



Daffodil
International
University

CLOTHING AND GEAR SALES MANAGEMENT SYSTEM

Submitted By:

MD. KOUSHIK KABIR

153-35-1341

Department of Software Engineering
Daffodil International University

Supervised By:

Prof. Dr. Touhid Bhuiyan

Professor and Head

Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University

A project submitted in partial fulfillment of the requirement for the degree of
Bachelor of Science in Software Engineering

Department of Software Engineering
DAFFODIL INTERNATIONAL UNIVERSITY

Fall – 2019

APPROVAL

This **Project/Thesis** titled “**Clothing and gears Sales Management**”, submitted by **Md. Koushik Kabir, ID:153-35-1341** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc in Software Engineering and approved as to its style and contents.

BOARD OF EXAMINERS

Dr. Touhid Bhuiyan
Professor and Head

Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University

Chairman

Dr. Md. Asraf Ali
Associate Professor

Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University

Internal Examiner 1

Asif Khan Shakir
Lecturer

Department of Software Engineering
Faculty of Science and Information Technology
Daffodil International University

Internal Examiner 2

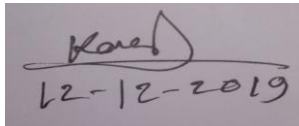
Dr. Md. Nasim Akhtar
Professor

Department of Computer Science and Engineering
Faculty of Electrical and Electronic Engineering
Dhaka University of Engineering & Technology, Gazipur

External Examiner

DECLARATION

It hereby declares that this project has been done by us under the supervision of **Md. Touhid Bhuiyan**, Professor & Head, Department of Software Engineering, at Daffodil International University. It also declares that neither this project nor any part of this has been submitted elsewhere for award of any degree.



.....

Md. Koushik Kabir

ID: 153-35-1341

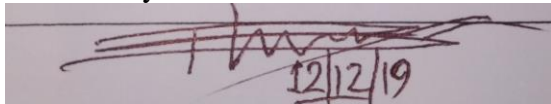
Batch: 18th

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

Certified by:



.....

Prof. Dr. Touhid Bhuiyan

Head of The Department

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

ACKNOWLEDGEMENT

I am faithful to the Almighty God first of all. I'm blessed that I'm moving to the last semester. I'm grateful to my parents for giving me the chance to chase my dreams. They are always helping, prioritizing, encouraging me and my views. I am thankful to my beloved teachers who have taught me about computer science and other subjects. They have also given me morals, and they teach us ethics as well as politeness. I would take this opportunity to thank all the faculty members and staff of the Software Engineering Department for keeping my sincere thanks.

I am grateful to my supervisor **Prof. Dr. Touhid Bhuiyan** for allowing me to develop the project. His supports make this project (Clothing and Gears Sales Management System) successful.

ABSTRACT

This project is “Clothing and Gears Sales Management System”. This purpose of my project is to develop an online application where the customer can shop online in a user-friendly environment. And seller can sell their products with efficiency.

Every software development follows some rules and method. I also following some method to develop this. My whole project work will follow the waterfall methodology. Which is a good software development process to develop a software.

TABLE OF CONTENTS

CLOTHING AND GEAR SALES MANAGEMENT SYSTEM	1
APPROVAL.....	i
DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF FIGURES.....	vii
LIST OF TABLES.....	viii
CHAPTER 1: INTRODUCTION.....	1
1.1 Project Overview	1
1.2 The Purpose of the Project.....	1
1.2.1 Background of the Project Effort	1
1.2.2 Beneficiaries and Benefits.....	1
1.2.3 Project Goals	1
1.3 Stakeholders	2
1.3.1 The Admin	2
1.4 Project Schedule	2
1.4.1 Project Timelines	2
CHAPTER 2: SOFTWARE REQUIREMENTS SPECIFICATIONS.....	3
2.1 Functional Requirements	3
2.1.1 Requirement Specification Description	3
2.2 Performance Requirements	4
2.2.1 Speed and Latency Requirements.....	4
2.2.2 Precision or Accuracy Requirements	4
2.3 Dependability Requirements.....	5
2.3.1 Reliability Requirements	5
2.3.2 Availability Requirements.....	5
2.3.3 Safety-Critical Requirements.....	5
2.4 Maintainability and Supportability Requirements.....	5
2.4.1 Maintenance Requirements	5
2.5 Security Requirements.....	5
2.5.1 Access Requirements	5
2.6 Usability and Human-Interaction Requirements.....	5
2.6.1 Ease of Use Requirements.....	5
2.6.2 Personalization and internationalization Requirements.....	6
2.6.3 Understandability and Politeness Requirements	6

