EASY FUND

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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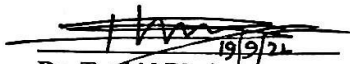Daffodil International University

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APPROVAL

This Project/internship titled **"Easy Fund"**, submitted by Md. Mushiur Rahman(183-15-11846), S.M. Towhidul Islam(183-15-11970) and Niloy Saha(183-15-12027) to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held 13.09.2022
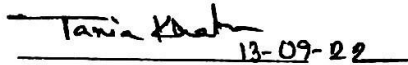
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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Shah Md. Tanvir Siddiquee, Assistant Professor, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.
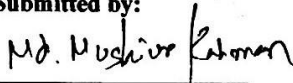
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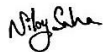Department of CSE
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ABSTRACT

Easy fund is a part of crowdfunding, an approach to raise assets for a particular reason or task by requesting an enormous number from individuals to give cash, ordinarily in limited quantities, and generally during a moderately brief timeframe, like a couple of months. It empowers pledge drives to gather cash from countless individuals through online stages. Often time we see when any person trying to start a new business or start-up or came up with a new approach, a support's always a crucial thing from one's point of view. We're trying to build a system where community is our only concern, focusing on to the network where each of the person whether it's the supporter or the creator who needs the donation to chaise the dream one step closer, it's us whom can support or get in touch with most of the possibilities to reach the outcome. One of the main project goal is to provide the effective learning for those who can think big, having effective mindset with flawless idea sharing to reach a effective platform to get a supportive community as well. Moreover, this makes some analysis and discussion about the testing and effectiveness of easy fund

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1.1 Introduction

A crowdfunding web application "Easy Fund" can be defined as a fund raising or creating an environment to raise donation opportunities for any person who is capable of making a change into our regular life. Here crowdfunding defines a prototype of which we want to create a room for every person who is capable of making a change except they need the fund which is necessary for the work as well as to make a better future. Nowadays there are many platforms who provide the story of a person, a nation, or a crisis among difficult situation where they try to approach different help or create different opportunities for the person or people who needs tremendous amount of helping hand let's say "Help Everyone Through Everyone". Here we're trying to build a similar room for those who needs help to grow their business or project to level up one step further to reach out a successful outcome and we hope "Easy Fund" will be the pillar of everyone's backbone.

Now similarly when we see other crowdfunding websites, a person's sharing his/her story it may be related to study/medical/business/communities/others we see what's happening their life or the problem he/she's trying to solve by making a wish or fulfilment of expecting some donation from us now, it's up to us whether we help or not. We often find or see the story of others sometimes it's so meant to us that we try our best to help that person who's trying to fulfil his dream. Let's join together in easy fund and do the unthinkable because who knows you help might shine someone's dream in successful somedays.

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Easy fund is not some regular crowd funding application it's more like a helping hand for the students or for the teachers or for the creative people who's willing to share his/her creativity by sharing a story of his/her creation & approach to make a change, his/her goal towards business where they can't demand but using this platform a person's able to create awareness which makes us think at least for while should I help this person and of course your small contribution can make a huge change for the person you're trying to help yet that is the main purpose of our application

A student when he/she is thinking about a startup or business that's when money comes one of the or most of the valid reason to deal with. Easy fund is not telling we'll give you the money when you're sharing your story but you can at least try your best to showcase your model & motivation behind your project or business and it's the people or the community you should focus into after all we're building community here not any charette.

In today's world you can share your thoughts on many social media I would rather say people won't care too much unless the project or thinking is so called high profile. Even if I say other fund-raising website they only care about help the poor, raising cost for campaign in rural area or crisis in any particular situation but easy fund make sure it's the person who's capable of making change, believing us think which's unthinkable, share his/her creation & share his/her journey for demanding a meaningful contribution as well

Easy fund is a free of cost platform where you verify yourself and make a project, attach some photos regarding to your story & detailed information about your story also the more detailed or attachment you provide, It is possible to create awareness under the community because all we find now a days "uniqueness". If people or other person who's contributing some small donation the project or thoughts, they might not get any reward or beneficial as we've already told earlier easy fund is an open platform

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Motivation

We believe that easy fund will be a fastest growing approach and one of the easiest Platform to reach out a person for fulfill his/her desire towards their goal & giving an ultimatum possibility by creating an supportive community which is the main factor of today's world. Offering not only a solution to each one of the Project but to create awareness for the support as well although this platform will be ensuring that the person who's expecting help from the community & the supporters who're supporting to that project who might not get any profit from their small donation but thinking as an initiative to change a person's life for chasing their dream goes under one roof.

1.2 Aims and Objective

Easy fund is an open-source platform for learning, changing and building community as well. Of course, it's time which will be determining what to get from the environment besides whether the person who's expecting a proper donation to make a change our life or his/her personal benefit. Yes, there still a question remains why should I invest some money into someone's else project while not getting any profit I hope you are thinking that questing from the beginning but easy fund believes that as it's a none profitable organization to carry out a huge responsibility yet that's true you don't get any profit from your small donation but we're talking about changes here which is needed for upcoming generation where you shouldn't think about the financial gain expect your support will be remembered for building better communication. We're not telling every project a user's creating will be successful as per the donation fulfillment rather to help out that person to reach out their destination as much as possible before the deadline – the key of building communication to reach out every person's door will be the revolutionary change of which this platform only expects from you so come join with us for making a better change tomorrow.

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1.4 Feasibility Study

Feasibility is the trial of the framework. It helps in concluding regardless of whether going through the project is suitable. Possibility to concentrate on examinations the framework and advises regardless of whether to foster the framework. In layman's terms it tends to be depicted as the trial of the framework and in the event that the framework finishes in the assessment, it is practical to foster the undertaking in any case not or we can say attainability concentrate on check's regardless of whether venture is doable.

Feasibility has four solid criteria:

- Technology
- Finance
- Time and
- Resources

The plausibility of the framework "Easy Fund" can be seen with the assistance of these four support point or aspects

Technology: The system development of "Easy Fund" is proposed with the easiest & simplest available technology except complex architecture. The system is well furnished like ensuring every device to fit in and make sure very easy to use. This system's developed by Programming language JavaScript, MongoDB for Database, Template engine like (EJS) for front-end, Node JS for backend and Software like (Figma) for designing.

Finance: This section measures that the platform respect to money of which the person's getting from easy fund for their project or we can say funds. Obviously, there is no problem to maintain the transaction because easy fund depends on the trusty payment-gateway system of which we believe every piece of money is matter to us other than that there is no extra hardware specification needed & we hope it's feasible to spend the

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required sum on the framework or it will be a waste yet the system's providing the opportunity to create free project and serves you donation the project's getting after a time period. We value the supporter's small contribution beside that the cost's under the privilege of organization which doesn't cost a lot.

Time: This particular is important for any person who's building a project or sharing their story to demand an affordable amount under rules & laws of easy fund. Yet it's the person who should aware of the fact that when the validity of the project ends, there's no possible way to make any contribution here validity determines how many days the project's live in the platform. Easy fund will be responsible or make sure that the person get every bit of attention towards their life changing story under preferred days which's set by the owner of the project so we can say the system's developed to look after the time period or deadline of every project simultaneously.

Resource: This aspect takes into count the assets expected to foster the framework. For this specific framework the assets are quite typical as well as understandable if you have the sense of understanding the term "fund raising". There's no need for hardware specification expect a device to deep dive into the system and get the best out of it. The user should follow every bit of instruction which is necessary like read the article which'll will help any person to how to write, share, connect to get the attention from the community that's all, the system expect from a person to believe the system.

By talking about the expect & nature, the role of which system will be playing in near future and expecting from user to get along to make a change for upcoming youth from all those, above dimension describing above it is viable to go through the project

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1.5 Expected Outcome

The main outcome of this project relay on the better communication building and more contribution or create awareness for each project which we'll be seeing on regular basis. A person should be able to get every opportunity to chase their dream project successful and easy fund will be the only key aspect who'll be responsible for dealing all necessary requirement from project creation to successful outcome. Users can view others project, share them in social network sites, support the project with small donation if they want moreover building a network for all those people who're capable of making a change for better future. We live in a modern day where problems are complex & smart, creative and supportive approach is all we want from anyone. The output of this project is not only found the creativity but also build a better network to fulfill one's dream.

1.6 Report Layout

Report format depicts a synopsis of all the multitude of parts. A concise synopsis of all sections is given beneath:

- **Chapter 1:** Depicts a presentation of the easy fund, Motivation, Aims and Objectives, Feasibility study, Expected Outcome and the Report format.
- **Chapter 2:** Depicts the foundation, the connected works, Comparative Studies, Scope and Challenges of the easy fund
- **Chapter 3:** Describe Business model, Use case model, Data model, Analysis of requirement & Design requirement
- **Chapter 4:** Describe the Front-end & Back-end design, User Experience, Interaction & Implementation requirements
- **Chapter 5:** Describes Implementation of Database and Front-end design, Testing implementation & Test result and reports
- **Chapter 6:** Portrays Impact of Society, Environment, Ethical Aspects and Sustainability Plan
- **Chapter 7:** Describes the goal, limitation & future dilemma of project.

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CHAPTER 2
BACKGROUND

2.1 Preliminaries

There are many systems which's already highly developed in a effective and sustainable manner to focus on more on categorize theme like medical, education, business, others issues most probably seen in any crowdfunding platform. Organization now a days don't think a single moment without a profitable margin Besides there are indeed few systems Such as – An innovation in tech and design platform like (https://www.indiegogo.com/) where innovation seekers find lovely, imaginable tech before it hits the mainstream. As far as concern a few associations which are attempting to explore and create the system in Bangladesh similar to (https://choloshobai.com/) . Other that, GoFundMe or Kickstarter would be a great example But in Bangladesh the system isn't developed yet properly. It's necessary to provide young entrepreneurs a chance to fund their project before getting any loan or raising money for venture capital. However, some question may arise for this project –

- How to make the system "Easy Fund" more effectively under the context of Bangladesh?
- How can a user benefited or more precisely the system ensure user's able to get every opportunity at free of cost?
- How about the transaction system and Is there any transaction fee per donation like what's the protocol here?
- How can a modern society enrich with this type of system for learning and develop their own mindset

For this situation, a broad undertaking or framework has been made in the space of crowdfunding to contribute with regards to Bangladesh.

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2.2 Related works

In this section we'll be discussing about the recent project and works related to this area.

Indiegogo: There could be no greater spot to begin the chase after something new and extraordinary. The framework accepts to find cunning and eccentric things that tackle each segment whether the issue's enormous and little. By giving business people wherever a stage to send off new and noteworthy items, they assist with surfacing developments in tech, plan, and significantly more, all before they go standard. The people group has rejuvenated in excess of 800,000 creative thoughts beginning around 2008. Addressing 235 nations and domains. From live missions to prepared to-send tech, inquisitive public generally transfer on Indiegogo to track down the most recent advancement in tech and plan. They trust now is the right time to begin finding the following huge thought.

