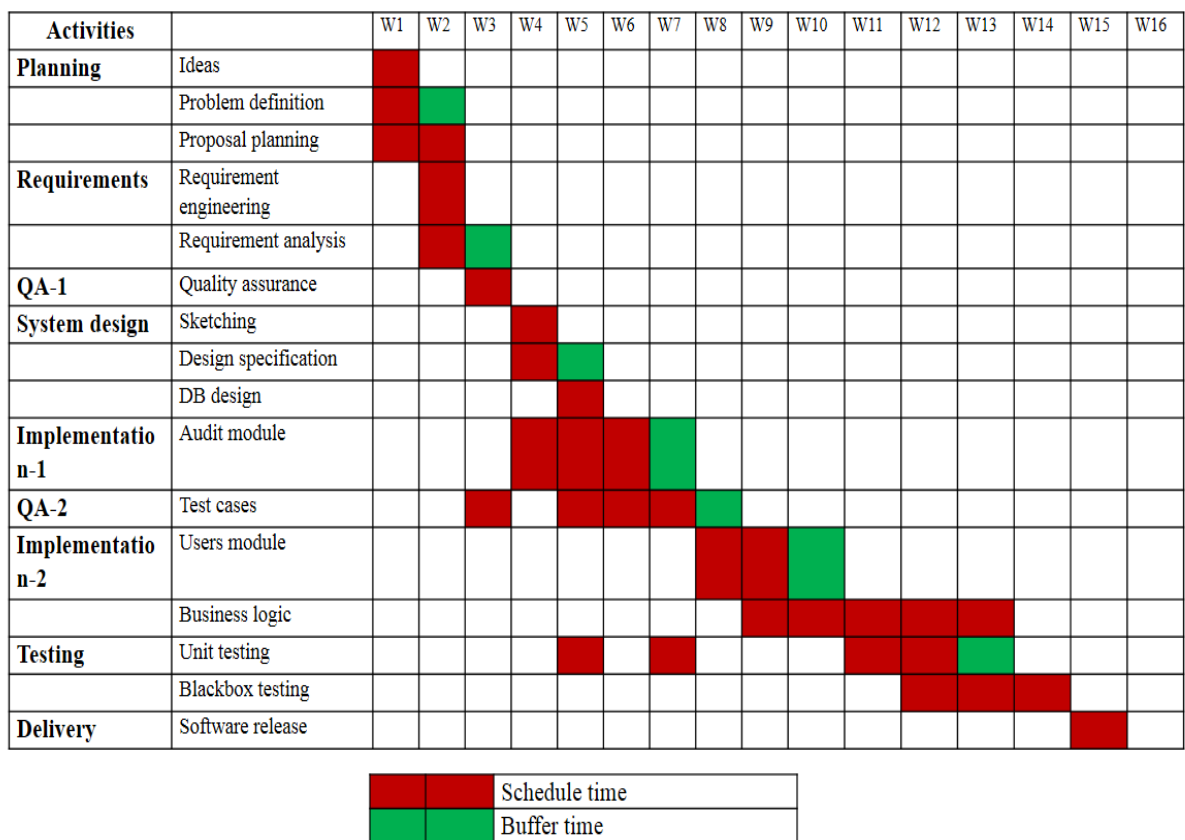


Figure-1.3: Gantt Chart

1.6.2 Milestones/Deliverables

Milestones, a timeline of a project, will clarify the task. This project milestones are as follows:

Task No	Task Name	Time
1	Requirements gathering and analysis	2 week
2	Sketching the overall system	1 week
3	Database design	1 week
4	UI design	1 week
5	Implementing the business logic	1 week
6	Testing	3 week
7	Evaluating the project	1 week

Chapter-2
Requirement Specification

2.1 Functional Requirements

The whole project have to develop on the basis of the following requirements.

2.1.1 Recording Income

FR-1	Recording Income
Description	There are many income source of Bangladesh police women network. Like income from monthly magazine, donation, membership fee and etc. All these things have to record on the database.
Stakeholders	BPWN members, Bank, Audit related members.

2.1.2 Recording Expense

FR-2	Recording Expense
Description	Like Income, they have many field to expense money, such as they have programme, for arranging this programme they will expense in decoration, crest to give their members and etc. All this things should have to record.
Stakeholders	BPWN members, expense medium, audit related members.

2.1.3 Membership Fees

FR-3	Membership fees
Description	All the members of BPWN, have a yearly subscription fees. This subscription fee has a specific amount on the members rank wise. Members can give one or more membership fees altogether at a time.
Stakeholders	BPWN members, Bank, Audit person

2.1.4 Summary of Income and Expense

FR-4	Summary of income and expense
Description	After record their income and expense, they will see from where they got income and spend their money. And also they can see total amount and they will get an alert if the income amount is less then expense amount.
Stakeholders	BPWN members, audit person

2.1.5 Due Report

FR-5	Due Report
Description	The members, who will not submit their subscription fees will marked as due.
Stakeholders	BPWN members, audit person

2.1.6 Member Registration

FR-6	Member Registration
Description	They can add new members in their organization. To be a member, member have to be a police.
Stakeholders	New BPWN members, audit person

2.1.7 Member List

FR-7	Member List
Description	Should have a field to see all members of BPWN.
Stakeholders	BPWN members

2.1.8 Income List

FR-8	Income List
Description	Income list will count as a report. On report they can see all the income source and details.
Stakeholders	BPWN members, audit person

2.1.9 Expense List

FR-9	Expense List
Description	Same as income list
Stakeholders	BPWN members, audit person.

2.1.10 Transaction Details

FR-10	Transaction Details
Description	Members can see the details of their transactions, like after inserting the income and expense member will see date, medium, category, attachment and etc.
Stakeholders	BPWN members, audit person.

2.1.11 Adding Category

FR-11	Adding category
Description	There will be some income and expense category which will be predefined. If the category will exist audit person can add it.
Stakeholders	Audit person.

2.1.12 Financial Year

FR-12	Financial Year
Description	Income, expense and member registration record will save and show on basis of a financial year.
Stakeholders	BPWN members, audit person.

2.1.13 Open and Close Financial Year

FR-13	Open and close financial year
Description	There will have an option to open and close a financial year.
Stakeholders	Audit person.

2.1.14 Member Profile

FR-14	Member profile
Description	Member details like members post, rank, mobile number, email, working area all these details will show on this field.
Stakeholders	BPWN members, audit person.

2.1.15 Edit Option

FR-15	Edit Option
Description	In the time of inserting the data audit person can make mistake on typing, so there should have an option for correction the mistake.
Stakeholders	BPWN members, audit person.

2.1.16 Printing Option

REQS-16	Printing option
Description	If the members of BPWN want to print the transaction detail and account summary then they will be able to print.
Stakeholders	BPWN members, audit person.

2.2 Performance Requirements:

It's very important to maintain the performance of the project. To ensure a good performance, this project have to meet some requirements which will ensure a good performance.

2.2.1 Speed and latency requirements

While inserting or viewing the system in the browser, system need a minimum amount of speed to perform the task.

SLR-1	The system will be faster
Description	While the audit person and members of BPWN browsing the system the system will be up. It also depends on audit person and members of BPWN'S internet connection.
Stakeholders	Audit person and BPWN'S members

2.2.2 Precision and accuracy requirements

System have to ensure the precision and accuracy of the data.

PAR-1	Data accuracy
Description	Data should have to accurate at the time of inputting. If the data will not accurate system will not allow to save the data. Like in the membership fees, if total inputting amount will not match with total amount of selecting member's fees, system will not allow to save.
Stakeholders	Audit person and BPWN'S members

2.2.3 Capacity Requirements

System is able to manage all the inserting data of audit person

CR-1	The system will manage all the inserting data in database.
Description	Data of income, expense, membership fees, member information will be stored in the database.
Stakeholders	Audit person

2.3 Dependability requirements

By the terms of dependability, it does not mean that this project is totally rely on something. Here, dependability means the running time of this project.

2.3.1 Reliability and availability

In order to support global and smooth operations the system must be available around the clock. On the other hand most services in this system are not mission-critical.

RAR-1	The system must be available 24x7
Description	<ul style="list-style-type: none"> • The system must be available 24 hours in a day • The system must be updated regularly • The system must generate report and other things un time
Stakeholders	<ul style="list-style-type: none"> • Audit person • BPWN'S members

2.3.2 Robust and fault tolerance requirements

In every system, there will have some person for destroying something. System will have to handle this type of person easily.

RFT-1	The system handles over access and system errors
Description	Sometimes multiple user can over access to this system. The system can handle multiple user access
Stakeholders	N/A

2.3.3 Safety critical requirements

There are no specific safety critical requirements

2.4 Maintainability and supportability

To look after or maintain and support the project some person have to associate with this project.

2.4.1 Maintenance requirements

MR-1	System helps to update the accounts information and member info at any time
Description	Audit person can insert income, expense, member info. This data will stored and update at any time
Stakeholders	Audit person

2.4.2 Supportability Requirements Specification

SRS-1. In order to understand the system's behavior on a technical support required by the system operator. The reason for reading them might be

SRS-2. System malfunction has occurred and the system operator has to find the exact point of time when this happened

SRS-3. System produces wrong results and the developers must be able to reproduce the data flow through the system

SRS-4. Hacker tried to breach the system's security mechanisms and the system operator must understand what he did

2.4.3 Adaptability requirements

There are no specific adaptability Requirements.

2.5 Security requirements

There are no access requirements beside those that have been outlined in the below:

SR-1. Log in as an audit person

SR-2. Log in as a BPWN'S member

SR-3. Log out as an audit person

SR-4. Log out as a BPWN'S member

To get access to this system or a specific module the system must provide a central authentication mechanism. In order to prevent anyone to exploit stolen participants all participants password must be encrypted in hash process.

2.5.1 Access requirements

To get access to the system, the system provides authorization/authentication way. This system uses various modules.

AR-1	The system provides security strategies.
Description	The system is designed in way that allows all modules to access a mechanism that provides security services.
Stakeholders	<ul style="list-style-type: none">• Audit person• BPWN'S members

2.5.2 Integrity requirements

To protect credentials of user from being stolen, all passwords are stored in encrypted form. The Requirements significantly reduces the value of stolen user credentials, it's not easy to decrypt the password.

2.5.3 Privacy requirements

The system provides a protection of the database in the server. However, the system will have to increment this level of protection because of the personal data mode available on the system & the larger share of people that will be having access to it through the system's registration. The user's privacy will be granted by the limited access that the log in process is going to give to the database.

PR-1	All data will be protected
Description	The main requirement in the context is the generation of participant's data for analysis.
Stakeholders	<ul style="list-style-type: none">• Audit person• BPWN'S members

2.6 Usability and human integrity requirements

This system is easy to use and only usable for the members of the BPWN'S organization.

2.6.1 Ease of use requirements

The system is easy to use and can easily be understandable.

EUR-1	The system must be usable for participants with all associate stakeholders.
Description	The system indicates the several possibilities that the participants has to go on in using the system. The participants is allowed to undo any of the operation.
Stakeholders	<ul style="list-style-type: none">• Audit person• BPWN’S members

2.6.2 Understandability and Politeness Requirements

This section describes more requirements of audit person and BPWN’S members to add more features in future

UPR-1	The features of participants information
Description	The system is more efficiently ease of use more added features .The system is understandability for both user. The system will not use any term that is not specified in this system.
Stakeholders	<ul style="list-style-type: none">• Audit person• BPWN’S members

2.6.3 Accessibility Requirements

There are no specific accessibility requirements.

2.6.4 User Documentation

UDR-1	The system developer documentation
Description	To develop my project, audit application, I have specified the requirements of user documentation the team 5-4 are involved to my project documentation.
Stakeholders	System Developer

2.7 Look and Feel

There should not exist any unnecessary things on this project.

2.7.1 Appearance Requirements

It should be clear to audit person which fields need to be filled and which can be left blank in this system.

AR-1	Labels of mandatory fields must be bold
Description	Labels of mandatory fields must be bold to identify them as being of mandatory.
Stakeholders	<ul style="list-style-type: none">• Audit person

2.7.2 Style Requirements

User interface will be web based. For styling the interface and making lucrative, I need to use CSS, CSS framework as bootstrap, JavaScript

SR-1	The look and feel must be controllable using style sheet.
Description	The styling of the elements of the web based user interface will be defined using CSS, JavaScript and bootstrap.
Stakeholders	<ul style="list-style-type: none">• Audit person• BPWN'S members• Technical engineer

2.8 Operational and Environmental Requirements

Operational and environmental requirements is very important because this project may not work in every environment and its operation may not accurate in every time.