2.6.4 Accessibility Requirements	6
CHAPTER 3 SYSTEM ANALYSIS AND DESIGN	7
3. System Analysis	7
3.1 Use Case Diagram:	7
3.2 Use Case Description:	7
3.3 Activity Diagram.....	11
3.3.1 Admin Perspective Activities.....	11
3.3.2 Customer Perspective Activities	12
3.3.4 System Sequence Diagram	12
Chapter 4: SYSTEM DESIGN SPECIFICATION	16
4.1 Class Diagram	16
4.2 Database Design Diagram.....	17
4.3 Development Tools & Technology	17
4.3.1 User Interface Technology	17
4.3.2 Implementation and Tool platform.....	17
Chapter 5: SYSTEM TESTING.....	19
5.1 Testing Features.....	19
5.1.1 Features to be tested.....	19
5.1.2 Features not to be tested	19
5.2 Testing Strategies	19
5.2.1 Test Approach.....	19
5.2.2 Pass/Fail Criteria	19
5.3 Test Case Table	19
Chapter 6: PROJECT SUMMERY.....	21
6.1 Limitations	21
6.2 Obstacles & Achievements.....	21
6.3 Future Scope.....	21
CONCLUSION.....	22
REFERENCE.....	23

LIST OF FIGURES

Figure 1.1: Gantt Chart.....	2
Figure 3.1: Use case Diagram.....	7
Figure 3.3: Admin Perspective Activities	11
Figure 3.3: Customer Perspective Activities	12
Figure: 3.4: Sequence diagram for customer registration	12
Figure 3.5: Sequence Diagram for Customer login	13
Figure 3.6: Sequence Diagram for Customer Order product	13
Figure 3.7: Sequence Diagram for Customer payment	13
Figure 3.8: Sequence Diagram for Admin Registration.....	14
Figure 3.9: Sequence Diagram for Admin login.....	14
Figure 3.10: Sequence Diagram for admin for add products	14
Figure 3.11: Sequence Diagram for admin confirmed order.....	15
Figure 4.1: Class Diagram.....	16
Figure 4.2: Database Design Diagram	17

LIST OF TABLES

Table-2.1: Functional Requirements	3
Table 3.1: Customer and Admin Registration	7
Table 3.2: Customer and Admin Login.....	8
Table 3.3: View Products	8
Table 3.4: Order Products.....	8
Table 3.5: Payment method.....	9
Table 3.6: Cancel order	9
Table 3.7: Manage Item in the inventory	9
Table 3.8: Confirm Order	10
Table 3.9: Generate sales reports	10
Table: 5.1: Test case Registration.....	19
Table 5.2: Test case Table	20

CHAPTER 1: INTRODUCTION

1.1 Project Overview

Clothing and Gears sales Management System is a web-based system that everyone can access this system from anywhere. This system will be very handy to any online based e-commerce company to keep their sales record efficiently. Their customers can choose and order their desired products and shop them easily.

1.2 The Purpose of the Project

Sales and purchased management system of this system is a process which can organize their sells, inventories with ease. The system provides customers to pick their products. The user-friendly environment helps customers to browse with ease and buy their product without troubles. Customers will get purchase product information. They can add products in shopping cart and confirm them for the delivery. Admins can easily make reports how much items sold per day and how many are remaining in the inventory.

1.2.1 Background of the Project Effort

There are many online shops who are selling their products in social media platform. Which is not suitable for any kind of e-shop. I got touch with a client who is selling their products in social media but due to lack of a very user-friendly environment, their sells are decreasing. They tried to take feedback from customers. Almost everyone wants a very easy to use system for shopping. So, I had the idea to make them a internet based sales management and shopping system which is very user-friendly and easy to use for both of the user (customers and sellers). Which helps to manage the selling process easier.

1.2.2 Beneficiaries and Benefits

This system is beneficial for both Admins and the end-user. Benefits are,

- Fully functional system
- Easy to use
- Savings in time, cash and energy
- Increased management efficiency that provides customers with quality services
- Records of sales and inventories for the administration
- Customers can choose products and buy.

The system provides an excellent way for customers to buy products without going to the shop.

1.2.3 Project Goals

Every project must have a specific goal to be successful. My project has also a goal. Its basic function is making the procedure user-friendly for the stakeholders. Admin can control the whole sales system. As well as make a report based on sales. All of the data will be logged in the database system.

1.3 Stakeholders

1.3.1 The Admin

- Add product (Edit, Update, Delete)
- View order report
- Create daily sales report
- View sales report
- View inventory.