Kickstarter: A system which's developed under so many option that gives you space to work with people who know you, love you and support you. The system launched on April 28, 2009. Turned into a Public Benefit Corporation to focus on our standards as much as our benefits. Records are quite a large number here like from the beginning till now 21 million people have backed a project, $6,774,812,628 has been pledged, and 224,744 projects have been successfully funded. From their words, no matter what, creator always control how the works come together, no last minute edits from investors when backers chip in funding, they too become part of these independent works.

GoFundMe: Another wonderful creation to support humanity with trust and safety, the system has successfully managed fundraisers worldwide for more than a decade. They're saying "Don't worry about a thing, we've got you covered. By giving people tools they need to capture and share their story far and wide, they have become quite a large community of more than 50 million donors and helped organizers raise over $5 billion – and also their dedication behind looking for great stories to share with media &

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community overall create a huge change to the global aspect.

2.3 Comparative Analysis

All those platform (GoFundMe, Kickstarter, Indiegogo, Start-engine) and many more to come we hope and those system get the best result for building large community & along with the support from investor. The criteria here can be divided into different category like Nonprofits, Investing, Individuals, Creativity, Overall aspect and those systems are the best not for all of the category but to make a change with any of them. Their models and feature or so call moto is crystal clear. We believe that our system will be helpful for any person who's creative as well as need investor to fulfill their journey. It can be helpful to our university system because there are so many entrepreneurs, creative mindset thinking about the creative ideas but without the lack of proper consequences or we would rather say lack of investor, the project or innovation became failure at the end of the day and easy fund will be responsible to make sure this doesn't happen most often.

2.4 Scope of the Problem

As we consider that easy fund will be the fastest growing environment for the creator, investor, a life changing platform for those who believe they can do something for the society while thinking out most of this thing, one of the major factors here is to grow the community & also make people understand that this platform is reliable for any of them who's capable of making a change obviously we've to get the trust which's the ultimate challenge. For the technical side, reactions to client's mistake and undesired circumstance have been dealt with to guarantee that the framework works without ending. Proper error handling and optimized platform to get possible outcome has been made sure with the codes.

2.5 Challenges

With the new platform, challenging outcomes and mostly user's demands, maintain an effective social awareness across the internet is never easy. We're thinking about possible

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outcome but it's all relay on the environment or society we live in.

What are we thinking?

The first challenge was faced after submitting this project idea & documentation see when we're talking about crowdfunding mostly think we're dealing every type of problem or aspect to deal with. But here situation is different, not to focus on any charity types issue, not really focusing on an issue of which a person needs money for his/her medical treatment or any kind of social work. Easy fund believes if you have an idea to explore which's effective, more like a helpful to our community or you have a business idea which you'd like to share because you need fund to start with so the platform here creates the awareness to make your dream comes true. There are several stories we regularly see in our social idea about invention, creation, hoping for a possibility to make once dream successful yet in the aspect of Bangladesh it's quite different people don't want to listen, they only want how can they get profit by giving small donation but as a non-profit organization it's our duty to highlight the creativity through this platform and rest of the work will do the community themselves and all we care about the person who's responsible for making a change, creating an impact to understand each user's needs respectively.

Summery

In this chapter, several related works of crowdfunding system described briefly. From the above content, It's clear that what we're trying to think about easy fund or the eco-system we're trying to build as of now it'll be a great journey for any learner or any person who's capable of sharing their story of their creation, invention to looking forward the support from community. Although, more and more research and projects are being done in this area of field beside that we're looking forward to make a change we hope to see soon.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Diagram Model

Business model diagram represent our business process in a visual representation way. Also, business process mapping, tools & other curriculum determines the procedure for anything from production process to employee incorporating, business diagram clearly map out everything involved in our system intend to do possibly.
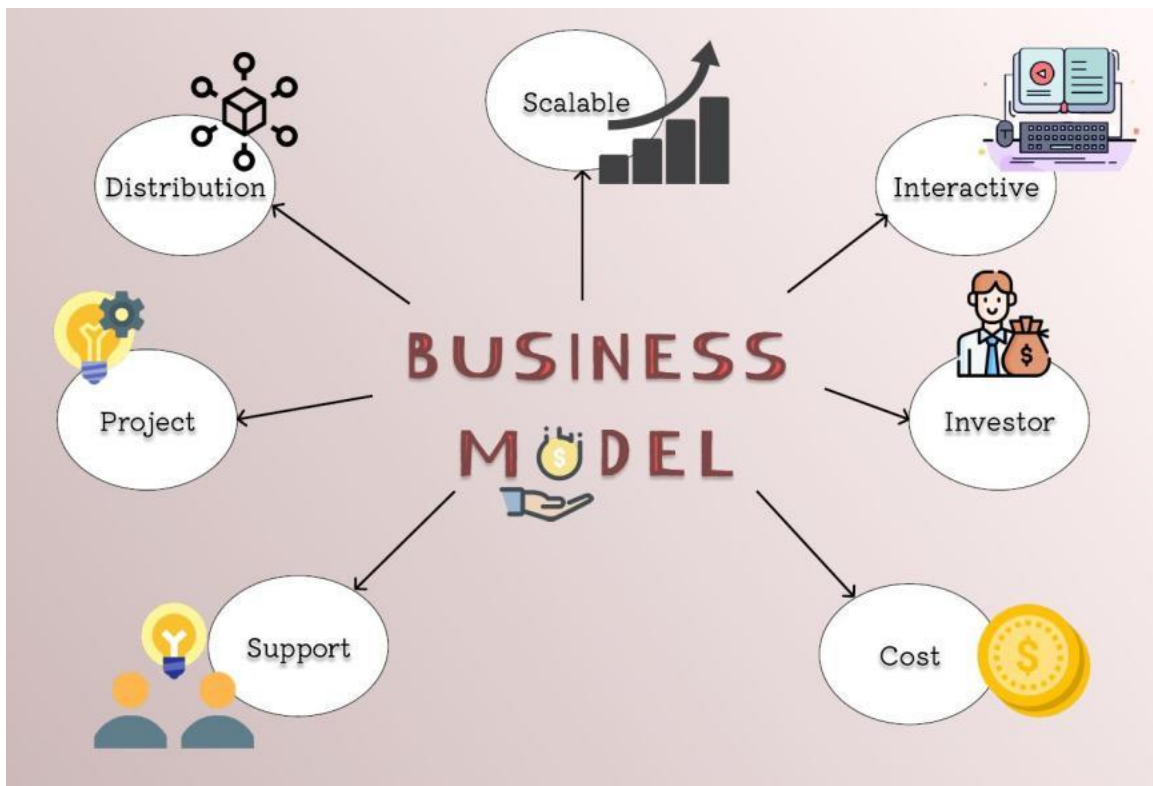

Figure 3.1: Business diagram model

3.2 Requirement Collection and Analysis

Visual Studio Code

Visual Studio Code is a lightweight yet strong source code supervisor which runs on your work area is accessible for windows, macOS and Linux. It accompanies worked in help for JavaScript, TypeScript and Node.js and has a rich environment of expansions for different dialects and runtimes (like C++, C#, Java, Python, PHP, GO, .NET). This depends on the Electron framework, which is utilized to foster Node.js Web applications that run on the Blink layout engine. It is a "free-editor" that helps a programmer to write code, debug the code, corrects their code with IntelliSense – it detects when any snippet is not completed. Here we can use different types of extensions like Python Notebook, Auto Complete tag, Live Sass Compiler, Git Extension pack, Extension Pack for Java, Live Share Extension and many more. Visual Studio Code gives basic all support to coder.

Now I'm talking about some cool features of Visual Studio Code. These are listed as below:

- **Support for numerous programming languages:**
  Upholds different programming dialects. So earlier, designers required Web-Support: a substitute boss for different vernaculars, yet it has verifiable multi-language support. This also suggests it really recognizes in case there's any deficiency or cross-language reference, it'll have the choice to distinguish it easily.

- **Cross-Platform Support:**
  Customarily, editors used to help either Windows or Linux or Mac Systems. However, Visual Studio Code is cross-stage. So, it can deal with each of the three stages. Likewise, the code deals with each of the three stages; else, the open-source and restrictive programming codes used to appear as something else.

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- **Extensions:**

  Raise the Extensions to view by tapping on the Extensions symbol in the Activity Bar in favor of VS Code or the View: Extensions order (Ctrl+ Shift+ X). This will show you a rundown of the most well-known VS Code expansions on the VS Code Marketplace.

- **Terminal Support:**

  Large numbers of the time, the client needs to begin from the foundation of the registry, to begin with, a specific activity, in-constructed terminal or control center gives the client backing to not to in the middle between two screens for something very similar.

- **Git Support:**

  We can pull the resources from the git repository and vice-versa; save the code also. Resources pulling means cloning the code from the git repository and can change it later.

- **Commenting:**

  A not unusual characteristic, but a number of the languages do no longer aid it. Commenting on the code helps the person to remember or tune in line with the sequence he desires.
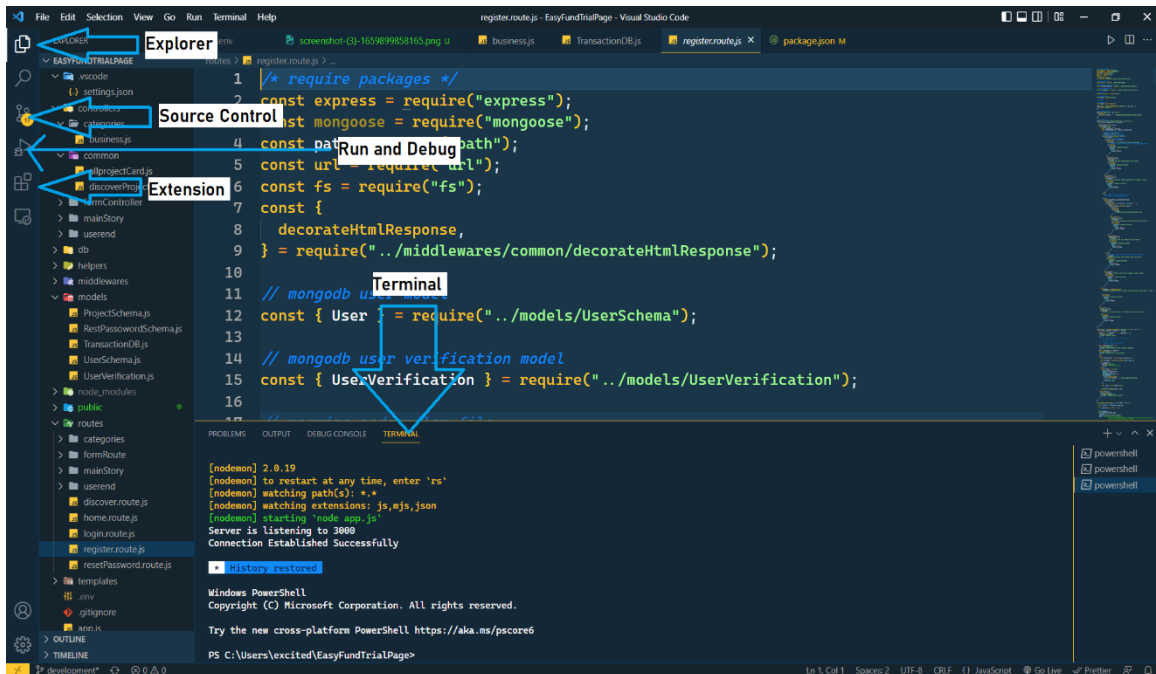
Figure 3.2: Interface of Visual Studio

MongoDB

MongoDB is a document-orientated NoSQL database used for excessive-extent facts garage. Instead of using tables and rows as within the traditional relational databases, MongoDB uses collections and documents. Documents include key-fee pairs that are the primary unit of facts in MongoDB. This is developed by MongoDB Inc.