2.8.1 Expected Physical Requirements

There is no specific expected physical requirements.

2.8.2 Requirement for Interfacing with Adjacent System

There is no specific interfacing with adjacent system requirements.

2.8.3 Release Requirements

There are no specific release requirements but in the project schedule section it was described briefly.

2.9 Legal Requirements

Fraudulent data and engaging third party software or third person is totally prohibited.

2.9.1 Compliance Requirements

Compliance requirements are only guidelines for compliance with the hundreds of laws and regulations applicable to the specific type assistance used by the recipient, and their objectives are generic in nature due to the large number of federal programs. Each compliance requirement is identified by a letter, in alphabetical order.

2.9.2 Standard Requirements

To comply with the Open Standards Requirement, an "open standard" must satisfy the following criteria. If an "open standard" does not meet these criteria, it will be discriminating against open source developers.

- **No Intentional Secrets:** The standard **MUST NOT** withhold any detail necessary for interoperable implementation. As flaws are inevitable, the standard **MUST** define a process for fixing flaws identified during implementation and interoperability testing and to incorporate said changes into a revised version or superseding version of the standard to be released under terms that do not violate the OSR.
- **Availability:** The standard **MUST** be freely and publicly available (e.g., from a stable web site) under royalty-free terms at reasonable and non-discriminatory cost.
- **No Agreements:** There **MUST NOT** be any requirement for execution of a license agreement.

Chapter-3

Requirements Analysis

3.1 Use Case Diagram

The following diagram has been depicted with two users. The relationship of different node with this two users clarify the system in brief.

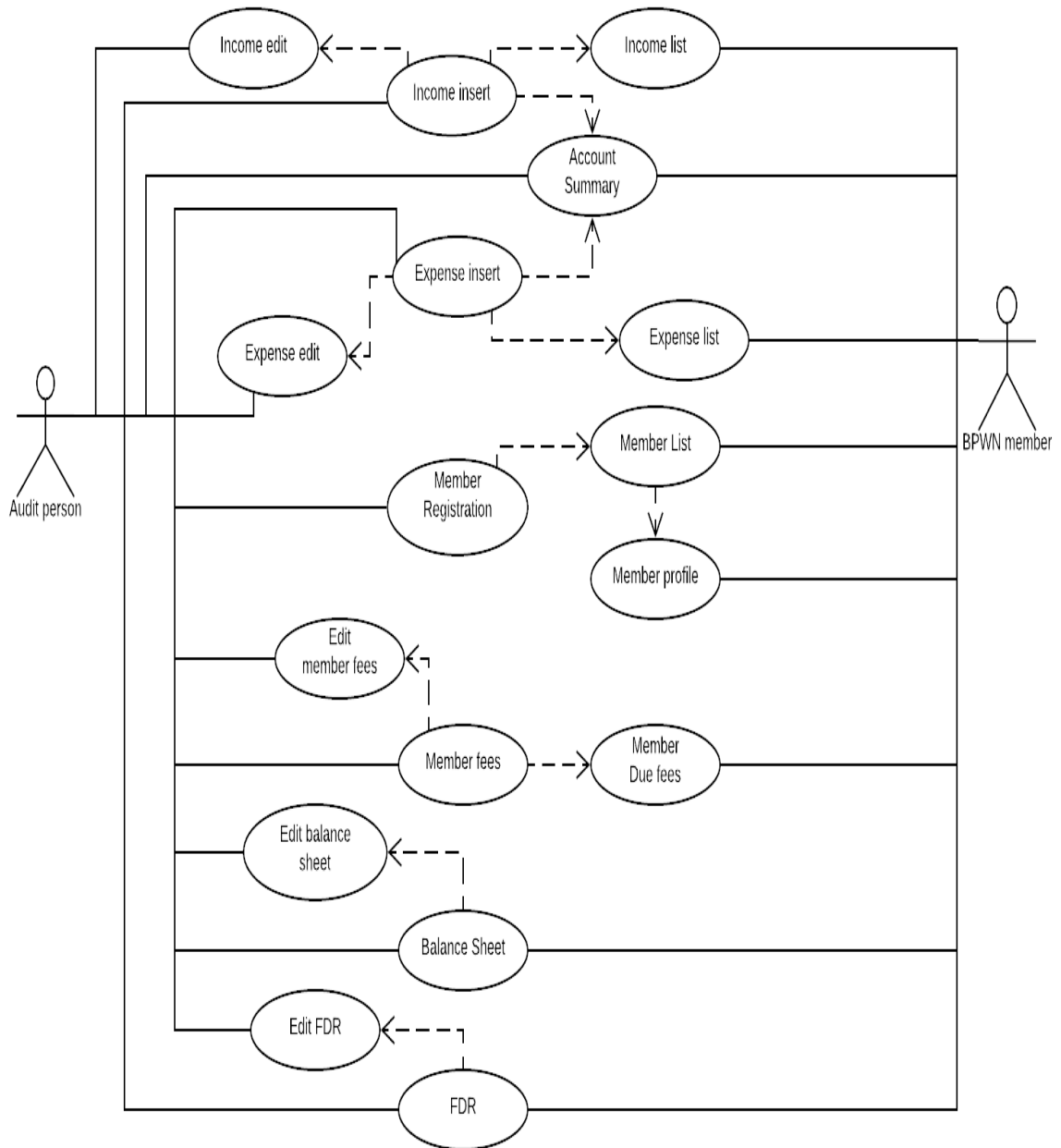


Figure-3.1: Use-Case Diagram

3.1.1 Income Insert and Edit

Use case title	Income insert and edit
Goal	Insert data to database
Preconditions	User should authentic herself/himself
Success End Condition	Organization has income data to insert.
Failed End Condition	Organization has not send the data yet.
Primary Actors:	Audit person.
Secondary Actors:	BPWN members.
Trigger	Income data comes to audit person
Description / Main Success Scenario	<ul style="list-style-type: none"> • Audit person can insert income data. At the time of inserting income data, he have to choose financial year. • If the audit person make mistake in the time of inputting income data then he can edit that data.
Alternative Flows	N/A
Quality Requirements	N/A

3.1.2 Income List

Use case title	Income List
Goal	Showing income list
Preconditions	Must have some income data in the database
Success End Condition	Members can be clarified about their income
Failed End Condition	Redirect to general income page
Primary Actors:	Audit person.
Secondary Actors:	BPWN members.
Trigger	Income data comes to audit person
Description / Main Success Scenario	Income list will be viewable for audit person and BPWN member after inserting data.
Alternative Flows	N/A
Quality Requirements	N/A

3.1.3 Expense Insert and Edit

Use case title	Expense insert and edit
Goal	Insert data to database
Preconditions	User should have to be audit person
Success End Condition	Organization has income data to insert.
Failed End Condition	Organization has not send the data yet.
Primary Actors:	Audit person.
Secondary Actors:	BPWN members.
Trigger	Expense data comes to audit person
Description / Main Success Scenario	<ul style="list-style-type: none"> • BPWN organization can expense their income able money by arranging different type of programme. After expensing money, a list will be given to audit person. Then audit person will insert all that data in the database. • Expense will be editable after inserting but will not be editable previous financial year data.
Alternative Flows	N/A
Quality Requirements	N/A

3.1.4 Expense list

Use case title	Expense list
Goal	Showing the expense data
Preconditions	User should have to be audit person or BPWN'S member
Success End Condition	Users will see list of expense data that have been inserted
Failed End Condition	Redirect to the expense page to insert data
Primary Actors:	Audit person.
Secondary Actors:	BPWN members.
Trigger	Expense data comes to audit person
Description / Main Success Scenario	<ul style="list-style-type: none">• Stored expense data will generate as report• Members of BPWN and audit person can see it any time.
Alternative Flows	N/A
Quality Requirements	N/A

3.1.5 Account Summary

Use case title	Account Summary
Goal	Showing data by calculating the sum total of income and expense data.
Preconditions	Must have some income and expense data on the database
Success End Condition	Red colour for higher expenses and Green colour for higher incomes.
Failed End Condition	Redirect to the general income and expense page
Primary Actors:	Audit person.
Secondary Actors:	BPWN members.
Trigger	N/A
Description / Main Success Scenario	After record their income and expense, they will see from where they got income and spend their money. And also they can see total amount and they will get an alert if the income amount is less then expense amount.
Alternative Flows	N/A
Quality Requirements	N/A

3.1.6 FDR

Use case title	FDR
Goal	Adjusting bank's fixed deposited money with the financial year's additional money
Preconditions	User should have to be audit person
Success End Condition	A list will generate after inserting FDR data
Failed End Condition	A new blank form will load
Primary Actors: Secondary Actors:	Audit person N/A
Trigger	Fixed amount and principle amount will be adjusted
Description / Main Success Scenario	<ul style="list-style-type: none"> • A interest will generate against the fixed amount after a year end • Principle amount will be calculated with fixed amount
Alternative Flows	N/A
Quality Requirements	N/A

3.1.7 Member Registration

Use case title	Member Registration
Goal	Inserting member's data to the member table.
Preconditions	User should be audit person
Success End Condition	Members data will be successfully stored
Failed End Condition	Audit should check the inserting data and should try again
Primary Actors:	Audit person.
Secondary Actors:	N/A
Trigger	New members data come to audit person hand
Description / Main Success Scenario	If a new member wants to join in BPWN. All the necessary data of new member will be included.
Alternative Flows	N/A
Quality Requirements	N/A

3.1.8 Member List and Profile

Use case title	Member List and Profile
Goal	Showing members data.
Preconditions	Some data of members of BPWN have to store on the database
Success End Condition	User will see the list and details of BPWN'S members
Failed End Condition	Redirect to the member registration page
Primary Actors:	Audit person.
Secondary Actors:	N/A
Trigger	New members data come to audit person hand
Description / Main Success Scenario	If a new member wants to join in BPWN. All the necessary data of new member will be included.
Alternative Flows	N/A
Quality Requirements	N/A

3.1.9 Member Fees

Use case title	Member Fees
Goal	Inserting income data of member fees.
Preconditions	<ul style="list-style-type: none"> ➤ User should have to be audit person ➤ Desired member details should exist on the database ➤ Members subscription status should have to be 'N'
Success End Condition	Subscription status of paid member will update automatically.
Failed End Condition	Form will blank and audit person will be requested to insert the data again.
Primary Actors:	Audit person.
Secondary Actors:	N/A
Trigger	New members data come to audit person hand
Description / Main Success Scenario	<ul style="list-style-type: none"> • Member fees is defined as income data • All member of BPWN have a subscription fees which is to payable around a year • One or more members can give their subscription fees at a time at the bank • Total paid amount will cross check with the total amount of members who have paid their subscription fees altogether • If the cross will correct then the member paid status will update automatically • This data will be stored against a financial year
Alternative Flows	N/A
Quality Requirements	N/A

3.2 Activity Diagram

Following activity diagrams are precisely depicting the flow of the different state of the project.

3.2.1 Income activity

First state of income activity is inserting data. After that data will be checked. Then if any condition it will check one by one.

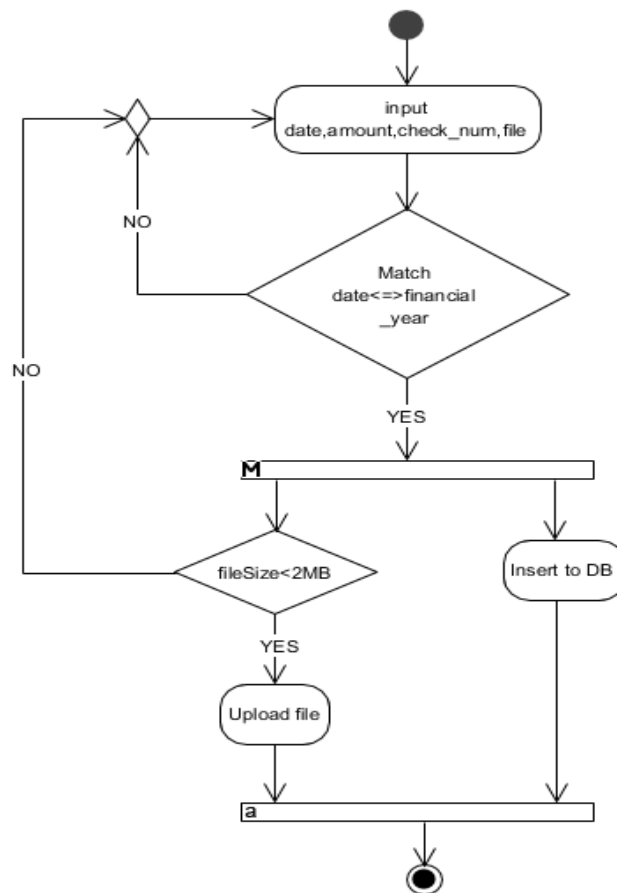


Figure-3.2: Income Activity

3.2.2 Expense Activity

Diagram of expense activity is little bit similer to income activity. In income activity it will not input category but here, it will take this type of input.