1.4 Project Schedule

1.4.1 Project Timelines

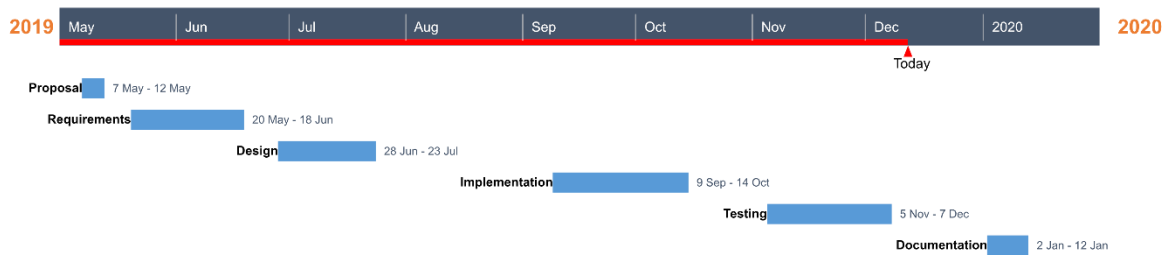


Figure 1.1: Gantt Chart

CHAPTER 2: SOFTWARE REQUIREMENTS SPECIFICATIONS

2.1 Functional Requirements

Table-2.1: Functional Requirements

FRQ_ID	FRQ_NAME	Description	Priority
FRQ001	Registration (Admin)	This module will control the Admin Registration process	High
FRQ002	Registration (Customer)	This module will control the Customer Registration process	high
FRQ003	Login (Admin)	The Module will control the reports of the registered users	High
FRQ004	Login (Customer)	The module will control the reports of all the logged in user	High
FRQ005	Manage Products	The module will control to manage the products	High
FRQ006	Order Products	The module will help to select items and order them by customer	High
FRQ007	Order Report	The module will control the reports for ordered product	Medium
FRQ008	Sales Report	The module will control the reports of sold product	Medium

2.1.1 Requirement Specification Description

- **FRQ001: Admin Registration**
Admin registration is mandatory to login the system. After entering a specific url admin registration page will be found. Then with a valid information Admin can register for the system.
- **FRQ002: Customer Registration**
The visitors don't need any registration to view the items in the shop. But when they checkout after selection of the items for their shopping, then they need to register for the system for further process.
- **FRQ003: Admin login**
The admins must need to login into the system to do the administrative works. Only authorized users can login to the system.
- **FRQ004: Customer Login**
If the customer is registered before then they can login the system and checkout easily. Only authorized customers are allowed to the system.

- **FRQ005: Manage Products**
Admin can add products, delete products and update the added products. With the proper description the module will help to manage the inventory.
- **FRQ006: Order Products**
Customers needs to select items they want. If they want to buy an item then this module will take the selected items and make an order for the customer. By which customer can order from this system.
- **FRQ007: Order Report**
After making order customer and admin both need the report of the ordered list and possible delivery information. This module will make the order report and give it to the customer and admin.
- **FRQ008: Sales Report**
After getting the order from customer admin need to confirm the sales of the products and deliver them. This module will make the sales report for the admin.

2.2 Performance Requirements

2.2.1 Speed and Latency Requirements

- Data insertion into MySQL database must be faster
- Response time and result of the query must be fast and accurate
- Fast user-interface loading in minimal time

2.2.2 Precision or Accuracy Requirements

- A successful system login result should be accurate and precise
- Database should store accurate and valid form data
- Authentic user should the authentic data

2.3 Dependability Requirements

2.3.1 Reliability Requirements

- Admins and customers should register with the valid data to update the database with given valid data
- Login process should have input by valid email and password
- Shopping system should visible to the customers
- Admin panel should visible to the Admins
- Any unauthorized login should not occur
- Admin should check the shopping carts of the customer and make report

2.3.2 Availability Requirements

- The system should run on a web browser in any platform at all times
- The system should response in any user activity
- The system should perform based on user activity
- The system should show a replacement page in case of any failure.

2.3.3 Safety-Critical Requirements

Without an extremely unfortunate malfunction, the system should be able to function.

2.4 Maintainability and Supportability Requirements

2.4.1 Maintenance Requirements

- Commercial database will be used to maintain the database
- Modular design of code for effective maintenance.

2.5 Security Requirements

2.5.1 Access Requirements

- Unauthorized access is prohibited
- Login system for only registered users

2.6 Usability and Human-Interaction Requirements

2.6.1 Ease of Use Requirements

- User-friendly fast environment online website
- Competitive shipping options
- Advance search and navigation
- Product photo and image presentation
- Product description in detail
- Customer product review option.