The name of the company "10gen" began developing in 2007 as a component planned service product. In 2009, the corporation shifted to an open-supply development version, with the enterprise supplying industrial assistance and different services.

MongoDB is a worldwide employer with US headquarters in New York City and International headquarters in Dublin.

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MongoDB Features

- Each database consists of collections that in turn contain files. Each record can be distinctive in a various wide variety of fields. The size and content of every file can be exclusive from each different.

- The record shape is greater in line with how developers assemble their classes and gadgets of their respective programming languages. Developers will regularly say that their classes aren't rows and columns but have a clean structure with key-value pairs.

- The facts version available within MongoDB permits you to represent hierarchical relationships, to keep arrays, and different more complex structures greater effortlessly.

- Scalability – MongoDB environments are very scalable. Companies internationally have described clusters with some of them strolling 100+ nodes with around hundreds of thousands of files inside the database

Now I'm describing to you why we should start using MongoDB, which is listed below:

MongoDB supports discipline, a variety query, and ordinary-expression searches. Queries can go back to specific fields of documents and additionally encompass person-defined JavaScript functions. Queries also can be configured to go back to a random pattern of outcomes of a given length.

Indexing:

Fields in a MongoDB report may be indexed with primary and secondary indexes.

Replication:

MongoDB offers excessive availability with duplicate units. A replica set includes two or greater copies of the facts. Each duplicate-set member might also act within the position of the primary or secondary replica at any time. All writes and reads are carried out at the number one reproduction by using default. Secondary replicas preserve a replica of the

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information of the primary usage of built-in replication. When a number one reproduction fails, the replica set routinely conducts an election procedure to decide which secondary ought to come to be the primary. Secondaries can optionally serve to examine operations, however, facts are only ultimately steady by default.

Load Balancing:

MongoDB can run over multiple servers, balancing the burden or duplicating information to preserve the gadget up and jogging in case of hardware failure.

File Storage:

MongoDB may be used as a file system, referred to as Grid-FS, with load balancing and data replication features over a couple of machines for storing documents.
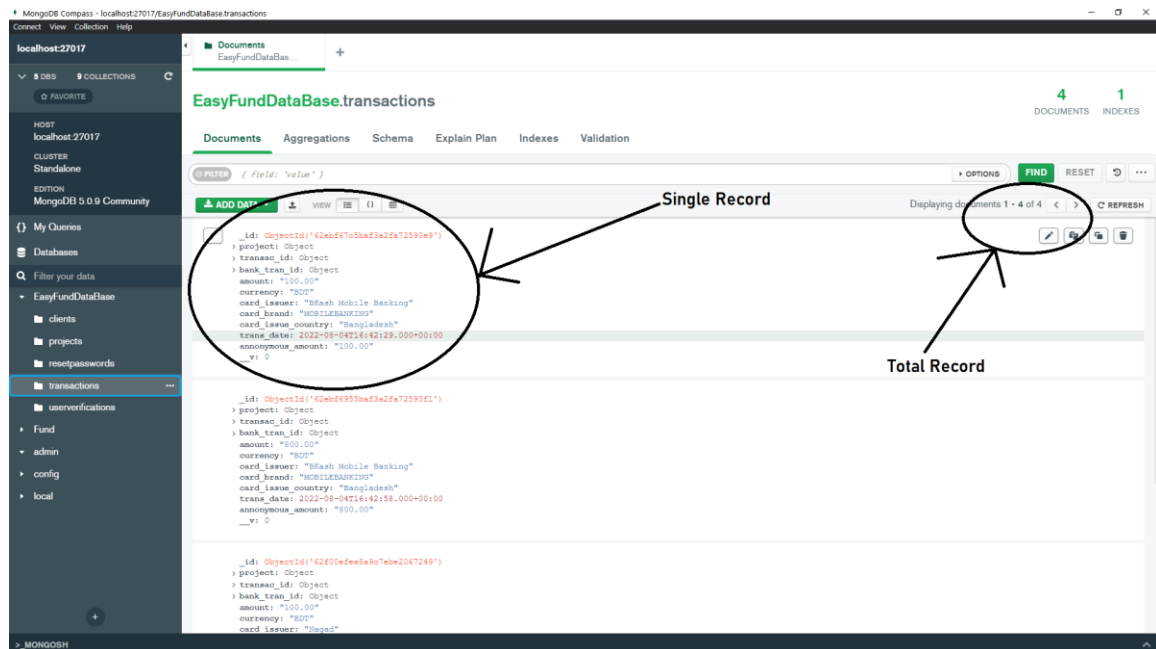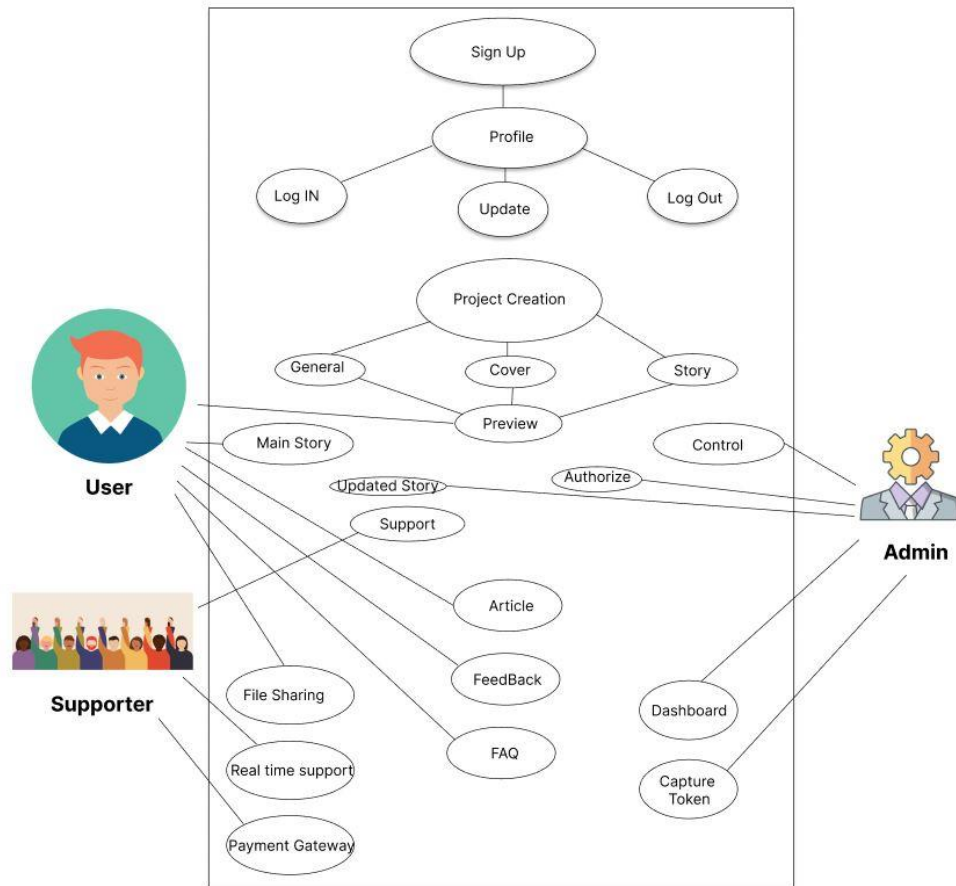

Figure 3.3: Interface of MongoDB

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3.3 Use Case Modeling and Description

In UML, use-case graphs model the approach to acting of a system and help to get the necessities of the structure. Use-case charts depict the irrefutable level capacities and degree of a structure. These graphs in like manner recognize the relationship between the structure and its performers.
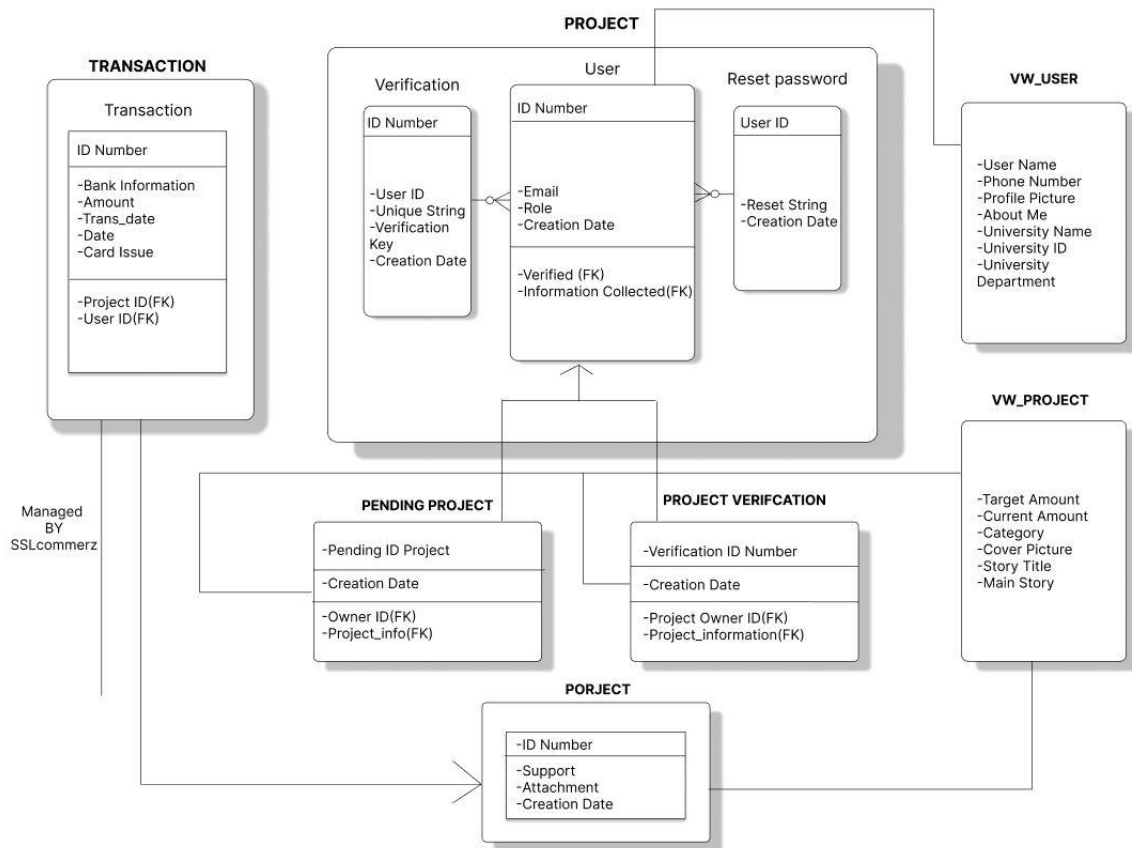
Table 3.3: Use case model description