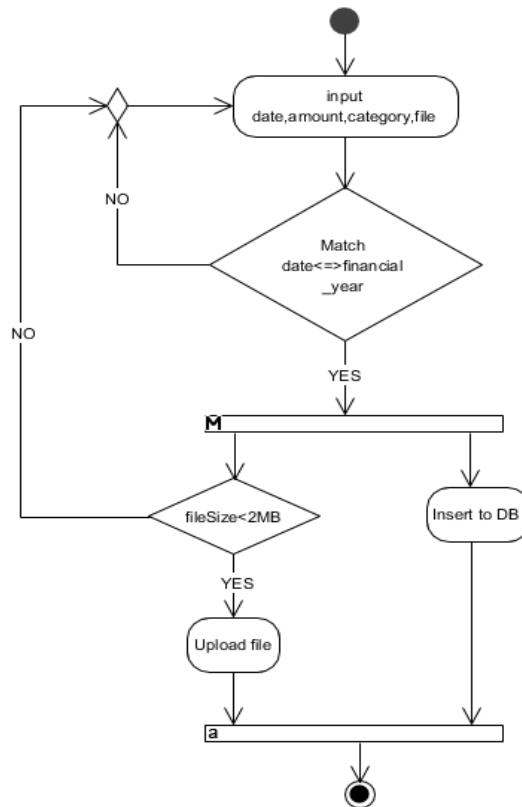


Figure-3.3: Expense Activity

3.2.3 Account Summary Activity

In this diagram, it will check the financial year first. If users will not select any financial year it will select a default financial year.

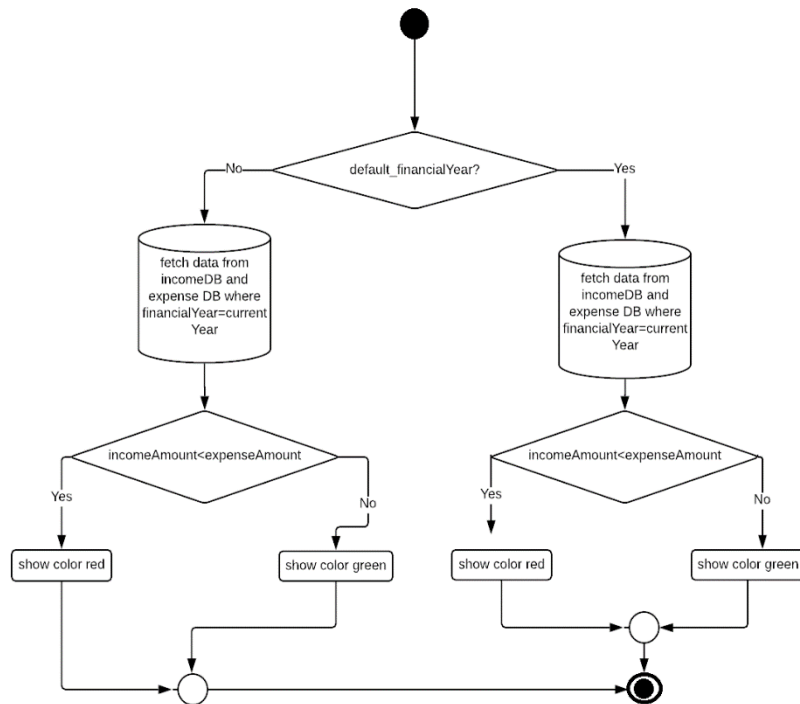


Figure-3.4: Account Summary Activity

3.2.4 Member Registration Activity

After inputting all the member data, here it will check only the file size.

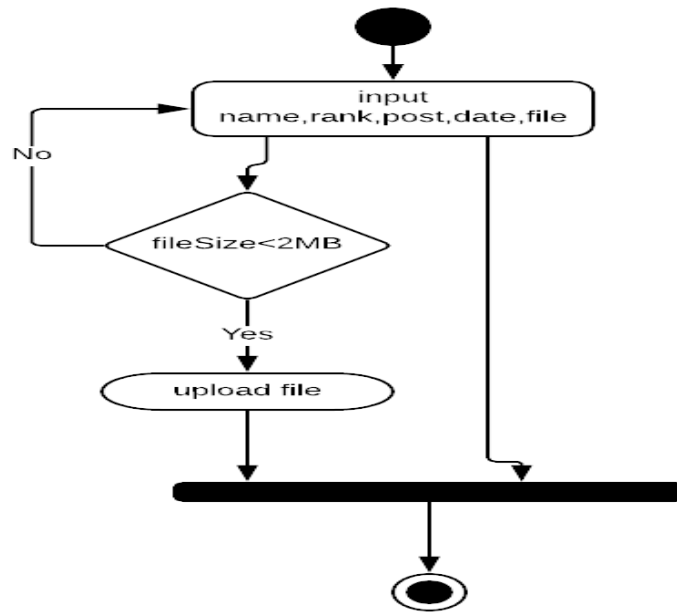


Figure-3.5: Member Registration Activity

3.2.5 Member Fees Activity

Here, in this diagram, there will be checked two state.

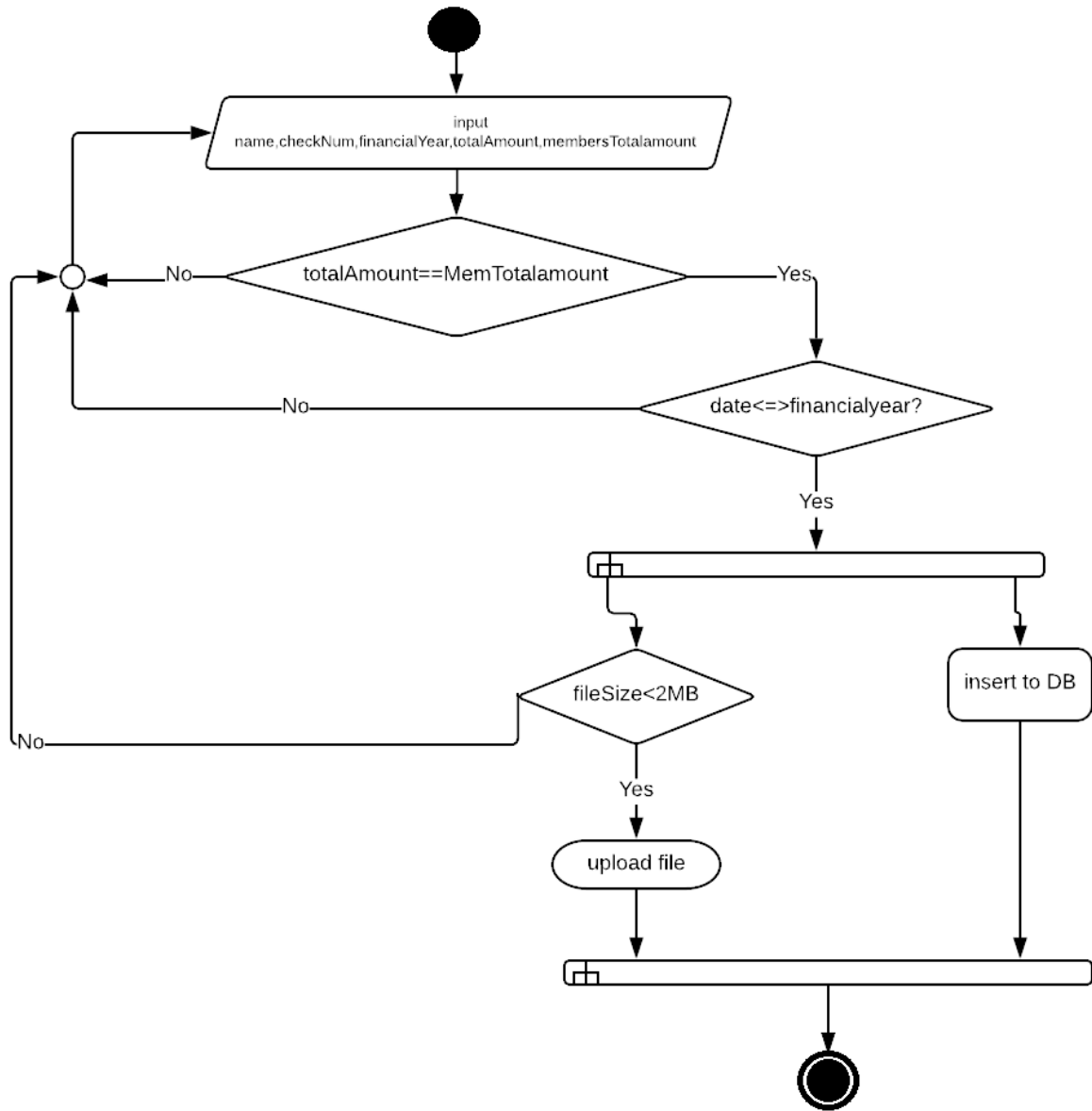


Figure-3.6: Member Fees Activity

3.3 Sequence Diagrams

Data should be flowed sequentially in a project. The following sequential diagrams show the data, in which the data are flowing sequentially.

3.3.1 Income Sequence

How data flows sequentially in income management, following diagram clarify it clearly.

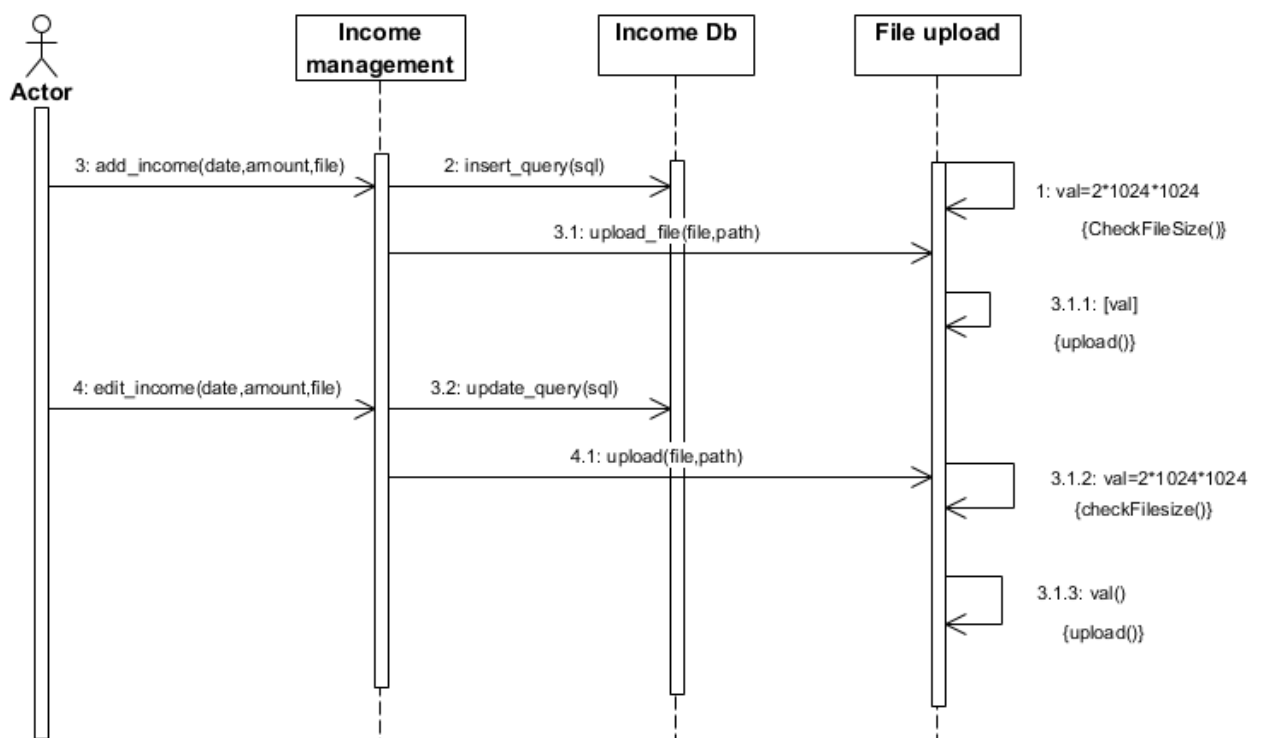


Figure-3.7: Income Sequence

3.3.2 Expense Sequence

Expense sequence is as like as income sequence.