2.6.2 Personalization and internationalization Requirements

- Payment Method (e.g. Cash on Delivery, Credit Card etc.)
- Taxes
- Shipping & logistics

2.6.3 Understandability and Politeness Requirements

- The system should be able to understand by users

2.6.4 Accessibility Requirements

- The system should be able to access from any device
- Logged in users should access authenticate accounts within a request

CHAPTER 3 SYSTEM ANALYSIS AND DESIGN

3. System Analysis

3.1 Use Case Diagram:

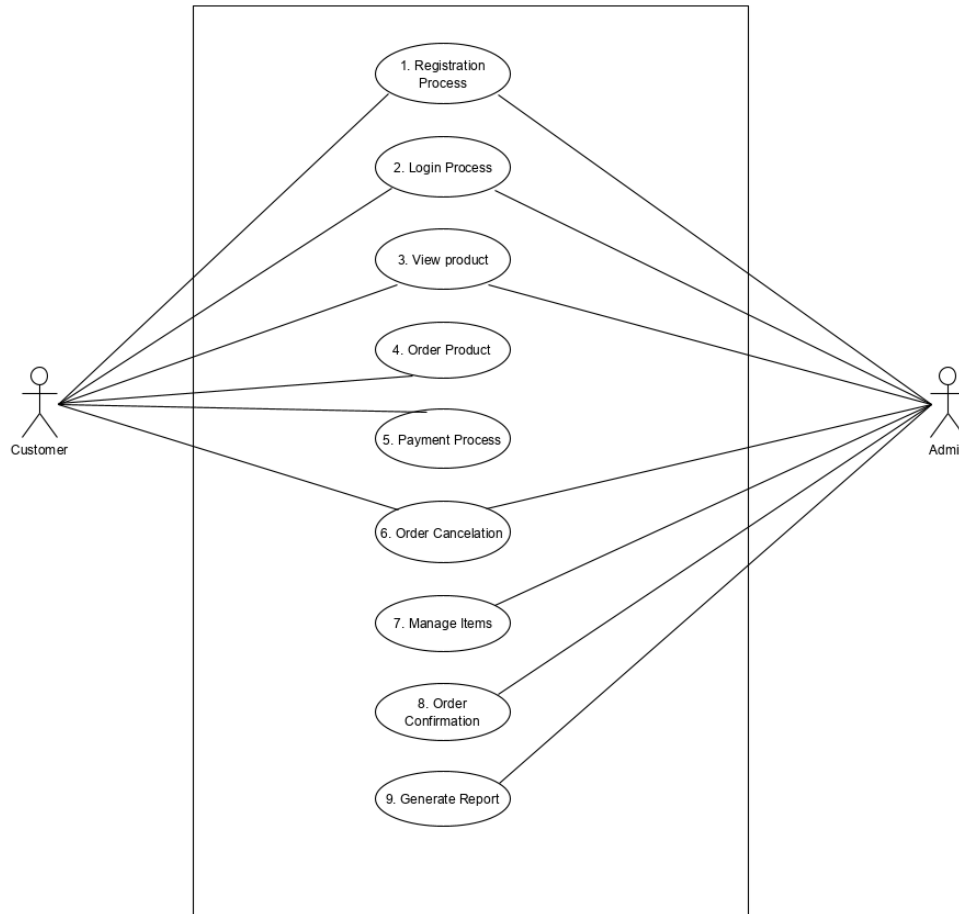


Figure 3.1: Use case Diagram

3.2 Use Case Description:

Table 3.1: Customer and Admin Registration

Use Case ID	UC001
Use case Name	Registration Process
Description	To access the system registration is required.
Actor	Admins, Customers
Pre-condition	Information form field must be filled with valid email, phone and other information.
Post-condition	Get access to the system.
Flow	<ul style="list-style-type: none">● Input valid information in the form● Press sign up after filling the form● System permits request and give access to the registered user to the system
Quality Requirements	None.

Table 3.2: Customer and Admin Login

Use Case no	UC002
Use case Name	Login Process
Description	To access the system with proper authorization
Actor	Admins, Customers
Pre-condition	Must include valid email and password
Post-condition	None
Flow	<ul style="list-style-type: none"> ● Input valid email and password ● Press sign up ● System permits request and give access to the registered user to the system
Quality Requirements	None.

Table 3.3: View Products

Use Case no	UC003
Use case Name	View product
Description	System will show the products to the customers
Actor	Admin, Customer
Pre-condition	Visiting the website
Post-condition	View all the products with their valid information
Flow	<ul style="list-style-type: none"> ● Search or Click the product ● View product detailed information
Quality Requirements	None.