Use Case: Sign up or log in
Actors: User, Admin
Type: Primary
Description: If any person whether user or admin wants to access this application as per
Uses: Log in
Extends by: None
Extends: None

Use Case: Profile
Actors: Admin, User
Type: Primary
Description: User has profile section with all relevant figure and admin has the dashboard as well.
Uses: Admin, User
Extends by: None
Extends: Update, Delete, Log out

Use Case: Project
Actors: User, Admin
Description: User has the access of creating project but those projects controlled by admin
Uses: User create projects & admin accept projects
Extends by: None
Extends: None

Use Case: Support
Actors: User
Description: Each individual can support any project under minimal policy or circumstances
Uses: User gets the support through payment from supporters
Extends by: None

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Extends: Support result
Use Case: Update Story **Actors:** Admin **Type:** primary **Uses:** have the privilege do delete any project while validating for 24 hours **Extends by:** None **Extends:** None
Use Case: Capture Token **Actors:** Admin **Type:** Primary **Description**: Help others showing this project gets like token funded, success or failure **Extends by**: None **Extends**: None
Use Case: Payment Gateway **Actors**: User **Type:** Primary **Description**: Using third party organization gateway system enabled securely. **Extends by**: SSLCOMERCE **Extends**: Gateway feature

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3.4 Logical data model diagram

A sensible information model lays out the design of information components and the connections among them. Free of the actual information base subtleties how the information will be executed. The sensible information model fills in as a diagram for utilized information.

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3.5 Design Requirement

A thing that is compulsory; a necessary condition & design requirements are the functional characteristics that our bag must meet to be successful. Therefore, the requirements contain the behavior, qualities and properties of future degree. We're hopeful to ensure that this all are understood by the investor as well. A design defined

Many characteristics like begin date, scope limits of the work, limitations in assets and individuals, project climate, expectations and spending plan.

System architecture would be a possible solution where we can figure out every part by part each section should how to work or develop because now a days maintain a system like this you need proper documentation describing which thing works on which way, modifying them if necessary and then go for developing.

We have divided each section like admin panel, individual user perspective & along with the database what it contains and how it's inter-related Beside all of that which layer contains which specification because as we have already mentioned that the system is built under agile strategy which is an iterative way to deal with project the board and programming improvement that helps group convey worth to their clients quicker and with less cerebral pains.

We think that as it will be a eco-friendly system then it's should be render with productive manner and also based on the below architecture it helps us constantly to think what we're trying to do or what should be our beginning steps as it will be constantly changing throughout the development concurrently change over following plan to get a better idea through business model, use case model or logic data model.
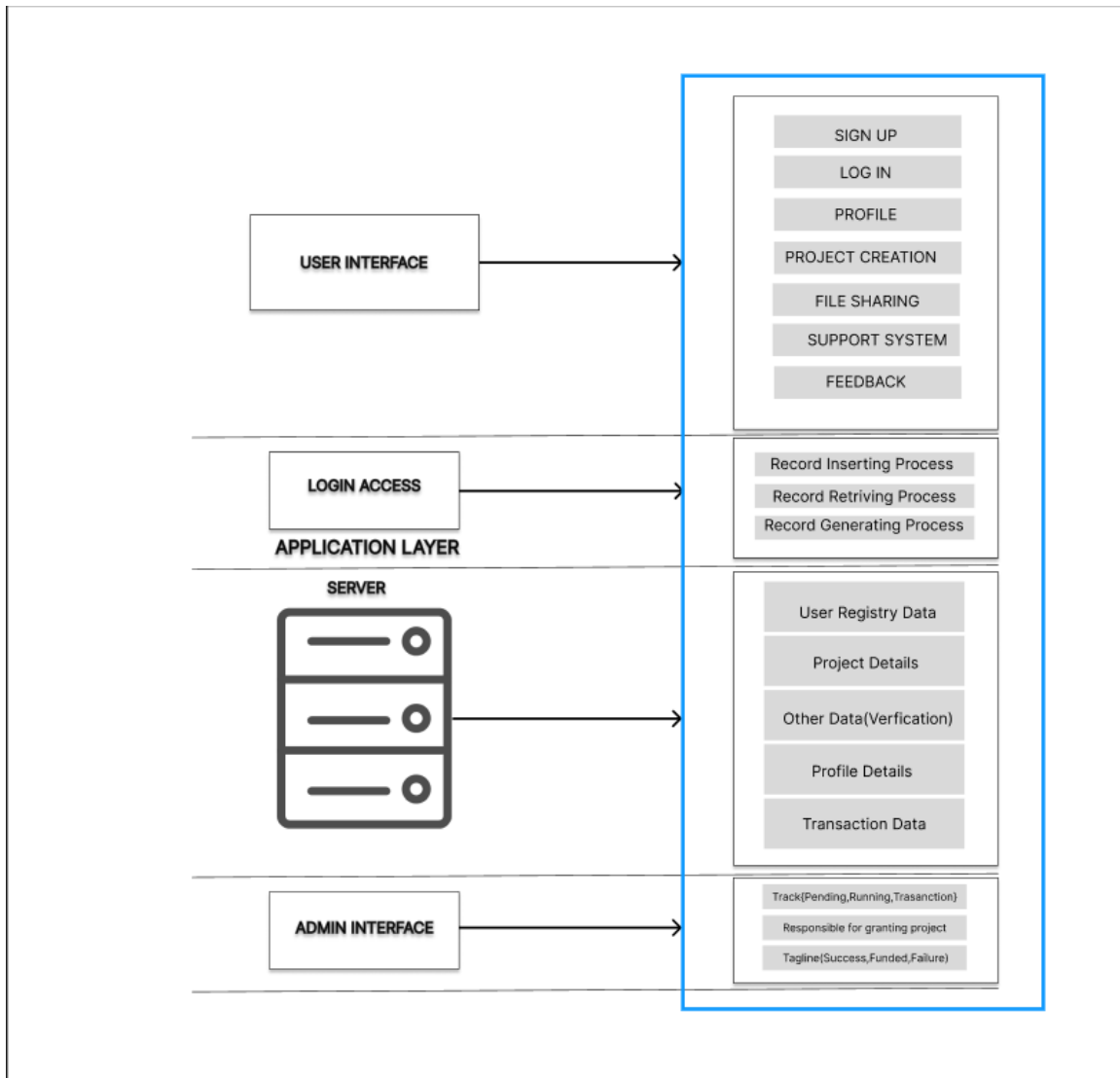
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Figure 3.6: System Architecture of Easy Fund

Here we've been focused every possible aspect to build the eco-system as reliable where elements of effective materiality is the first concern then above point of view as follows:

- User friendly design. When designing our system, our audience and investor or creator should be at the forefront of their mind
- A focus of speed, compelling content, calls to action, utter pleasing imagery
- Responsiveness for the device and focus on SEO

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CHAPTER 4
DESIGN SPECIFICATION

4.1 Front-end Design

The front end is an essential part for any website for two reasons more specifically the graphic design & the user interface. The front-end design normally goes through in a few different stages of development including wireframes (defining user flow), prototypes (working examples of site) and finally testing which's important as well.

To turn a website into dynamic web application (a website whose content may change depending on what is in its database based on that variety of functionality playing through user input. Here's the easy fund's architecture defined below for more clarity.

Figure 4.1: Interface of front-end design

We've summed up five points to cover the front-end view of our application let's say when a user wants to create a project (Button) from above picture to go with the formality or procedure until (Medium platform) showcase the data. Now, For the deadline and supporter, its necessary to support the project under deadline as per the policy of our website.
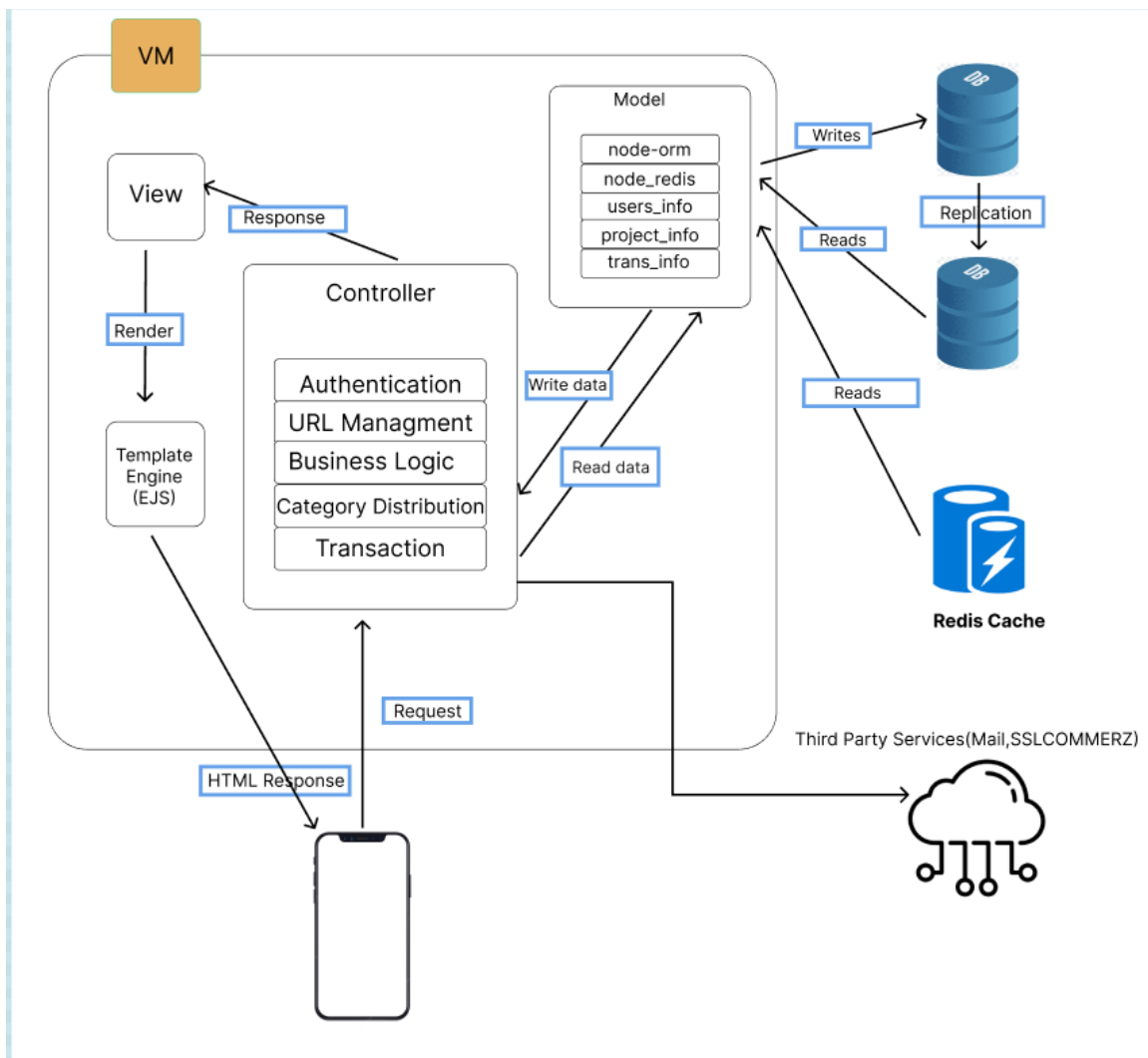
4.2 Back-end design