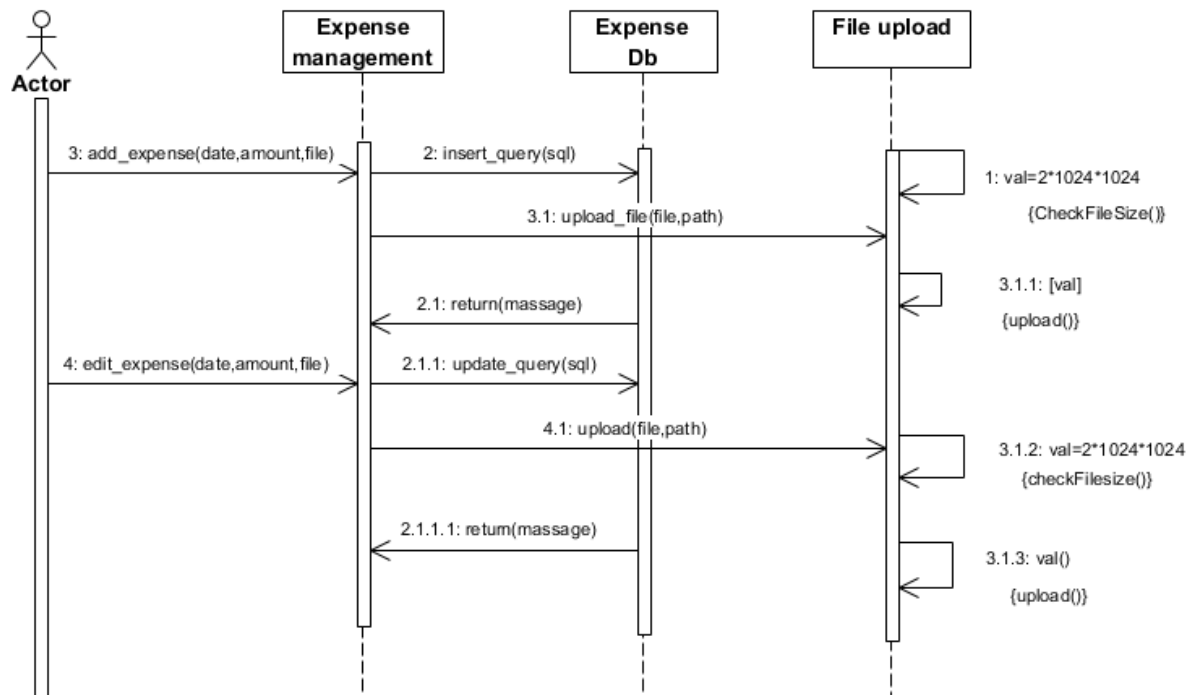


Figure-3.8: Expense Sequence

3.3.3 Account-Summary sequence

Data from income DB and expense DB will be fetched first and then it will calculate the data of income DB and expense DB.

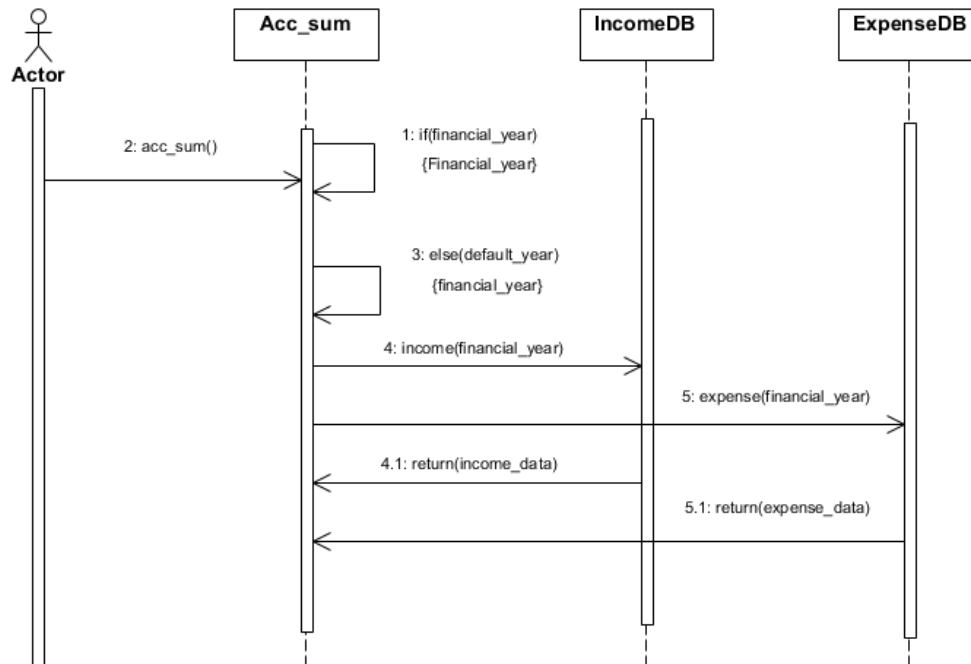


Figure-3.9: Account Summary Sequence

3.3.4 Member Registration Sequence

Members all data that will be inserted by audit person will save in member DB first. Then if any member wanted to see listed member, it will fetched the member's data from member DB.

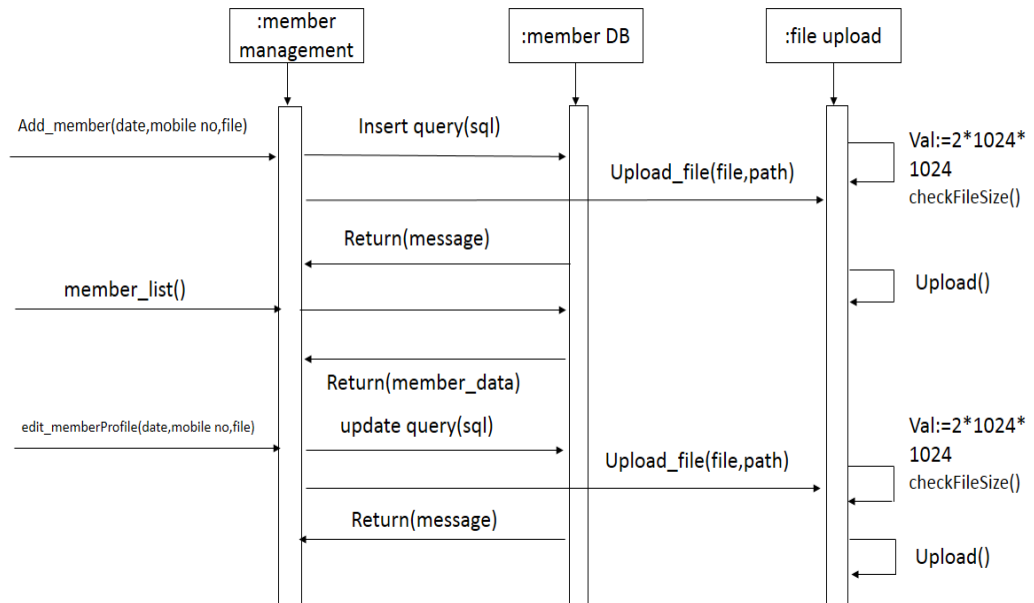


Figure-3.10: Member Registration

3.3.5 Member Fees Sequence

Every members of BPWN has a fixed amount which is payable in every year as their subscription fees.

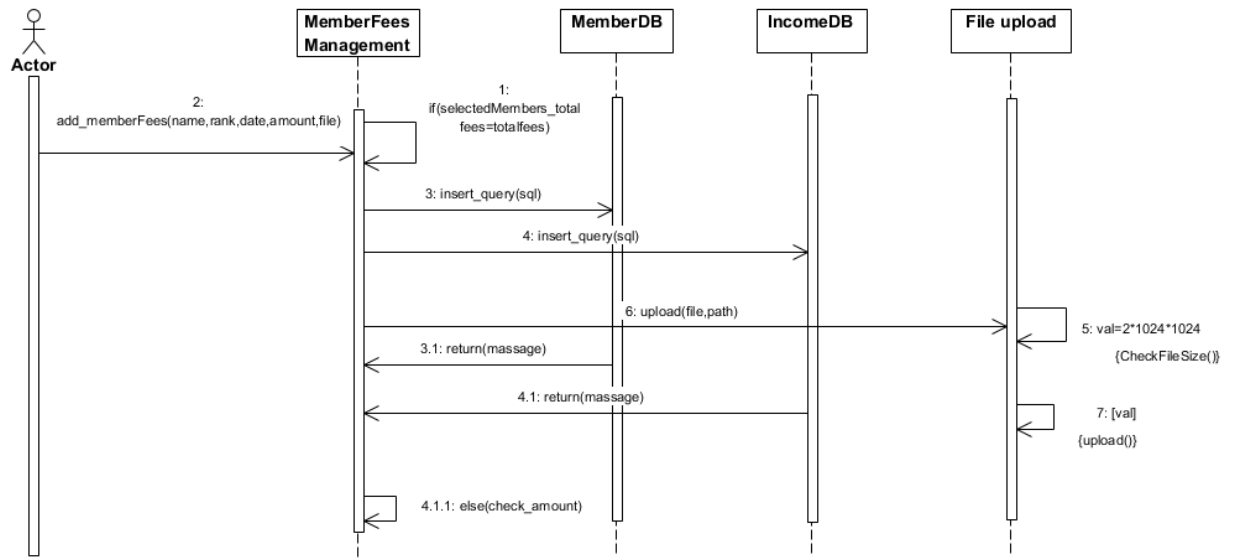


Figure-3.11: Member-Fees Sequence

3.3.6 FDR Sequence Diagram:

Fixed deposit receipt, stored amount in different bank, will be calculated with the total amount of income DB and expense DB.

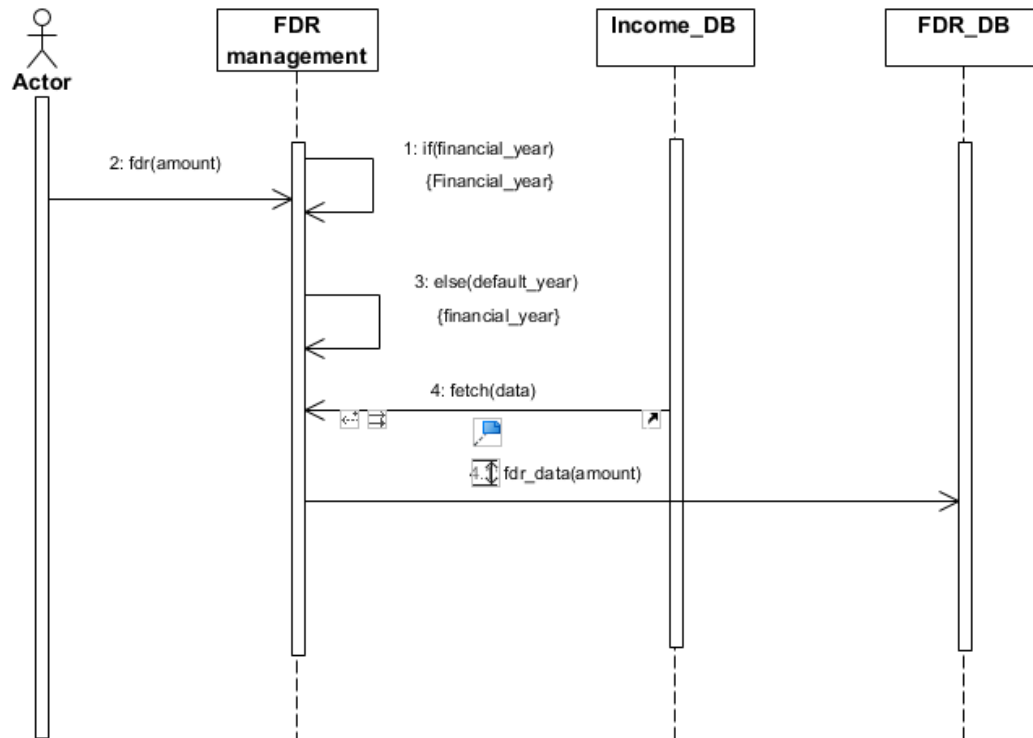


Figure-3.12: FDR Sequence

Chapter 4

Design and Development

4.1 Development tools and technology

Without using tools, development of software is impossible. There are many tools that I have used to develop this software.