Table 3.4: Order Products

Use Case no	UC004
Name:	Order Product
Description:	Customer will choose the products the want to buy. System will pick data according to customer has chosen.
Actor	Customer
Pre-condition	View the product detail information
Post-condition	Customer have to confirm their order
Flow	<ul style="list-style-type: none"> ● View product ● Add products to the cart ● Confirm or update the cart. ● Confirm the order ● Order information stored in system database
Quality Requirements	Payment method

Table 3.5: Payment method

Use Case no	UC005
Name:	Payment Process
Description:	Customers have to pay the price of the products to get the products delivered to them. It will be done by the payment method.
Actor	Customers
Pre-condition	Confirm the order
Post-condition	Product should be delivered to the customer
Flow	<ul style="list-style-type: none"> ● Provide necessary information about payment. ● For the valid user information confirm the payment. ● Show payment confirmation message or send payment slip. ● For any invalid information show message. ● All the information stored in system database.
Quality Requirements	Login.

Table 3.6: Cancel order

Use Case no	UC006
Name:	Order Cancelation
Description:	Customer can cancel order in a period of time. Admins also can cancel a order if the product does not exist in inventory.
Actor	Customer, Admin
Pre-condition	Product add to cart and confirm the order
Post-condition	Remove the product from order list or cancel the list
Flow	<ul style="list-style-type: none"> ● View the item to the cart. ● Remove item from the cart from the edit cart
Quality Requirements	Login in the system

Table 3.7: Manage Item in the inventory

Use Case no	UC007
Name:	Manage item
Description:	Admin can add, delete or update the product to the inventory
Actor	Admin
Pre-condition	Authorized or registered admins
Post-condition	Add the new products and which product are not available in the stock can be removed.
Flow	<ul style="list-style-type: none"> ● Visit the manage item option ● Add, delete or update the product information ● All the information will be stored in the system database
Quality Requirements	<ul style="list-style-type: none"> ● Add product ● Delete product ● update product

Table 3.8: Confirm Order

Use Case no	UC008
Name:	Order Confirmation
Description:	Admin can confirm the order.
Actor	Admin
Pre-condition	When payment is confirmed.
Post-condition	Admin deliver the product to the customer.
Flow	<ul style="list-style-type: none"> ● Admin view the order list. ● If payment is confirming admin can confirm the order. ● Store all the data to the system database. ● If payment is not confirmed by the admin send a notification message to the customer.
Quality Requirements	None.

Table 3.9: Generate sales reports

Use Case no	UC009
Name:	Generate Report
Description:	Only admin can access the sales report.
Actor	Admin
Pre-condition	Authorized admin
Post-condition	Admin can generate the sales report
Flow	<ul style="list-style-type: none"> ● Payment confirmation data is recorded to the system database ● Admin visits the report generate option in the admin panel ● All the sales record will be stored in the system database
Quality Requirements	None.

3.3 Activity Diagram

We need an operation diagram to illustrate the complex aspects of the systems. An important diagram in UML is the activity diagram. It is a flowchart representing the activity flowing from one activity to the other. What is described as a system operation.