Figure 4.2: Back-end design architecture

The backend is basically a website's brain which has all the connectors to work on the functionality or to the infrastructure that support the front end which's made of software regular users can't see often.
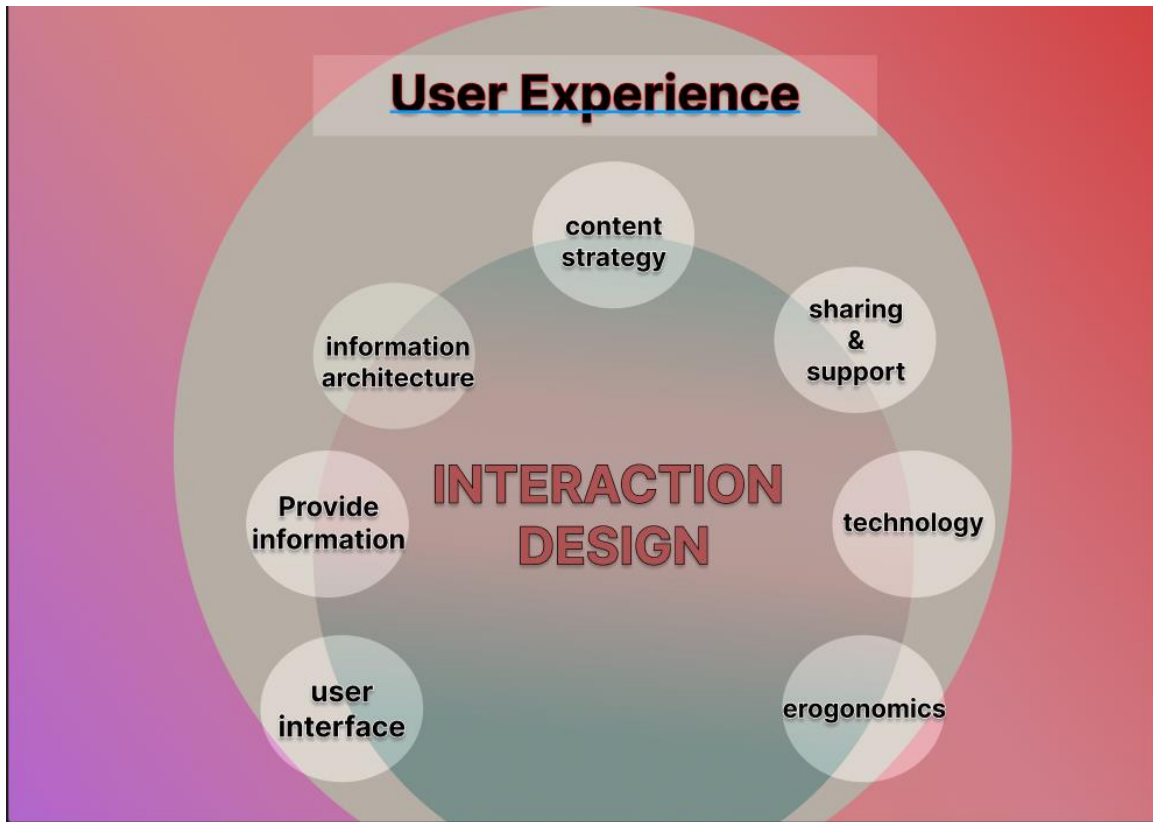
The backend design handle everything that doesn't involve providing a user interface. APIs, building libraries, and utilities all included here which makes it easier to communicate with the presentation and business layer. The design played a vital role before developing the system as well. The above pipeline which's focused on building easy fund.

4.3 Interaction Design and User Experience (UX)

Collaboration configuration is a significant point of view inside the goliath umbrella of User experience (UX) plan. In short, it's a simple term to understand but too complicate to simplified. Most often when people talk about the interaction design, the product tend to be software application like apps or websites. The goal is to provide user interaction design to enable the user to achieve their objective in the best way possible.

Most often we think that there is an enormous cross-over among collaboration and UX plan yet most piece of the experience includes some cooperation plan and UX configuration is more than communication: it likewise includes client research, making client profile (Why, and under what condition they utilize the item), performing client testcase and of course usability testing etc. Important point of view which should be considerable when understanding the design as well as usability.

This is important to concern while we're building system like crowdfunding to get the people attraction as many as possible and in turn what interactions are necessary to achieve one's goal. We had to go through the research to find out what the goals of the users are before creating a strategy that translates into interactions for easy fund

4.3: User experience design

4.4 Implementation Requirements

Implementation is the execution or practice of a game plan, a method or any arrangement, thought, model, determination, standard or procedure for following through with something. Thusly, execution is the approach that should understand for something to happen as a matter of fact. These processes including the following:

- Investigating prerequisites.
- Establishment, design, customization, testing, running.
- System incorporations, client preparing.
- Conveyance and making changes.

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Implementation plans may differ depending on the product or the system but here we focus on the following elements:

- **Goal.** This is the ultimate result a project or story aims to achieve.

- **Objectives.** These steps, activities and milestones must be achieved to reach the ultimate goal.

- **Scope statement.** The project scope outlines project boundaries and explains what the team here will do or will not do. We're defining the scope here for easy fund.

- **Resource & Risk analysis**. The team will be responsible for implementation and risk analysis to identify potential problems.

- **Timeline.** A timeline list targeted completion times and deadline for each milestone. Project management tools & design like Gantt chart, workflow diagram, business model or architecture can help render this

- **Roles and responsibilities**. A description of team roles and responsibilities of all team members and their work towards easy fund

There are four distinct sorts of crowdfunding: rewards, gift, obligation and value. To build a successful crowdfunding platform it's important to capture attention of a large number of investor who might be interested to make a small donation to a project which is worthy of investment But as we're reconsidering that this platform(easy fund) don't provide any rewards or interest to the investor so it's a huge challenge for us to figure out how should we develop the system that everyone will be fascinated to join the community and respect every one of the creativity coming from the creative thought through this platform.

The diagram presents the necessities that are ordinarily caught in a message determination. The necessities are displayed in a control order to address their parent-kid connections. The line with the focus image at the top means control.
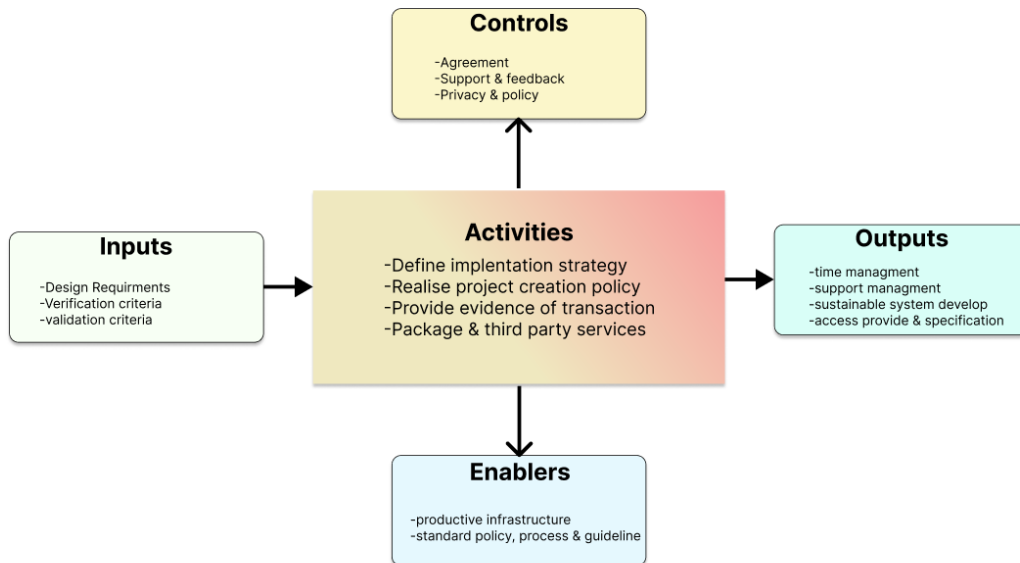
Figure 4.4: Implementation requirement diagram

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Table 4.4: Specific options for implementation requirement analysis

Requirements	Functions
Measurability	1. Capture the concept behind the service level attributes behind easy fund; 2. Catch the idea of hazard and confidence in deals
Extensibility	1 Catch the idea of portrayal come closer from center arrangement to particular nonexclusive ideas; 2. Catch the method of various help sending and conveyance model
Information Hiding	Catch the idea of Cloud administration coordination or piece we're trying to build for bundle of services.
Conceptualization	UML & OWL
Comprehensibility	Catch the fathomability of service depiction by utilizing deferent representation of each form for project creation
Deployment Symmetry	Catch the idea of Abstract Service in Administration Module
Execution Resilience	Catch the idea of Fault, Precondition and Post-conditions

CHAPTER 5

IMPLEMENTATION AND TESTING

It is important to clarify that this undertaking was planned and grown altogether founded on gathering data from existing frameworks, ideas and fanciful situations.