4.1.1 User interface technology

User interface (UI) is everything designed into a system view that which person's associates with this system may like the interface of this system.

4.1.1.1 JQuery UI

JQuery is a JavaScript library. JQuery greatly simplifies JavaScript programming. JQuery UI is a curated set of user interface interactions, effects, widgets, and themes built on top of the jQuery JavaScript Library.

Whether you're building highly interactive web applications or you just need to add a date picker to a form control, jQuery UI is the perfect choice. JQuery UI is built for designers and developers alike. We've designed all of our plugins to get you up and running quickly while being flexible enough to evolve with your needs and solve a plethora of use cases.

4.1.1.2 CSS framework or Bootstrap

CSS is a language that describes the style of an HTML document. CSS describes how HTML elements should be displayed. Build responsive, mobile-first projects on the web with the world's most popular front-end component library. Bootstrap is an open source toolkit for developing with HTML, CSS, and JS. Quickly prototype your ideas or build your entire app with our Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful plugins built on jQuery.

After adding some classes to existing elements in the HTML-code and altering some CSS code such as removing some values for width given in pixels the site was changing depending on the width of the window. The bootstrap code is included minified, which means that white spaces are removed to make the file size smaller and therefore make the load time faster for the file which improves the load time for the whole page.

The main design that bootstraps ads without specifically adding design to elements is that when hovering over a link. This is fixed with some simple CSS-code added to the CSS-file, unless the bootstrap CSS-file is included after the original, then bootstrap will override the custom ones and the changes will not be seen. Having some basic knowledge about how Bootstrap works before starting to use it would increase the efficiency and speed one might achieve the goal one has in mind for including bootstrap into the project.

4.1.1.3 Programming Language

For developing this system I have use PHP as a programming language. PHP (recursive acronym for *PHP: Hypertext Preprocessor*) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages.

4.1.2 Implemented tools and platform

The order of execution may vary depending upon the person developing the plan. Some people do better with looking at lots of tools and asking themselves “How can I use these tools to accomplish my goals and which ones do I use?” While others may look at tactics that have been tried and proven successful and determine which tactics best apply to them and their goals. And, many start with developing a sound strategy, then determine which tactics and tools best suits their needs to accomplish their goals.

4.1.2.1 IDE

I have used phpStorm as an IDE for developing this project. jetBrains phpstorm is a commercial cross platform IDE for php built on jet brains interlay idea platform. Phpstorm provides an editor for php, HTML and JavaScript with on the fly code analysis, errors presentation and automated refactoring's for php and JavaScript code. Phpstorm code completion supports php 5.3, 5.4, 5.5, 5.6 & 7.0 including generators co-route lines etc.

It includes a full-fledged SQL editor with editable query results. PhpStorm is built on IntelliJ IDEA, which is written in Java. Users can extend the IDE by installing plugins created for the IntelliJ Platform or write their own plugins. All features available in Webstrom are included in PhpStorm, which adds support for PHP and databases. WebStorm ships with pre-installed JavaScript plugins.

4.1.2.2 Web Server

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP Server was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015. The Apache http server is the world's most used web server software.

Originally based on the NCSA HTTP server, development of Apache began in early 1995 after work on the NCSA code stalled. Apache played a key role in the initial growth of the World Wide Web quickly overtaking NCSA HTTP as the dominant HTTP server & has remained most popular since April 1996. The Software is available for a wide variety of operating system besides Unix, including eCom Station, Microsoft windows, Netware open VMS.

4.1.2.3 Database server

MySQL is an open-source relational database management system (RDBMS). I have used MySQL database to store data of my projects data. Because this database server provides huge storage and this server is very easy to use.

4.3 Class Diagram

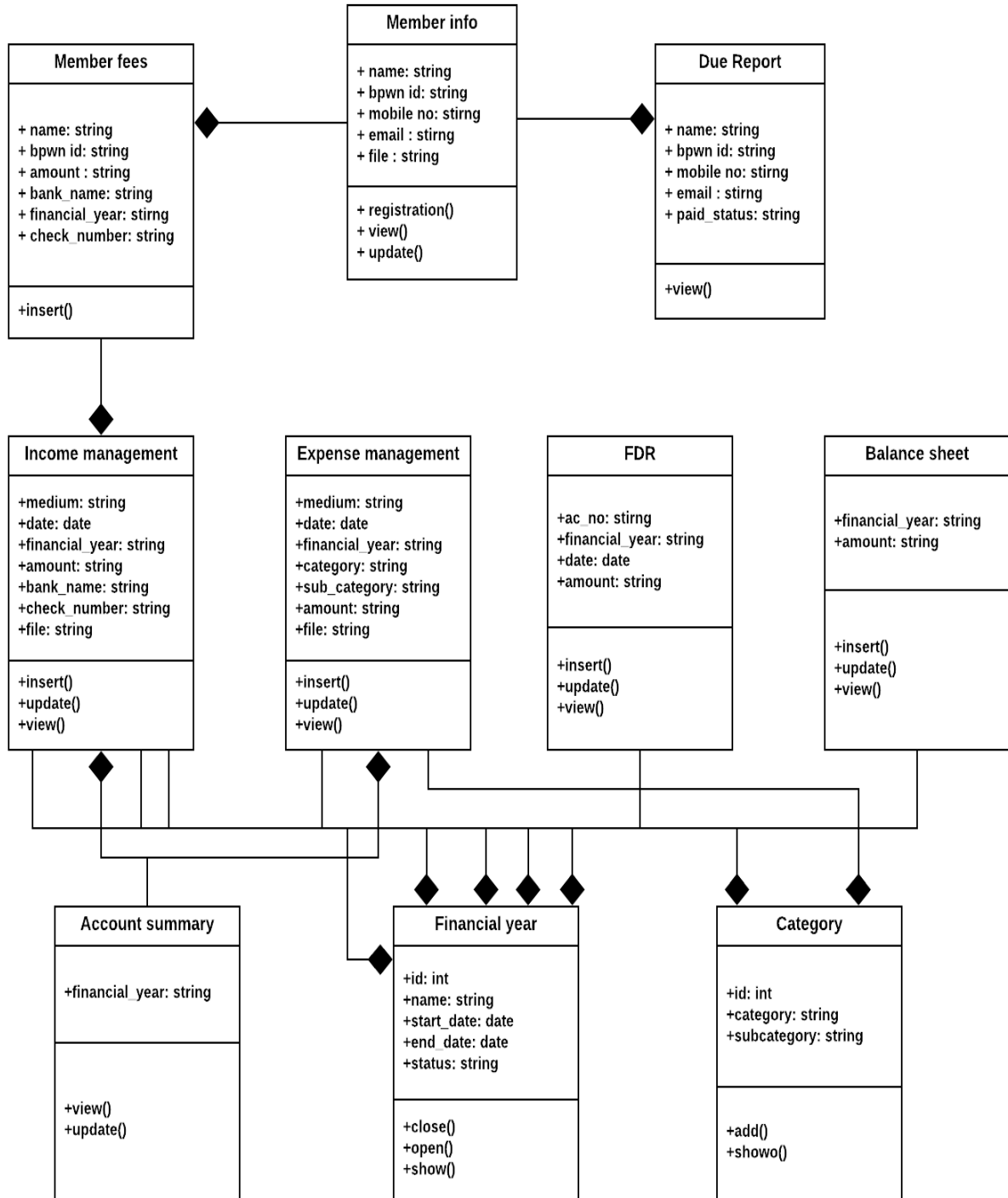


Figure-4.1: Class-Diagram

4.4 Database Diagram

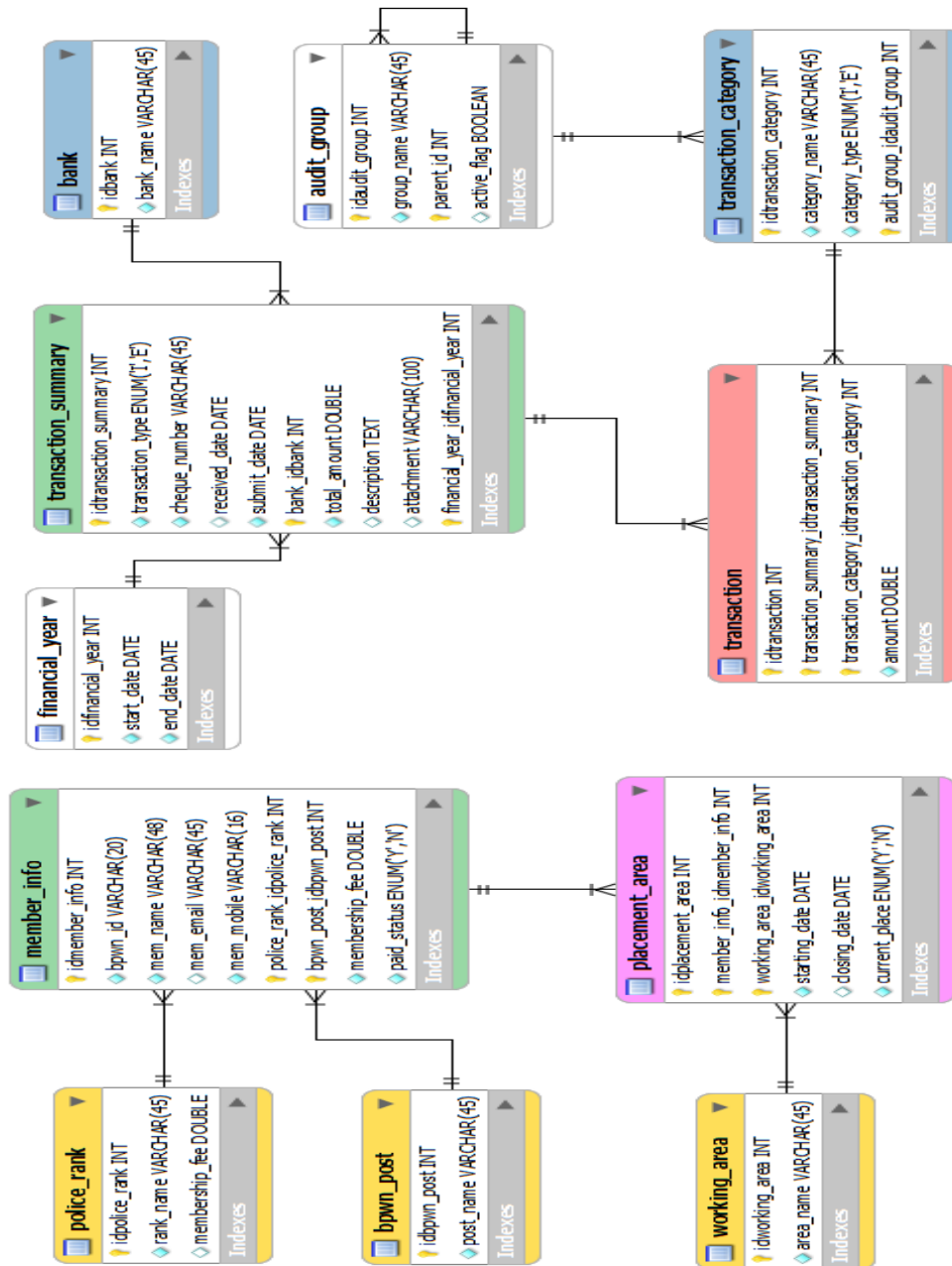


Figure-4.2: Database Diagram

Chapter 5

Test Plan

5.1 Testing Features

Feature testing is the process of making changes in software system to add one or more new features or to make modifications in the already existing features. Each of these feature is said to have a characteristics that is designed to be useful, intuitive, and effective.