5.1 Implementation of Database

Database implementation is the most common way of delivering a point after point information model of a data set. The legitimate information model (Figure 3.3) contains all the consistent and actual plan decisions and actual stockpiling boundary expected to produce a plan in an information definition language which can be utilized to make a data set. A totally credited data model contains unmistakable qualities for each variety or component. The term data base arrangement can be used to portray a large number of parts of the arrangement of an overall structure. In any case, the term informational collection execution could similarly be used to apply to the general course of arranging, notwithstanding the base data structures yet furthermore the designs and questions used as a component of the overall informational index application inside the informational collection organization system (DBMS)

A data architecture should nonpartisanship set information principles for every one of its information frameworks as a dream or a model of the possible communications between those information frameworks. Information coordination, for instance, ought to be subject to information engineering principles since information combination requires information collaborations between at least two information frameworks.

The following data types for its column and parameter declarations.
String, Integer, Boolean, Double, Arrays, Timestamp, Object, Null, Symbol, Date, Object ID, Binary data, Code, Regular Expression, Min/Max Keys

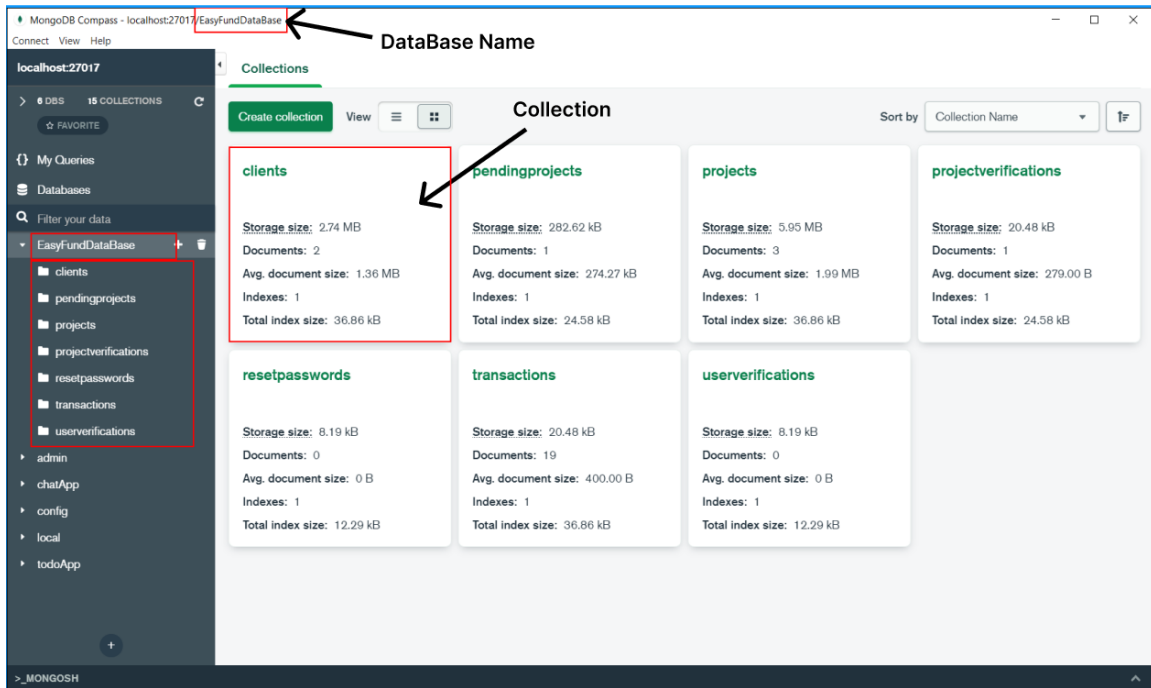Here is an outlook about the collection or table we're considering to build the system.

Figure 5.1: Infrastructure of easy-fund database

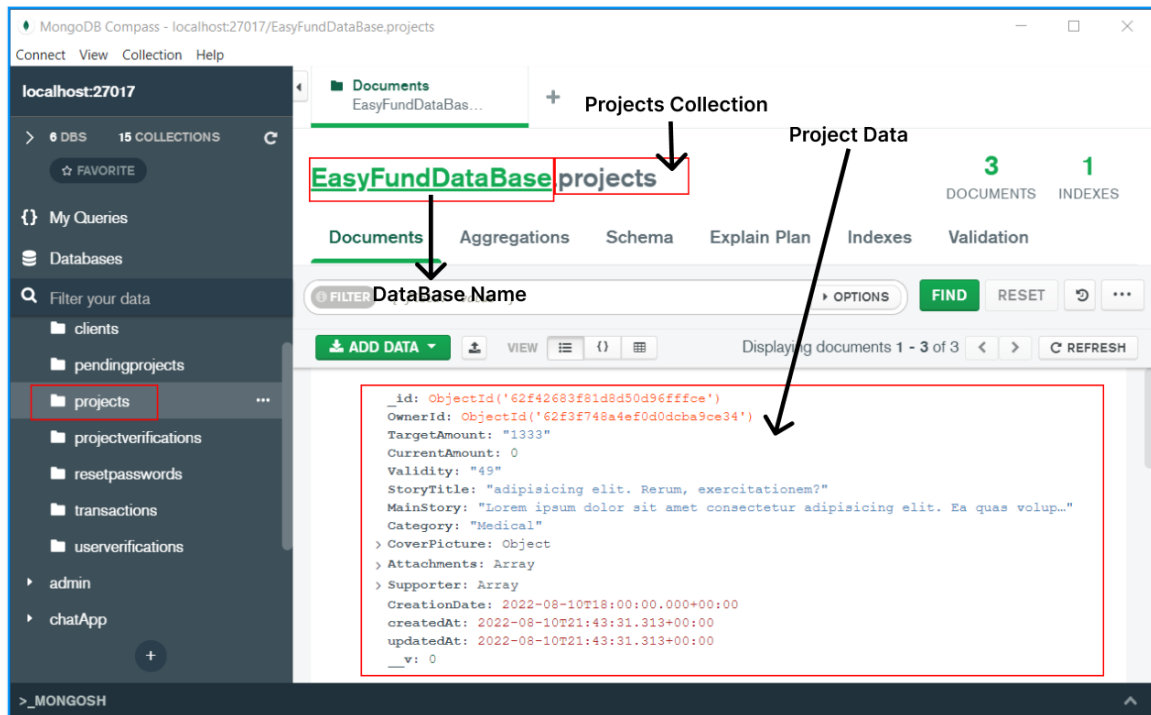Here is the table (Projects) structure shown below:

Figure 5.2: Infrastructure of projects collection

5.2 Implementation of Front-end Design

The screenshots below show the project view. Capture an image of what you see on mobile device as well as desktop & how to use it

Homepage Activity: In this system we have sorted all the project in a card design like when anyone go to visit this site, he/she'll see some new projects displaying like the following manner.
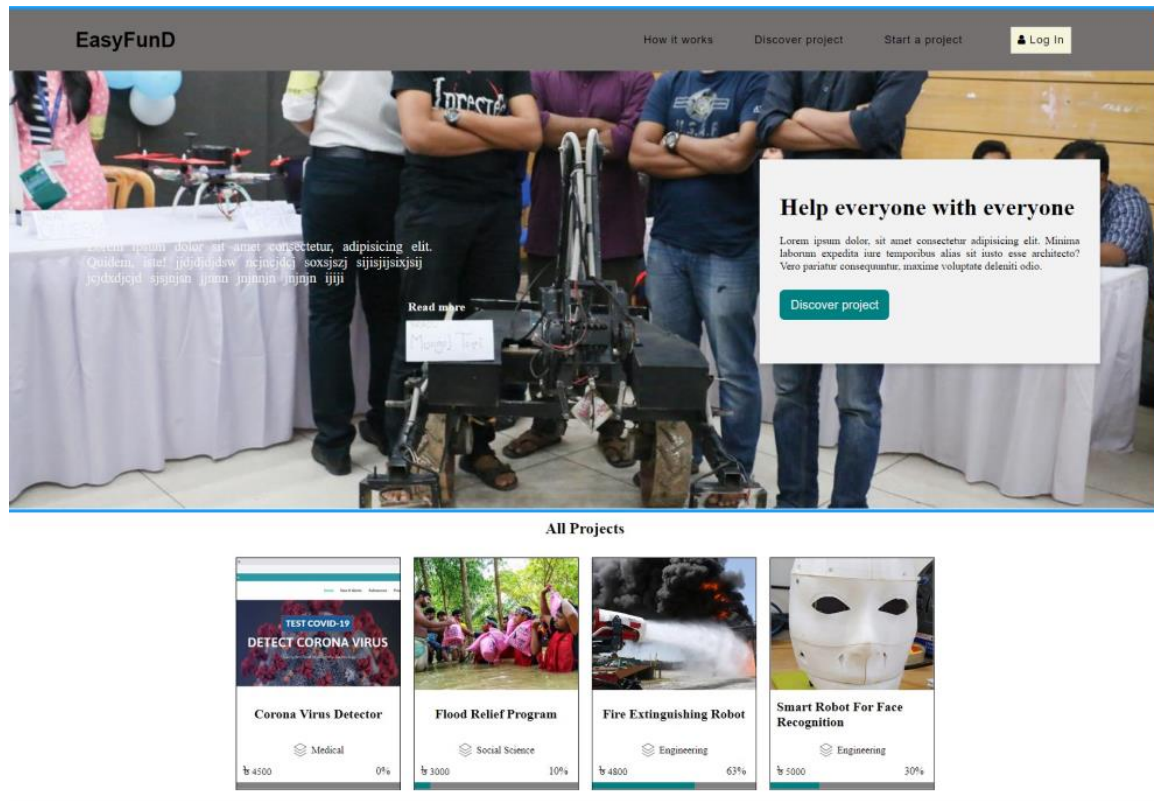

Figure 5.3: Homepage Design

Other then, different types of category project which's got enough success rate already, will be displayed in the following manner & many more features instructions to carry on.
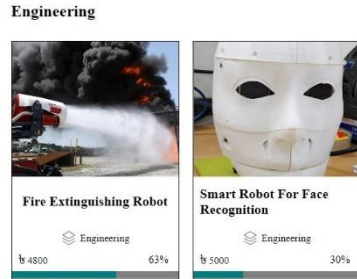
Figure 5.4: Categorical view

Sign up & Sign in Form: A validation email will go to their co-responding email and after the following validation user will be available for log in to the System.