5.1.1 Features to Be Tested

Features	Priority	Description
Log in	1	Login as authenticated user.
Logout	1	Logout from the system.
Inserting income data	2	When audit person gets income data.
Inserting expense data	2	When audit person gets expense data
Summary of income and expense data (Account Summary)	3	All the income and expense data will show sequentially.
Registration	1	To be a member of BPWN, member should registered herself first.
Member Profile	1	After registration member, audit person will see the member's profile.
Check equal of total amount in members subscription fees	3	In members subscription fees, members all together amount and members individual amount should match.
Financial year	2	All the data will save and show against a financial year.
Print	1	Some specific page is printable. Printed data should be correct.
Checking income and expense data is editable or not editable	2	Previous year's income and expense data is not editable. Audit person can able to edit or update present year's data only.
Image size	1	Only less than 2MB or equal to 2MB size picture is insert able.
Financial year close and open	3	If audit person doesn't open any financial year, system force users to open a financial year first by redirecting him to financial year open page.
Technological Features		
Database	1	Access to database is frequently needed operation. So this technical feature should be tightly in control for management system

Here, 1=Low Priority; 2=Medium Priority; 3=High Priority

5.2 Testing Strategy

A testing strategy is a general approach to the testing process rather than a method of devising particular system or component tests. Different testing strategies may be adopted depending on the type of system to be tested and the development process used.

5.2.1 Test approach

A test approach is the test strategy implementation of a project, defines how testing would be carried out. Test approach has two techniques:

- **Proactive** - An approach in which the test design process is initiated as early as possible in order to find and fix the defects before the build is created.
- **Reactive** - An approach in which the testing is not started until after design and coding are completed.

5.2.1.1 Black Box Testing

Black box testing also called functional testing that ignores the internal mechanism of a system or component and focuses on the outputs generated in response to selected inputs and execution conditions. We have decided to perform equivalence partitioning and Boundary value analysis for this system

5.2.1.2 Equivalence Class Partitioning

In considering the inputs for our equivalence testing, the following types will be used:

Legal Input values: Test values within boundaries of the specification equivalence classes. This will be input data the program expects and is programmed to transform into usable values.

Illegal Input Values: Test equivalence classes outside the boundaries of the specification. This will be input data the program may be presented, but that will not produce any meaningful output.

5.2.1.3 Boundary Value Analysis

The acceptable range of values for this application was set by the development team. At the time of testing developer will define the boundary value & generate test case for performing the boundary value analysis

5.2.1.4 White Box Testing

White box testing is a software testing method in which the internal structure /implementation of the item being tested is known to the tester. The tester chooses inputs to exercise paths through the code and determines the appropriate outputs. Programming know-how and the implementation knowledge is essential.

5.2.1.5 Pass/Fail Criteria

The entrance criteria's for each phase of testing must be met before the next phase can commence. Now the criteria's for pass and fail are given below.

- According to the given scenario the expected result need to take place then the scenario will be considered as pass otherwise that criteria should be failed.
- If an item tested 10 times, 9 times perfectly worked and single time do not work properly then it will consider as fail case.
- System crash will be considered as fail case.
- After submitting a query in the system, if expected page won't appear then it will be considered as fail case.

5.3 Testing Schedule

Test Phase	Time
Test Plan Creation	1 week
Test specification creation	2 week
Unit Testing	Developing time
Component testing	1 week
Test Phase	Time
Integration Testing	1 week
Use case validation	1 week
User interface testing	1 week
Load testing	1 week
Performance Testing	1 week
Release to Production	1 week

5.4 Trace Ability Matrix

Project Manager			Business analyst Lead		
QA Lead			Target implementation Date		
BR#	Category/Functional Activity	Requirement Description	Use Case Reference	Test Case Reference	comments
BR-1	Functional	Recording income and income list	Use case 3.1.1	Test case 5.6.2 Test case 5.6.3	
BR-2	Functional	Recording expense and expense list	Use case 3.1.3	Test case 5.6.3	
BR-3	Functional	Account Summary	Use case 3.1.5	Test case 5.6.9	
BR-4	Functional	Member registration	Use case 3.1.7	Test case 5.6.4	
BR-5	Functional	Member subscription fees	Use case 3.1.9	Test case 5.6.7	
BR-6	Functional	Due report	N/A	Test case 5.6.8	
BR-7	Functional	Financial year	N/A	Test case 5.6.5 Test case 5.6.8	
BR-8	Functional	Transaction Details	Use case 3.1.5	N/A	
BR-9	Non-functional	Reliability	N/A	N/A	

5.5 Testing Environment

Testing environment is a setup of software and hardware for the testing teams to execute test cases. In other words, it supports test execution with hardware, software and network configured.

For test environment, key area to set up includes

- System and applications
- Test data
- Database server
- Front end running environment
- Client operating system
- Browser
- Hardware includes Server Operating system
- Network
- Documentation required like reference documents/configuration guides/installation guides/ user manuals

5.6 Test Cases

It is impossible to build a system without any fault. Sometimes, this fault makes software implementation failure. If we test the system before executing the system it will help us to find the fault of the system. For testing the system, we need to write some test cases.

5.6.1 Log In

Test case #1		Test case name: Log In			
System: Audit Application		Subsystem: Audit person and members ID.			
Designed By: Bishawjet Banik		Designed Date: 20.04.18			
Executed by:		Executed date			
Short Description: The user is registered and trying to log in to the Audit Application website when the system will check validity.					
Pre-conditions:					
<ol style="list-style-type: none"> 1. When any users tries to go home page or any page, they will be asked to login first. 2. Assume that Username is 'admin' and password 'password' 					
Step	User name	Password	Expected Response	Pass/ Fail	Comment
1	Shuvo	124	Wrong username and password		
2		admin	Username can't be blank		
3	admin	admin	Invalid password		
4	Password	admin	Invalid username		
5	admin		Password can't be blank		
6			Username and password can't be blank		
7	b@gmail.com	password	Invalid username		
8	shuvo@gmail.com	password	Invalid username.		
9	Sldjf	Invalid username & password		
10	Admin	Password	Successfully logged in and redirect to home page		
11	Khan	-- khan@fasdff	Invalid username and password		
Post conditions: Audit person and BPWN'S members will successfully log In in the system					

5.6.2 File Size

Test case #2		Test case name: File size		
System: Audit Application		Subsystem: N/A.		
Designed By: Bishawjet Banik		Designed Date: 20.04.18		
Executed by:		Executed date		
Short Description: Audit person fill all the input field and now trying to input a file.				
Pre-conditions:				
<ol style="list-style-type: none"> 1. Audit person should log in first with his username and password. 2. File size should have to less than 2MB. 				
Step	Action	Expected Result	Pass/ Fail	Comment
1	Inputting a video	File is too large.		
2	Inputting 2.5 Mb file	File is too large.		
3	Inputting 2 Mb file	Allow to save		
4	Inputting no file	Allow to save		
Post-conditions: File is inserted into the database successfully.				

5.6.3 Required Input Field in All Pages

Test case #3		Test case name: Required input field in all pages.		
System: Audit Application		Subsystem: N/A.		
Designed By: Bishawjet Banik		Designed Date: 20.04.18		
Executed by:		Executed date		
Short Description: Audit person fill all the input field and now trying to input a file.				
Pre-conditions:				
<ol style="list-style-type: none"> 1. Audit person should log in first with his username and password. 2. Every input field should have to be filled except input file. 				
Step	Action	Expected Result	Pass/ Fail	Comment
1	All the input field is filled but income title filed is empty	Please fill out income title field		
2	All the input field is filled.	System will allow to save.		

5.6.4 Check Equal Total Amount in Member-Fees Page

Test case #4		Test case name: Check equal total amount in member-fees page		
System: Audit Application		Subsystem: N/A.		
Designed By: Bishawjet Banik		Designed Date: 20.04.18		
Executed by:		Executed date		
Short Description: Audit person fill all the input field and now trying to input a file.				
Pre-conditions:				
<ol style="list-style-type: none"> 1. Audit person should log in first with his username and password. 2. Left side's amount and right side's amount should have to be equal. 				
Step	Action	Expected Result	Pass/Fail	Comment
1	Left side's amount is 900 and right side's amount is 800	Save button will disappear		
2	Left side's amount is 1200 and right side's amount is 1200	Save button will appear		
3	Left side's amount is 1300 and right side's amount is 800	Save button will disappear		
Post conditions: Amount and all the data will be allowed to save.				

5.6.5 Getting Actual Data Based on Financial Year in Account Summary

Test case #5		Test case name: Getting actual data based on financial year in account summary.		
System: Audit Application		Subsystem: Account Summary.		
Designed By: Bishawjet Banik		Designed Date: 20.04.18		
Executed by:		Executed date		
Short Description: Audit person and BPWN'S members want to see the account summary based on financial year.				
Pre-conditions:				
<ol style="list-style-type: none"> 1. Audit person should log in first with his username and password. 2. Suppose, in 2012th- 2012th's net income is 12, 35,707 tk and expense is 5, 34,808 tk. 				
Step	Action	Response	Pass/Fail	Comment
1	Selecting 2012-2012 financial year	Net Income: 10,35,711 Net Expense: 11,33,463	Fail	
2	Selecting 2012-2012 financial year	Net Income: 12,35,707 Net Expense: 5,34,808	Pass	
Post conditions: Desired data will show correctly.				

5.6.6 Checking Editable and Not Editable

Test case #6		Test case name: Checking Editable and not editable.		
System: Audit Application		Subsystem: Transaction details.		
Designed By: Bishawjet Banik		Designed Date: 20.04.18		
Executed by:		Executed date		
Short Description: Audit person see a wrong expense data and now trying to update that.				
Pre-conditions:				
<ol style="list-style-type: none"> 1. Audit person should log in first with his username and password. 2. Editable data should have to be present financial year's data. 3. Assume that present financial year is 2012-2012 				
Step	Action	Expected Result	Pass/ Fail	Comment
1	2013 th 's transaction details	Not editable	Pass	
2	2015 th 's transaction details	Editable	Fail	
3	2012 th 's transaction details	Editable	Pass	
4	2017 th 's transaction details	Not editable	pass	
Post-conditions: Expense and income data will be edited.				

5.6.7 Checking Due Subscription Fees Members

Test case #7		Test case name: Checking due subscription fees members.		
System: Audit Application		Subsystem: Due Report.		
Designed By: Bishawjet Banik		Designed Date: 20.04.18		
Executed by:		Executed date		
Short Description: After inputting one members subscription fee, audit person and BPWN'S members are checking due report.				
Pre-conditions:				
<ol style="list-style-type: none"> 1. Audit person should log in first with his username and password. 2. Assume two members, Amina begum and Nigar sulta have reimburse their subscription fees. 				
Step	Action	Response	Pass/ Fail	Comment
1	User press on due subscription page link.	All the members name will show except Amina begum.	Fail	
2	User press on due subscription page link.	All the members name will show except Amina begum and Nigar Sultana.	pass	
Post conditions: Users will see all the members name who didn't reimburse their due fees at all except Amina begum and Nigar Sultana.				

5.6.8 Open and Close Financial Year

Test case #8	Test case name: Open and close financial year.			
System: Audit Application	Subsystem: Financial year configuration.			
Designed By: Bishawjet Banik	Designed Date: 20.04.18			
Executed by:	Executed date			
Short Description: This system is only editable only by audit person. A financial year has finished. Now audit person want to close that year and want to add a new financial year.				
Pre-conditions:				
<ol style="list-style-type: none"> 1. Audit person should log in first with his username and password. 2. Opened financial year should have to be closed before opening a new financial year. 3. Assume that no financial year is opened. 				
Step	Action	Expected Result	Pass/Fail	Comment
1	2013-2013 add to open	Successfully opened a new financial year	Pass	
2	2014-2014 add to open	Redirect to financial year closing page	Pass	
3	2015-2015 add to open	Successfully opened a new financial year	Fail	Before closing opened financial year, it opened another financial year
4	2016-2016 add to open	Redirect to closing page	pass	
5	2013-2013 add to close	Successfully closed a financial year	Pass	
6	2014-2014 add to open	Successfully opened a new financial year	pass	
Post-conditions: audit person will able to open a new financial year successfully.				