Figure 5.5: Login & Registration

Project Creation: There are certain criteria where user can't have the access of creating project unless he/she's been able to fulfil their user information and it's quite important to acknowledge whether the user's valid or not
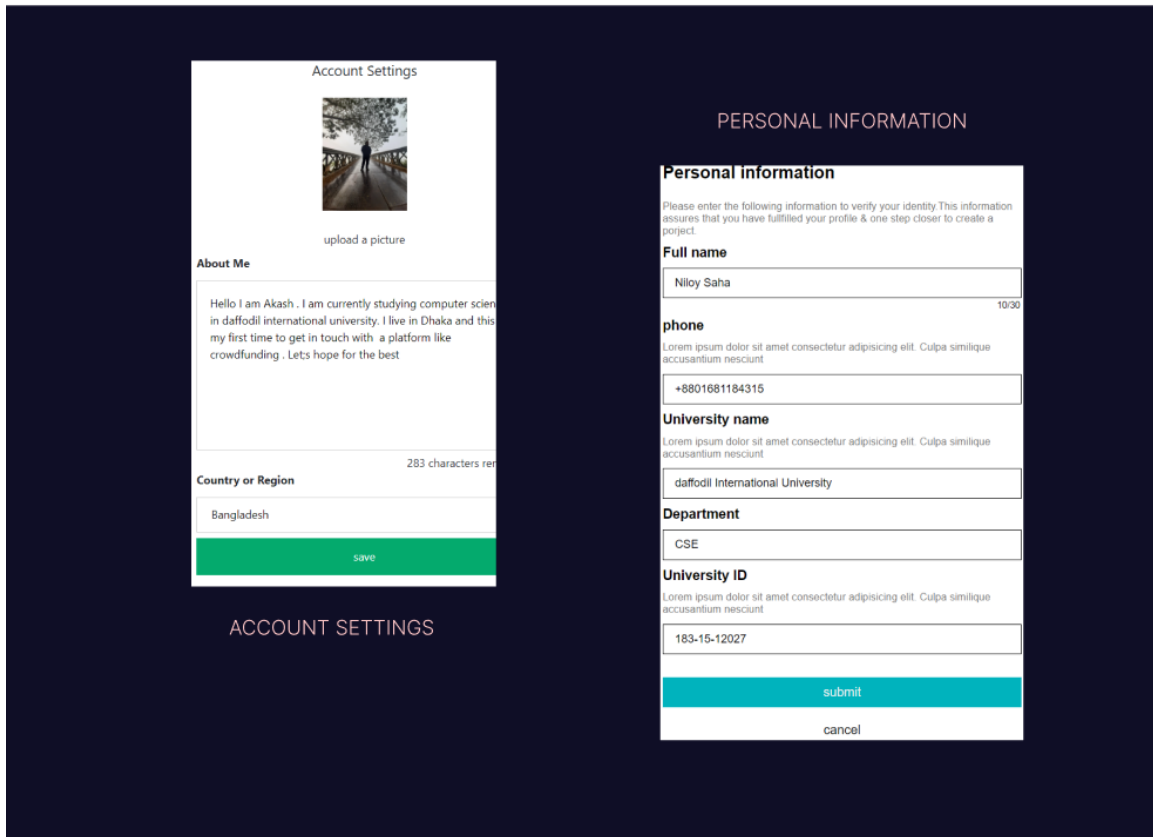
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Figure 5.6: Account settings & Information collection

After the information's been collected through system, now the user has the access to fill up the required information as per their choice to create a project. Below is the demonstration of user needs to get through
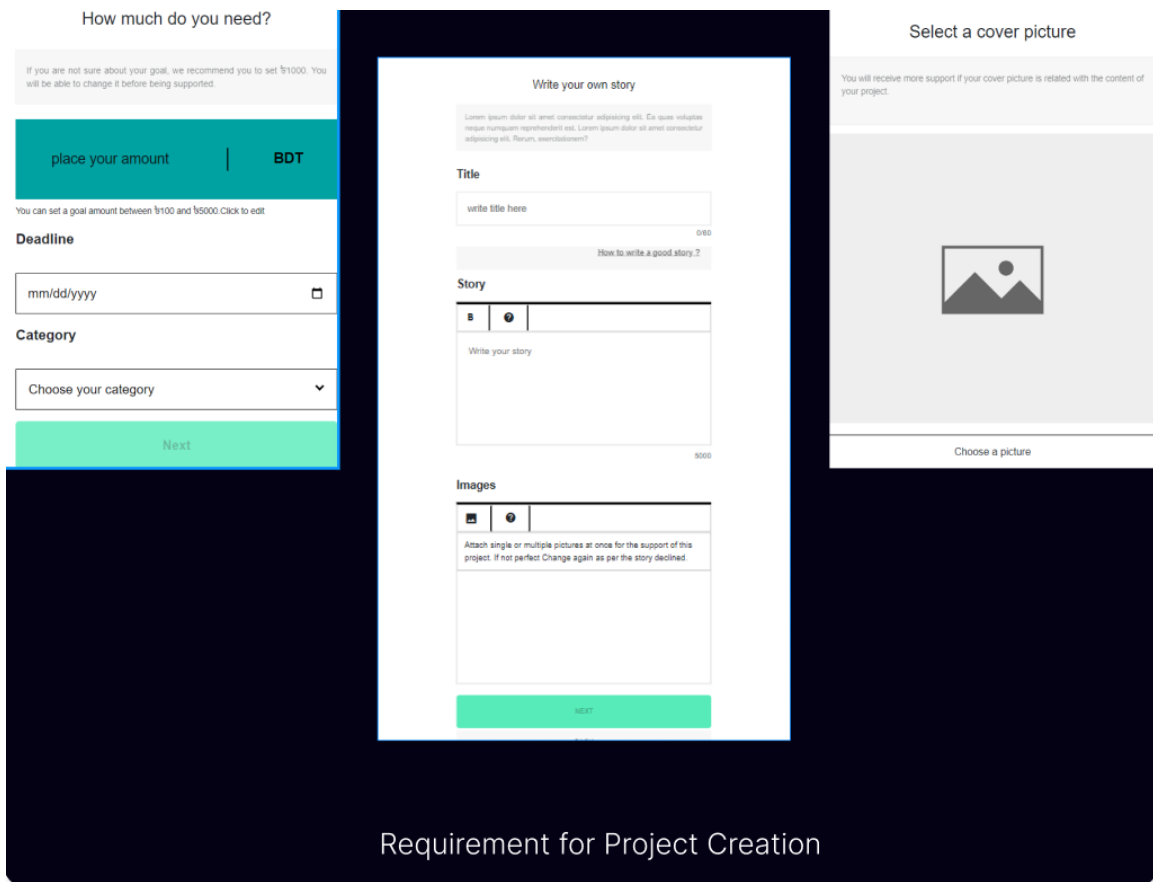
©Daffodil International University

Figure 5.7: Project creation

User's able to view the project from their end when it's accepted from the admin panel yet they have the privilege of support others project. Below are some pictures from user perspective view.

At this moment, user's able to see the project in their own profile also beside that when any user supports their project, they can also see from story from user end & also they'll be notified through email after certain period of time through system. The project will be valid until the day creator selected while creating project.

Admin panel: When any user creates a project it'll go to admin panel and admin has the privilege to determine whether the project should go live or not. Unless proper justification, attachments and proper valid reason along with story, the project might get rejected and also user will be notified if it's get rejected or accepted through email.
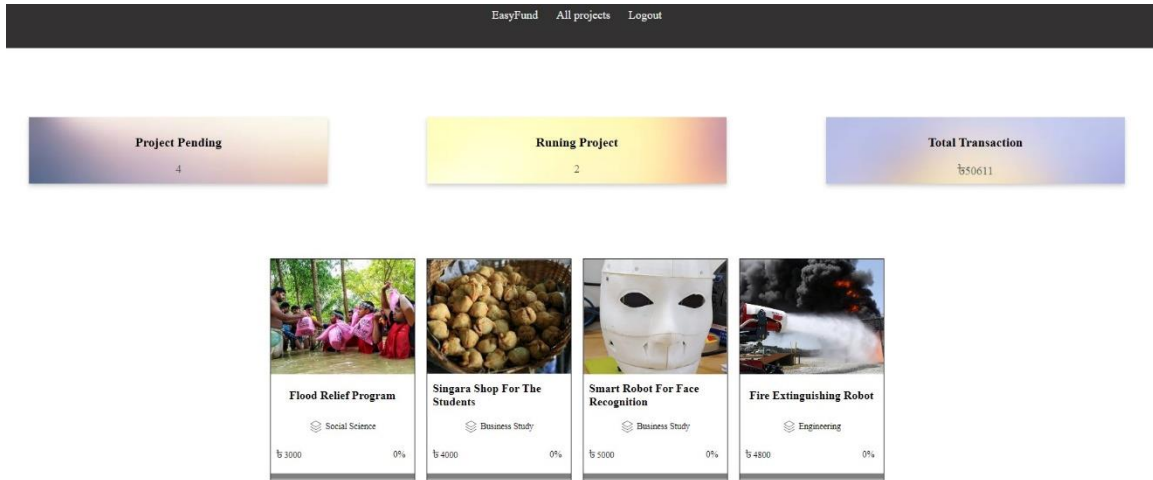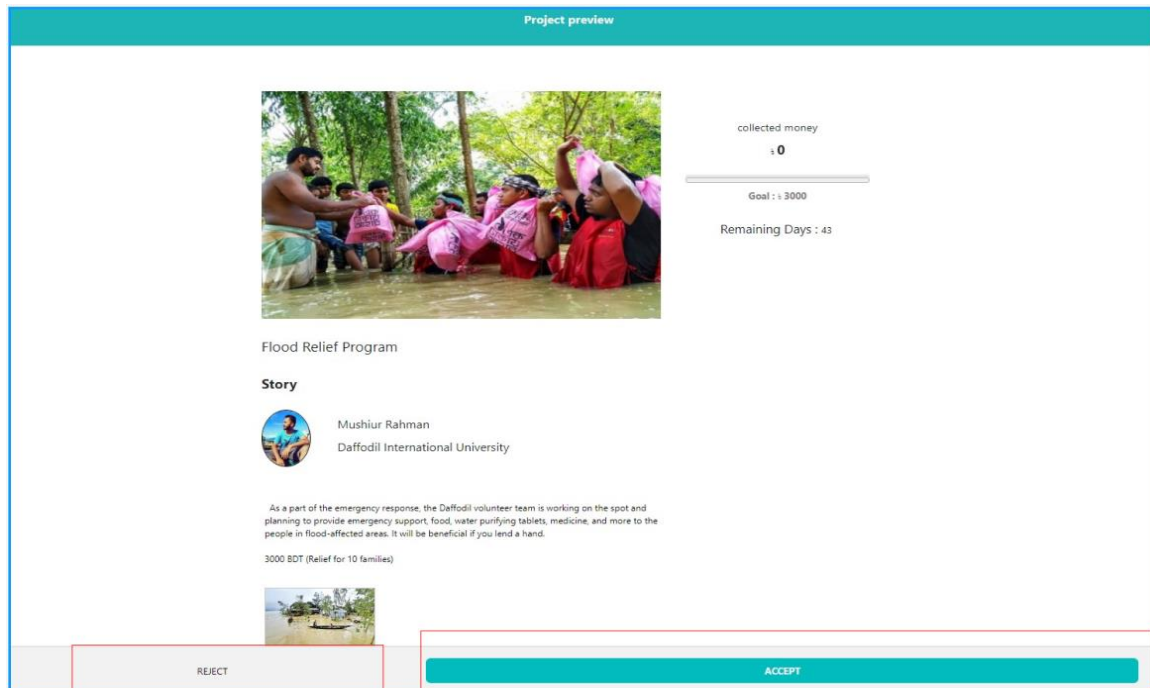

Figure 5.8: Admin panel of running documents

Figure 5.9: Admin privilege of acceptance

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5.3 Testing Implementation

This project was judged on the following process of criteria:

Fulfilling necessity determinations: The task is supposed to find success on the off chance that it fulfills every one of the prerequisites like useful and non-practical prerequisites. As such, it ought to be equipped for guaranteeing the prerequisite details.

Accuracy: It is one of the basic necessities of programming advancement. Every single piece of the application ought to work appropriately and precisely

Similarity and Integrity: These are two critical circumstances to check whether the task is effective. The live homeroom was made to be viable with any space. It was likewise planned so that it could convince the virtualization which is viewed as a significant component. Moreover, the assessment of the framework relied heavily on how the application was carried out to the entire framework or not.

Constant administration: The application is about savvy study hall. In this way, keeping up with the constant scenario is fundamental. The clients of this framework ought to can keep up with this.

Unwavering quality and security the executives: The security is one of the significant variables in any assistance situated frameworks. Hence, the assessing standards on the security includes that had been considered when the framework was created.

Ease of use: Friendliness in any applications is likewise an extraordinary rule to pass judgment on the frameworks. For example, the clients of this arrangement ought to feel satisfied when they are utilizing the framework. Basically, a framework ought to have the quality estimates properties, like proficiency, compactness, reusability, adaptability, union and free coupling among various parts of the planned programming.

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Unit Test

Unit testing is for the most part utilized in a nitty gritty planning and carrying out period of this task. The reasoning of unit test was to figure out the imperfections in this undertaking.

Compatibility Test

Similarity Testing, part of programming non-practical tests, is trying led on the application to assess the application with the registering climate. Programming similarity testing can be all the more suitably alluded to as client experience climate. This venture is tried on various sorts of android versatile to guarantee the accompanying

5.4: Compatibility test result & report

Device Name	Screen Size	Test	Result
Samsung Galaxy A51	6.5 inch	Yes	Okay
ViewSonic Monitor VA2223H	21.5 inch	Yes	Okay
Samsung Galaxy S20 Ultra	6.9 inch	Yes	Okay
iPhone 12 pro	6.6 inch	Yes	Okay
LG Ultragear	31.5 inch	Yes	Okay
Dell E2220H	22inch	Yes	Okay

Table 5.4: Compatibility test result

CHAPTER 6

IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

6.1 Impact on Society

Technology has come into our lives to better the human situation. It has effortlessly and certainly stepped forward our lifestyle, from cellular telephones, endless get entry to all kinds of data and its involvement within the advancement of infrastructure, transportation, and technological know-how. In the arena of finance, the adoption of Fintech has fostered a virtual economy of clean, on-call for transactions and transfers, remodeling enterprise communication and decreasing administrative expenses.

In the last years crowdfunding has mounted its presence as an option in contrast to the essential represent business people or companies, have their drives supported. This idea arose in 2006, inside the USA, and has been proliferating all around the globe, likewise offering individuals the chance to monetarily help assignments wherein they accept. Crowdfunding is available in Portugal on the grounds that mid-2011 and has changed the funding worldview in the U.S.A. Nonetheless, errands with a social goal have been one of the greatest best classes, both for challenge advertisers and benefactors. These social business visionaries and foundations are given the gamble to lift assets for their undertakings.

So, Crowdfunding's role inside the effect sector has grown in current years thanks to its particular way of raising budgets to aid social companies and firms, attracting retail traders and philanthropists to social innovation, and permitting them to participate as funders of societal answers. The Covid-19 pandemic is probable to boost this increase, with increasing demand from social begin-U.S.A. Struggling to get admission to economic assets and rising public interest in crowdfunding

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For example, foundations can assist crowdfunding platforms reduce the hazard of marketing campaign failure by means of supplying anchor investments or via suit-funding contraptions wherein the muse can match the contribution of the gang. Crowdfunding systems also can cooperate by way of sharing deal go with the flow with impact price range or banks and financial establishments that guide social companies and corporations with specific repayable contraptions, such as debt or fairness.

6.2 Impact on Environment:

Crowdfunding gives a new capability supply of financing, frequently predicted to prefer environmentally orientated ventures. However, there is little thought about how crowdfunding can be successfully used for such ventures.

Web based crowdfunding can help with the perpetual financial setbacks in natural preservation and control. Web based crowdfunding is a pristine gathering pledges component that expects to utilize the broad reach of the net to gain, ordinarily little, gifts from countless individuals. Numerous crowdfunding efforts were carried out to adapt to natural issues; at the same time, hardly any specialists have investigated crowdfunding in biological protection and the executives (Gallo-Cajiao et al. 2018). One exemption changed to Gallo-Cajiao et al. (2018) who found around 600 preservation centered drives for the explanation that 2009, all through 80 countries and like around 5 million USD in gifts. In any case, this study zeroed in least difficult on hit crowdfunding projects, as that changed into the to-be-had data, which makes it difficult to perceive what separates effective and fruitless missions, and stays a significant data hole.

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6.3 Ethical Aspects:

Lined up with the great development of crowdfunding lately, we are likewise seeing a developing worry with moral parts of crowdfunding practice. Here, while not addressing standard turns of events, anecdotes about stages and missions associated with extortion have drawn in both public and media consideration. For instance, at the stage level, the examination concerning misappropriation of assets, as on account of Sweden-based swarm loaning stage TrustBuddy, wound up with it petitioning for financial protection in 2015 with significant misfortunes for its moneylenders (Palmer 2016). In China, the Ezubao crowdlending stage, capitulated to an administration crackdown on unlawful gathering pledges, uncovering its tasks as a 'Ponzy plot' (Zhang and Miller 2017). Also, at the mission level, and inside the prize crowdfunding setting, an autonomous review showed that 9% of missions neglected to follow through on guaranteed rewards, 8% of dollars vowed went to bombed projects, and 7% of sponsor neglected to accept their picked reward. Such cases incorporate non-conveyance on business ideas like I-Back-Pack, which raised USD 720K on Indiegogo for its metropolitan knapsack idea, and Central Standard Timing, which raised more than USD 1 million on Kickstarter for the 'world's most slender watch, to name only two. Different cases are more evil, including the GoFundMe gift crusades by US resident Jennifer Flynn, mentioning help in taking care of hospital expenses related with malignant growth she didn't have, raising more than USD 38K, prior to being sentenced for extortion.

So, we first cope with classical tactics to our ethics, and we then delve deeper into the context of crowdfunding, at the same time exploring associated dilemmas from more than one stakeholder's view. We then advocate outlining capacity moral pitfalls in crowdfunding exercise, as well as a few mechanisms for addressing them.

6.4 Sustainability Plan:

Sustainability plan is a widely concept. The most normally used definition comes is "Our Common Future". Maintainable advancement depicts as "progress that meets the wants of the predominant without compromising the ability of people in the future to fulfill their own personal necessities".

Sustainable development in the beginning catches three aspects: monetary, social, and natural manageability, with the ecological size greatest routinely noted in research and among professionals (Soini and Birkeland 2014). Some have expanded the current system with an extra institutional (Hosseini and Kaneko 2012; Spangenberg 2004) or social estimation (Hawkes 2001; Soini and Birkeland 2014).

In huge phrases, the economic dimension focuses on keeping monetary growth and encompasses excessive stages of income (Halisçelik and Soytas 2019) and growing GDP. The economic increase has long been a key concern for nations the world over but has additionally been surprisingly criticized because of the strain it places on the surroundings. Hence, monetary sustainability is about changing the cutting-edge method of economic growth and locating approaches to growing a new economic system primarily based on sustainable development (Moldan et al. 2012) that lets in for monetary increase within our environmental limits.

The Social dimension is the least defined (Dempsey et al. 2011; Murphy 2012). It has a tendency to cope with troubles related to social justice and social inclusion such as higher training and health (Halisçelik and Soytas 2019). Spangenberg (2004) attracts a difference between macro (e.g. Distribution of earnings and belongings) and micro (e.g. Schooling, education, social contacts) ranges of the social dimension. Most techniques attention to the social dimension in phrases of achieving countrywide welfare however it is also feasible to include a worldwide and intergenerational angle (Murphy 2012).

Similarly, as with different aspects, the ecological aspect has been characterized in various ways. Generally speaking, it's far "founded absolutely on a conviction of environment administrations — both sustainable and non-inexhaustible assets and squanders absorptive capacity that offers advantages to people and in this manner work on their government assistance" (Moldan et al. 2012, p. 11). Ecological maintainability involves saving those contributions and, subsequently, staying inside the snags of the biophysical climate (on the same page.). Energy utilization, texture streams, and land use are 3 classifications that structure the focal point of the natural aspect and are utilized as markers for estimating ecological manageability (Spangenberg 2004). In the educational writing, there has been powerful consideration on cleaning agent creation inside maintainable turn of events (see, e.G., Jegatheesan, et al. 2009; Dovì et al. 2009).

So, already knew about other companies' plans from the above description. And we have a sustainable plan for our Easy Fund. First of all, we will be working in a small area like we create funds for students (Education), medical. Suppose, A student needs fund for his/her project, so first of all, he/she have to create an account and then there have to put all the information like phone number, university id, and personal photo which must be valid otherwise we reject his/her fund from our admin panel. We will start small and gradually grow our project and we will gain people's trust. Right now this our main goal.

CHAPTER 7
CONCLUSION AND FUTURE SCOPE

7.1: Discussion & Conclusion

Easy fund is a crowd funding application that allows users an effective environment of learning and sharing their creativity for expecting possible good outcome from the community. Platform is quite easy friendly, sustainable under circumstances where the system focuses on the user's perspective and co-responding demand from the community through sharing or building network among us. Hope this will be a better solution in the field of fund raising for the best & a good learning for the present and upcoming generation as well.

The main goal is to create platform between us the people whom we know or the people we can trust more specifically it's the community which will develop the network to build a good relationship between the investor, helpers with the creator more precisely the makers which is one of the important goals of this application.

7.2: Scope for Further Developments

- Interface configuration will be refreshed a large number of times
- More element and usefulness will be added to turn out to be more helpful to the framework
- Dependability of the application ought to be expanded for better figuring out the center
- Ongoing talk climate will be empowered for greater dependability under insignificant conditions

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