5.6.9 Checking Summation of Balance Sheet

Test case #9		Test case name: Checking summation of Balance sheet.			
System: Audit Application		Subsystem: Balance sheet.			
Designed By: Bishawjet Banik		Designed Date: 20.04.18			
Executed by:		Executed date			
Short Description: At the time of inputting the amount audit person will see the summation.					
Pre-conditions:					
1. Audit person should log in first with his username and password.					
Step	Cash in hand	Cash in bank	Current assets	Pass/Fail	Comment
1	500	500	800	Fail	
2	1200	800	2000	Pass	
Step	Non-Current assets(A)	Current assets(B)	(A+B)	Pass/Fail	Comment
3	5,000	2,000	5,000	Fail	
4	5,000	2,000	2,000	Fail	
5	5,000	2,000	7,000	Pass	
Step	Total(A+B)	Total(C+D)	Equal/Not-equal	Response	Pass/fail
6	7,000	8,000	Not equal	Save button appear	fail
7	7,000	8,000	Not equal	Save button disappear	pass
8	7,000	7,000	Equal	Save button appear	pass
Post-conditions: System will allow to save the data.					

Chapter-6

User Manual

6.1 Log In page

To enter on audit application, user need to authentic herself/himself first. If the person is audit person, then he should specify himself as audit person with his valid username and password. Things is also same for the members of BPWN.

Please Sign In

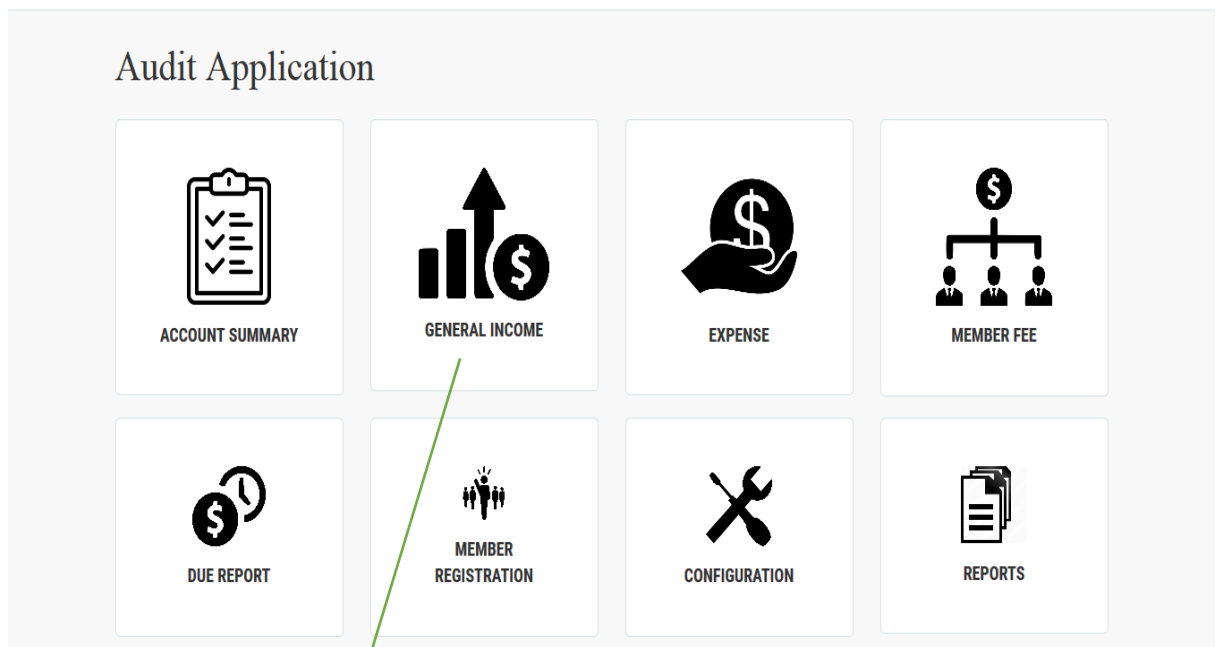
 Remember Me

6.2 Home Page

After login successfully, users will see a home page. Here in this page users need to select his desired category to perform that task. Suppose, the user is audit person now he have got some income data to input. For this he should select general income category. Then he will be able to input the income data successfully.



[Log Out](#)



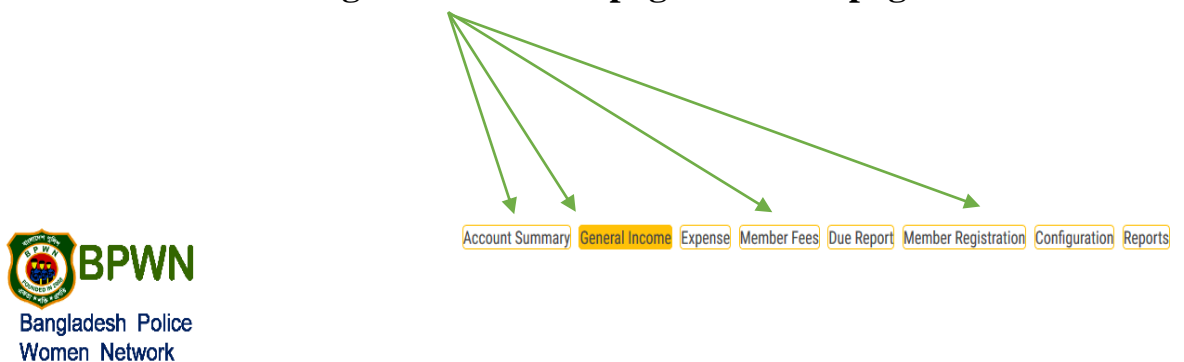
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Audit person should select general income for inserting income data.

6.3 General Income Page

After selecting general income from the home page, audit person will get this page. Here, he will be asked to insert the income data on the following input box. Although all the input box are labelling nicely, I will discuss about two input box that is submit date and received date. Here, submit date is the date of submission the income data and received is the date of when he got the income data. All the input field are required here. Audit person cannot submit the data without filling the input box.

User can go to his desired page from this page also.



General Income

Income Title: <input type="text" value="Please enter the Title of Income"/>	Financial Year: <input type="text" value="2012-2012"/>
Income type: <input type="text" value="Select Income Type"/>	Submit Date: <input type="text" value="dd / mm / yyyy"/>
Cheque Number: <input type="text" value="Enter Your check Number"/>	Bank: <input type="text" value="Select Bank Name"/>
Amount: <input type="text" value="BDT Amount /="/>	Received Date: <input type="text" value="dd / mm / yyyy"/>
Description: <input type="text"/>	
Attachment: <input type="button" value="Browse..."/> No file selected.	

6.4 Expense Page

After arranging a programme, audit person will get expense data category wise. And category can have a sub-category. Like, to arranging a programme decoration is must. For decoration, there will need flower, lighting etc. Here category will be decoration and sub-category will be flower and lighting.



Expense

Expense Title: <input type="text" value="Please enter Expense Title"/>	Financial Year: <input type="text" value="2012-2012"/>
Expense Medium: <input type="text" value="Who was the medium of expense?"/>	Date: <input type="text" value="dd / mm / yyyy"/>
Description: <input type="text"/>	
Attachment: <input type="button" value="Browse..."/> No file selected.	

SL	Expense Category	Expense Sub Category	Amount	
1	<input type="text" value="Select Category"/>	<input type="text" value="Select Sub-Category"/>	<input type="text" value="Enter your Amount"/>	<input type="button" value="Add More"/>

Total: 0/- BDT

By clicking add more button, user will get same input field. He can increase this input field as much as he need.

6.5 Account Summary

Income and expense data will generate against a financial year. User can see previous year's income and expense data. For this, users need to select the desired year from the financial year box. A default summary will generate automatically against present year.

Users need to select desired year from this box.



Account Summary | General Income | Expense | Member Fees | Due Report | Member Registration | Configuration | Reports

Account Summary

Financial Year

2012-2012

[Print](#)

Account Name	Balance	Action
Incomes	51,15,461/- BDT	
Donation	51,08,567/- BDT	View Details
Bank Interest	6,894/- BDT	View Details
Expenses	45,03,693/- BDT	
Magazine & Publication	5,00,400/- BDT	View Details
Gift Materials	2,74,380/- BDT	View Details
Decorator & Decoration	16,395/- BDT	View Details
Cultural Program	4,05,435/- BDT	View Details
Banner & Festoon	62,270/- BDT	View Details
Event/Program	22,65,803/- BDT	View Details
Bank Charge	3,027/- BDT	View Details
Audit Fee	7,000/- BDT	View Details
Computer Training	1,78,000/- BDT	View Details
Transportation	1,87,900/- BDT	View Details
Honorarium	6,000/- BDT	View Details
Entertainment	5,97,083/- BDT	View Details
Current Balance:	6,11,768/- BDT	

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If income is more than expense colour will be green and if expense is more than income colour will be red.

6.6 Membership Fees

Here, total amount should match with the total amount of selected members.



Membership Fees

Title:

Financial Year:

Date:

Bank:

Cheque Number:

Amount:

Description:

Attachment: No file selected.

Add Members

Total: 0/- BDT

SL	BPWN ID	Name	Amount
----	---------	------	--------

This two amount should need to match.

If this two amount will not match save will be disabled automatically.

6.7 Member Registration

User can registered a member from this page and also can see all the member list by clicking the right-side link **View Member list**



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[Reports](#)

Member Registration

[View Member list](#)

BPWN ID Enter your id	Member Name Enter your name
Email Enter your email address	Mobile Number Enter your Mobile Number
Police Rank Select Your Rank	BPWN Post Select Your Post
Working Area Select Working Area	Sub Unit Sub Unit
Starting Date dd / mm / yyyy	Ending Date dd / mm / yyyy
Picture: Browse... No file selected.	
Save	

6.8 Configuration Page

This page is only for the audit person. Audit person can do several things from this page. Like he can add some category of income and expense. And also can close and open financial year. Audit person is also able to add FDR statement and prepare balance sheet from this page.



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Configuration

Income/Expense Configuration

Add Category

Add FDR Statement

Prepare Balance Sheet

Financial Year Configuration

Add Financial Year

Set Current Financial Year

Close Financial Year

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6.9 Add-Category

From this page audit person can add some category for income and expense. Before inserting category name audit person should clarify whereas the category name belongs to income or expense.



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Add category

Transaction Type: Expense Income

Category Name:

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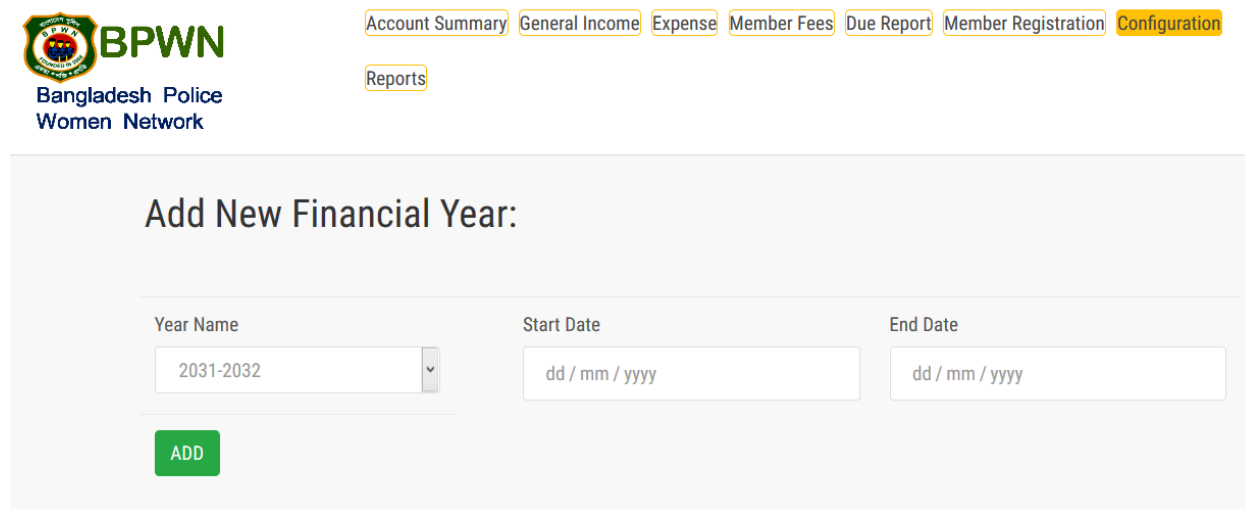
Like category name is decoration and decoration is belongs to expense here.


6.10 Financial Year Page

This page is only for financial year configuration. Audit person can add, close and open new financial year.

6.10.1 Add Financial Year

If audit person does not get his desired financial year in income, expense or other pages, he can add that financial year or can add more financial year from this page.



 **BPWN**
Bangladesh Police
Women Network

Account Summary General Income Expense Member Fees Due Report Member Registration **Configuration**

Reports

Add New Financial Year:

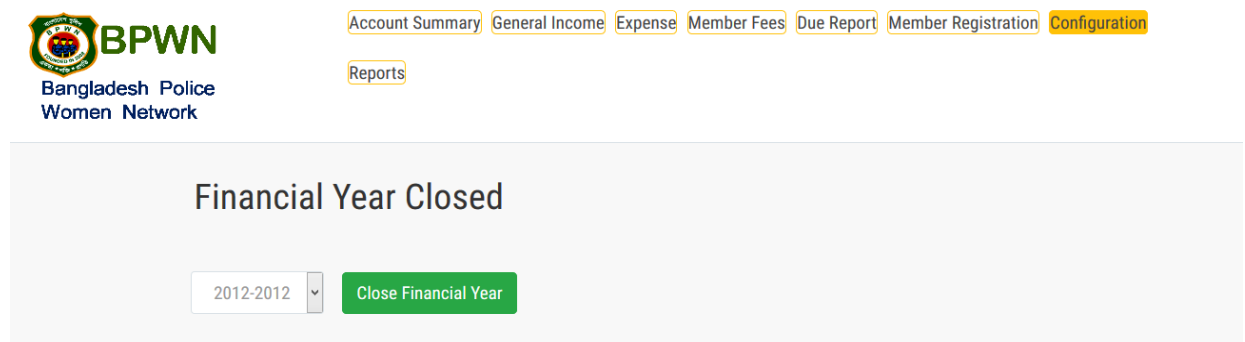
Year Name Start Date End Date


2031-2032 dd / mm / yyyy dd / mm / yyyy

ADD

6.10.2 Close Financial Year

If the year is on the end, audit person can close this year from this page.



 **BPWN**
Bangladesh Police
Women Network

Account Summary General Income Expense Member Fees Due Report Member Registration **Configuration**

Reports

Financial Year Closed

2012-2012 **Close Financial Year**

6.10.3 Set Financial Year

Closing a financial year that means a new financial has started. Audit need to set a financial year from this page. Without closing the existing financial year, audit person will not be able to set new financial year.



- Account Summary
- General Income
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Set Current Financial Year

Before set a NEW Current Financial Year, You have to close the running Financial Year

6.11 FDR

BPWN organization can fix their income money on the specific bank. Previous year income money will be denoted as opening balance and present year balance will add with previous year's income money.



- Account Summary
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FDR Statment

FDR Account No <input type="text" value="Please enter the FDR number"/>		Financial Year <input type="text" value="2012-2012"/>	
Bank <input type="text" value="Select Bank Name"/>	Issue Date <input type="text" value="dd / mm / yyyy"/>	Maturity Date <input type="text" value="dd / mm / yyyy"/>	
Principal Amount (A)			
Amount <input type="text" value="Enter Principal Amount"/>	Addition during the Year <input type="text" value="Addition of Principal Am"/>	Encashment during the Year <input type="text" value="Encashment of Principal"/>	Closing Balance <input type="text" value="Closing Balance"/>
Interest Amount (B)			
Opening Balance: <input type="text" value="0"/> /- BDT			
Interest during the Year <input type="text" value="Enter Interest Amount"/>	Encashment during the Year <input type="text" value="Encashment of Interest ,"/>	Charge during the Year <input type="text" value="Charge of Interest Amou"/>	Closing Balance <input type="text" value="Closing Balance"/>
Total Balance (A+B)			
		BDT	<input type="text" value="Total Balance"/> /-
<input type="button" value="Save FDR Statement"/>			

6.12 Balance Sheet

Some amount will have on the bank, some amount will have on hand and some amount will have as FDR on the bank. After inserting these amount a balance sheet will prepare against a financial year.



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Prepare Balance Statement:

Financial Year

2012-2012

ASSETS			
A. Non-Current Assets:	499650/- BDT		
Investment in FDR	BDT	499650	/=
B. Current Assets:	0/- BDT		
Cash in Hand	BDT	Cash in Hand	/=
Cash in Bank	BDT	Cash in Bank	/=
Total Assets (A+B)	0/- BDT		
FUNDS & LIABILITIES			
C. Funds:	0/- BDT		
Opening Balance	BDT	0	/=
Excess of Income/ (Expenditure) during the year	BDT	611768	/=
D. Current Liabilities:	0/- BDT		
Provision for Expenses	BDT	Provision	/=
Total Fund and Liabilities (C+D)	0/- BDT		
<input type="button" value="Save Balance Statement"/>			

6.13 Report Page

This page is viewable for BPWN'S members as well as audit person. User can see all type of report from this page only by clicking his desired report.



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Report



INCOME LIST



EXPENSE LIST



FIXED DEPOSIT LIST



MEMBER LIST



ACCOUNT SUMMARY



BALANCE SHEET



DUE REPORT

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6.13.1 Income List

Here, members and audit person of BPWN can see the list of income. For getting the income list members will have to go to report page than he will see the income list. After clicking on the income list all the income data will generate. Users can print the page.

Users can search his desired data from this search box which is existing on income list.

A pdf file of this page will generate after clicking on this print button.

BPWN
Bangladesh Police
Women Network

Account Summary General Income Expense Member Fees Due Report Member Registration Configuration Reports

List of **INCOMES**:

Show 10 entries Search:

Transaction Name	Cheque Number	Received Date	Submitted Date	Amount	Action
First Donation	EBL00125566777	2012-02-07	2012-02-13	45,000 /=BDT	Edit
Another Big Donation	JBL998834343	2012-07-11	2012-08-28	50,63,567 /=BDT	Edit
Bank Interest from FDR 01	JBL773434111	2012-07-01	2012-07-01	2,370 /=BDT	Edit
Bank Interest from FDR 02	JBL776633333	2012-12-02	2012-12-03	4,524 /=BDT	Edit

Showing 1 to 4 of 4 entries Previous 1 Next

User will see the data in different page and he can go next page and previous page.

Row numbers will depicts here.

6.13.2 Expense List

After clicking, on the expense list from report page, an expense list will come as like as income list.



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List of EXPENSE:

[Print](#)

Show entries

Search:

Transaction Name	Transaction Medium	Date	Amount	Action
All for this year	N/A	2012-09-04	11,03,300 /=BDT	Edit
1st Asia Region Womens Police Conference	Mily Bisswas	2012-10-23	20,93,613 /=BDT	Edit
Yearly Audit	SP Shahela	2012-12-20	7,000 /=BDT	Edit
Bank Charge 2012	SP Shahela	2012-12-28	3,027 /=BDT	Edit
Another Program	Shamima Sir	2012-03-12	1,27,955 /=BDT	Edit
Program No 03	All	2012-05-16	2,79,835 /=BDT	Edit
Year End Program	N/A	2012-11-14	2,91,880 /=BDT	Edit
Total Entertainment of 2012	all	2012-11-15	5,97,083 /=BDT	Edit

Showing 1 to 8 of 8 entries

Previous Next

6.13.3 FDR List

In which bank, which date, which financial year, the organization has deposited their money, every details will come in FDR list. User can update the data from this page.



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FDR List

Show entries

Search:

FDR Number	Bank	Issue Date	Maturity Date	Financial Year	Action
31955019171	Janata Bank Limited	2012-11-22	2018-02-22	2012-2012	View FDR Statement

Showing 1 to 1 of 1 entries

Previous Next

User can update the data by clicking on this link.

6.13.4 Member List

All the data of members of BPWN organization will show here.

Users will see 10, 25 or 50 data of members altogether by selecting the numbers from this box.



Account Summary General Income Expense Member Fees Due Report Member Registration Configuration Reports

View Member List

Show entries

Search:

BPWN ID	Member Name	Email	Mobile No	Police Rank	BPWN Post	Working Area	Action
BP5988029870	Mily Biswas PPM	n/a	01713373005	Deputy Inspector General of Police (DIG)	President	Police HQ, Dhaka	View Profile
BP6288123778	Rowshon Ara Begum	n/a	01730336286	Deputy Inspector General of Police (DIG)	General Member	Police HQ, Dhaka	View Profile
BP7399009537	Atika Islam	n/a	00	Additional Deputy Inspector General of Police (Addl DIG)	General Member	DMP, Dhaka	View Profile
BP6188020938	Roushan Ara Begum	n/a	01730336325	Additional Deputy Inspector General of Police (Addl DIG)	General Member	CID	View Profile
BP7099124980	Amena Begum	n/a	01717074234	Additional Deputy Inspector General of Police (Addl DIG)	General Member	Norsingdi District	View Profile
BP7301103758	Soheli Ferdous	n/a	017110226777	Superintendent of Police (SP)	General Member	Police HQ, Dhaka	View Profile
BP7705020792	Fatiha Yeasmin	n/a	01556356133	Superintendent of Police (SP)	General Member	DMP, Dhaka	View Profile
BP7503047894	Samsun Nahar	n/a	01711470091	Superintendent of Police (SP)	General Member	CID	View Profile
BP7503047893	Mst. Taslima Khatun	n/a	017170614119	Superintendent of Police (SP)	General Member	RRF, Khulna	View Profile
BP7605101943	Mahfuza Akter	n/a	01712899838	Superintendent of Police (SP)	General Member	Police HQ, Dhaka	View Profile

Showing 1 to 10 of 9,884 entries

Previous 2 3 4 5 ... 989 Next

6.13.4.1 Members Profile


Members profile is only viewable from the members list. Besides, every name there will have an action called view details. After clicking on view details, users will see the member details descriptively.

Member photo will visible here, if any.



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Member's Profile



Mily Biswas PPM
President [Edit Profile](#)

BPWN ID:	BP5988029870
Email:	n/a
Mobile Number:	01713373005
Rank:	Deputy Inspector General of Police (DIG)
Working Area:	Police HQ, Dhaka
Sub Unit:	ফিন্যান্স এন্ড ডেভলপমেন্ট (এফএডডি)
Starting Date:	1988-02-15

Chapter 7

Conclusion

7.1 Project Summary

This project has been started from February. From that beginning time I have to work hard to know the clients requirement clearly. After that I proposed a design to them by help of my supervisor. They appreciated and said to start developing the project. Then I started to develop the project.

From then I gradually develop the project. To build an accounting software is typically hard. I think storing the data in database neatly is very important. That's why I did this first and made a relationship with the tables. After that I design the UI. This project's UI is very simple and clean which is very help for the user's experience. Then I started coding and executing the project.

If I did not test this project there will stay some bug on this project which will ruin the full project. That why give importance to test this project and then I solved some bug which I got after testing this project.

7.2 Limitations

It is very hard to develop something without any limitations. This project has some limitations. Limitation are as follows:-

- Not fully responsive
- Not highly secure
- User's password are not encrypted
- Member's login and audit person's login did not separated at all.

7.3 Obstacles and Achievements

To walk in the good way one's have to face many obstacles. By facing obstacles one will get some achievements. To store the data with financial year wise and to get the data in a correct format was an obstacle for me. Although I have done it by taking help from my supervisor, friends and by searching the solution from google. Some obstacles and achievement are as follow:

- **Scope Change:** Sometimes I was asked to add some features. Then I had to redesign the system. It made me sometimes hopeless.
- **Resource Deprivation:** In some cases I did not get proper resource to handle that situation.
- **Lack of Stakeholder's Engagement:** This project's stakeholders are Bangladesh police. Police are very busy with their work. Sometimes I need to talk with for some issue but I did not get them in proper time.

7.4 Future Scope

By working with this project, I have learnt many things and meet with some great person. This project will give me some opportunity to work with this type of similar project.

7.5 References

To complete audit application, I have taken help from many places. Some references are given bellow:-

- www.google.com
- www.wikipedia.com
- <https://github.com/>
- <https://getbootstrap.com>
- www.w3schools.com
- www.php.net
- www.jquery.com
- www.bpwn.org.bd
- www.youtube.com