3.3.1 Admin Perspective Activities

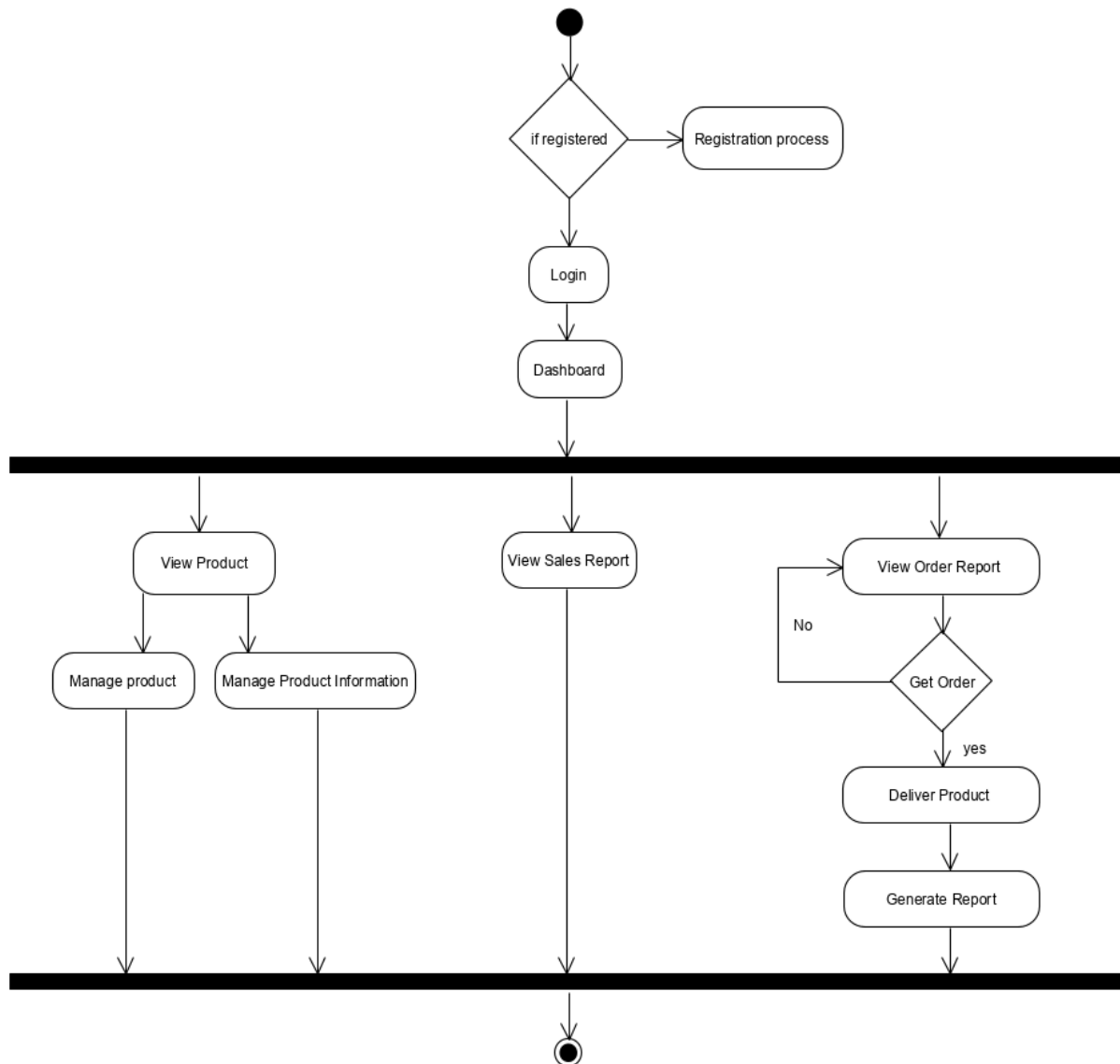


Figure 3.3: Admin Perspective Activities

3.3.2 Customer Perspective Activities

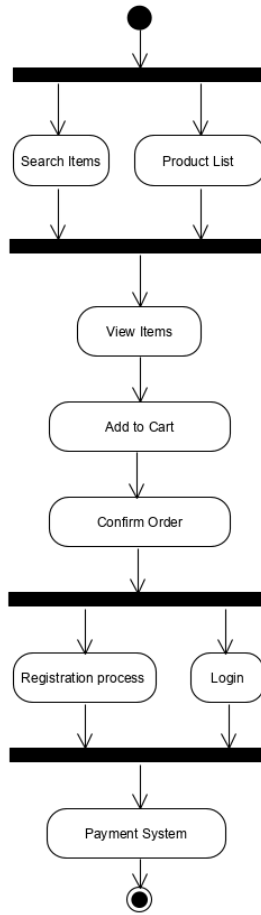


Figure 3.3: Customer Perspective Activities

3.3.4 System Sequence Diagram

Sequence diagrams of this system are:

- Customer Registration:

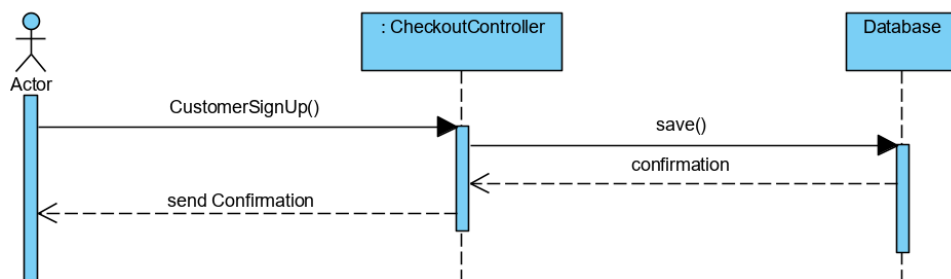


Figure: 3.4: Sequence diagram for customer registration

- Customer Login:

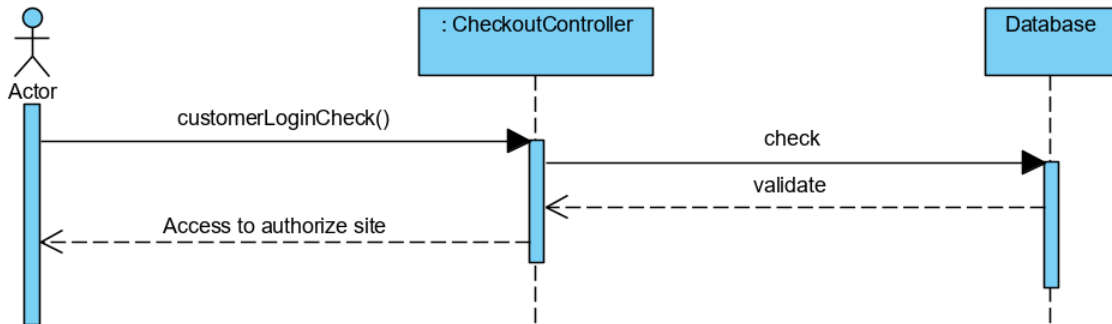


Figure 3.5: Sequence Diagram for Customer login

- Customer Order Product:

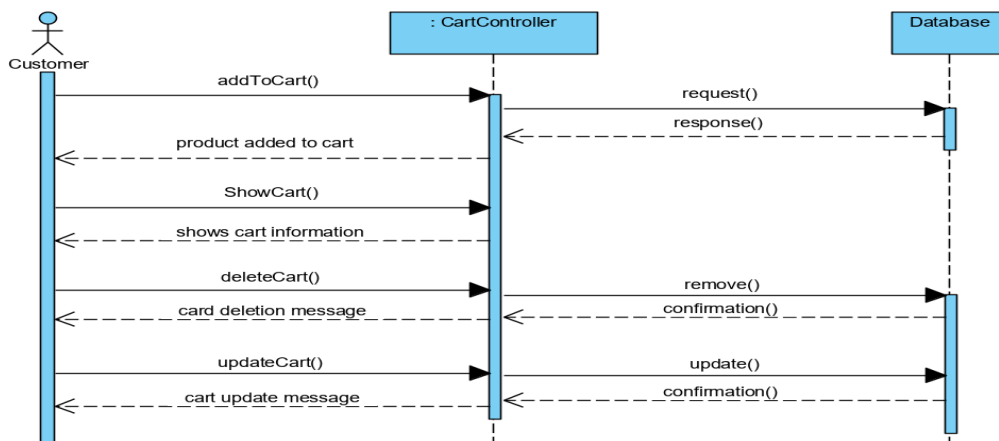


Figure 3.6: Sequence Diagram for Customer Order product

- Customer Payment:

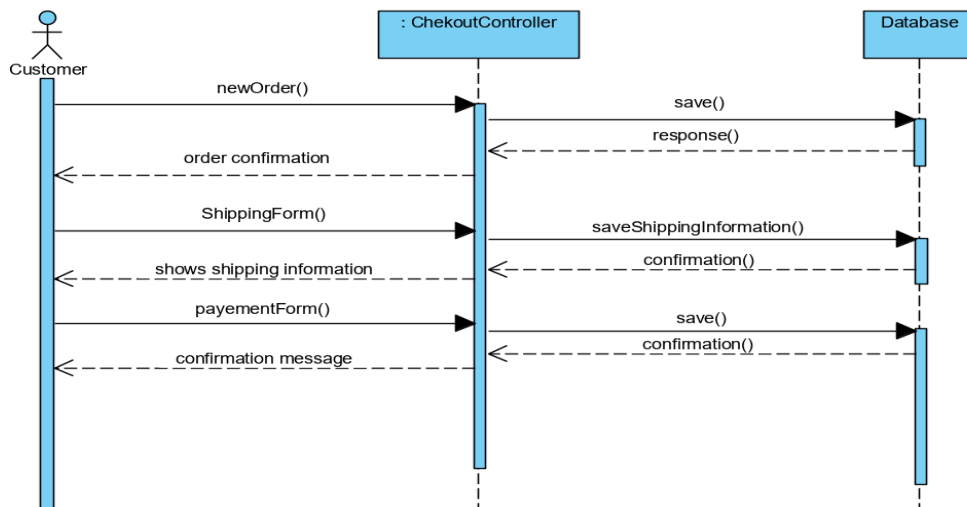


Figure 3.7: Sequence Diagram for Customer payment

- Admin Registration:

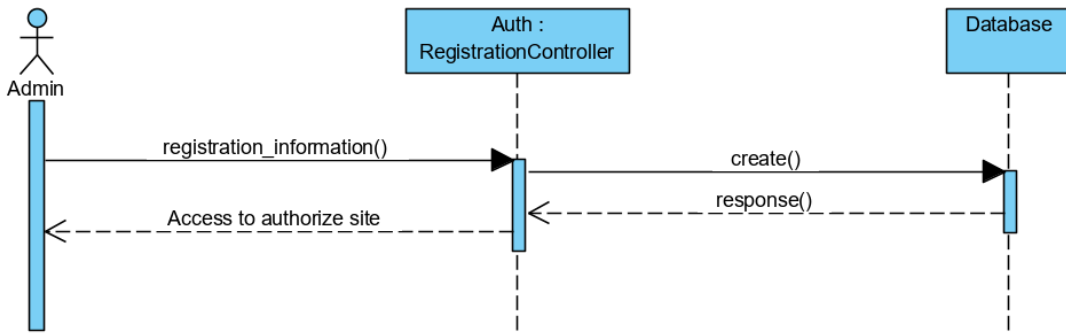


Figure 3.8: Sequence Diagram for Admin Registration

- Admin Login:

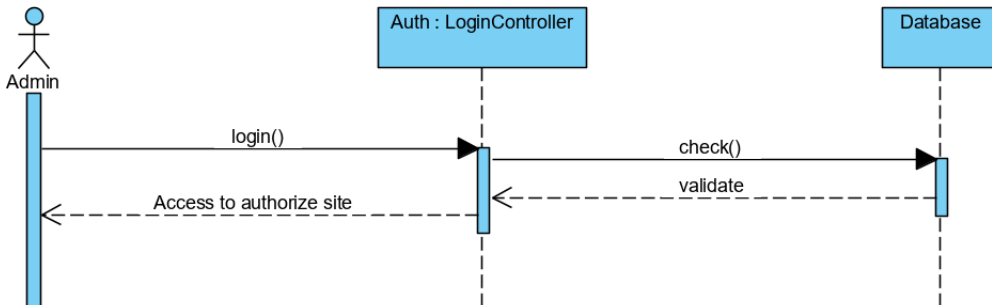


Figure 3.9: Sequence Diagram for Admin login

- Admin Manage Product:

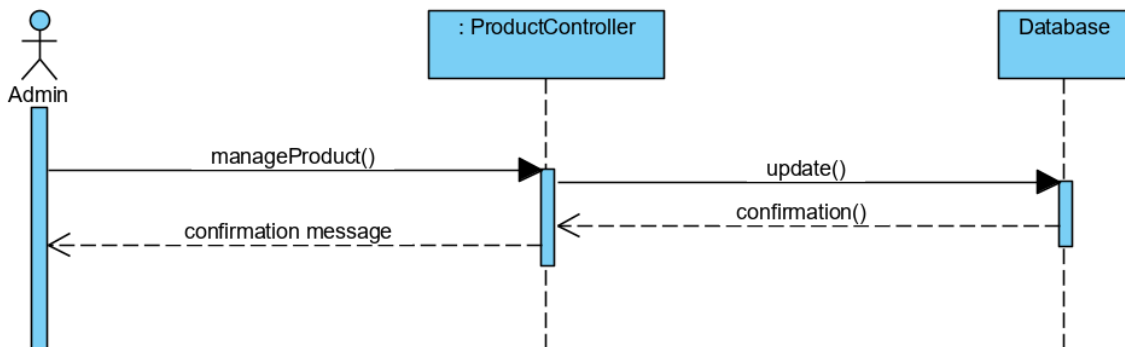


Figure 3.10: Sequence Diagram for admin for add products

- Admin Manage Orders:

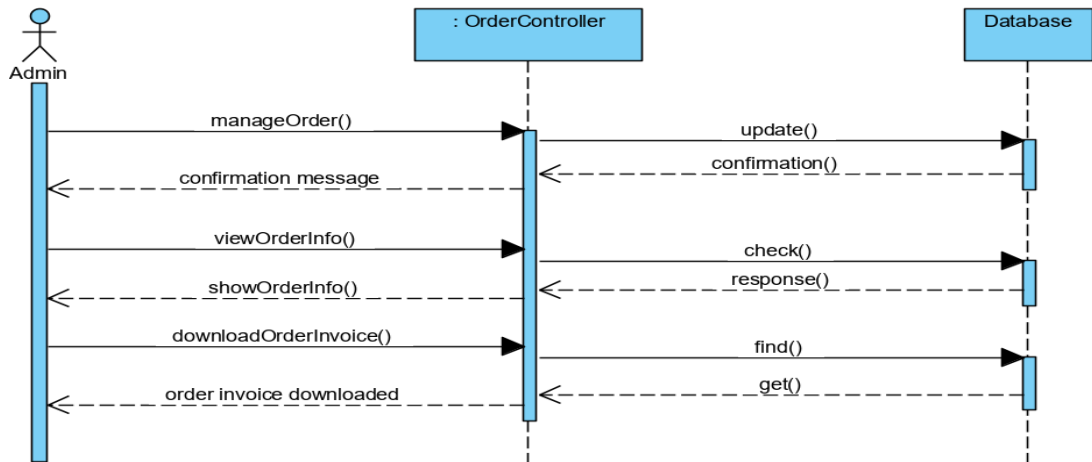


Figure 3.11: Sequence Diagram for admin confirmed order

Chapter 4: SYSTEM DESIGN SPECIFICATION

4.1 Class Diagram

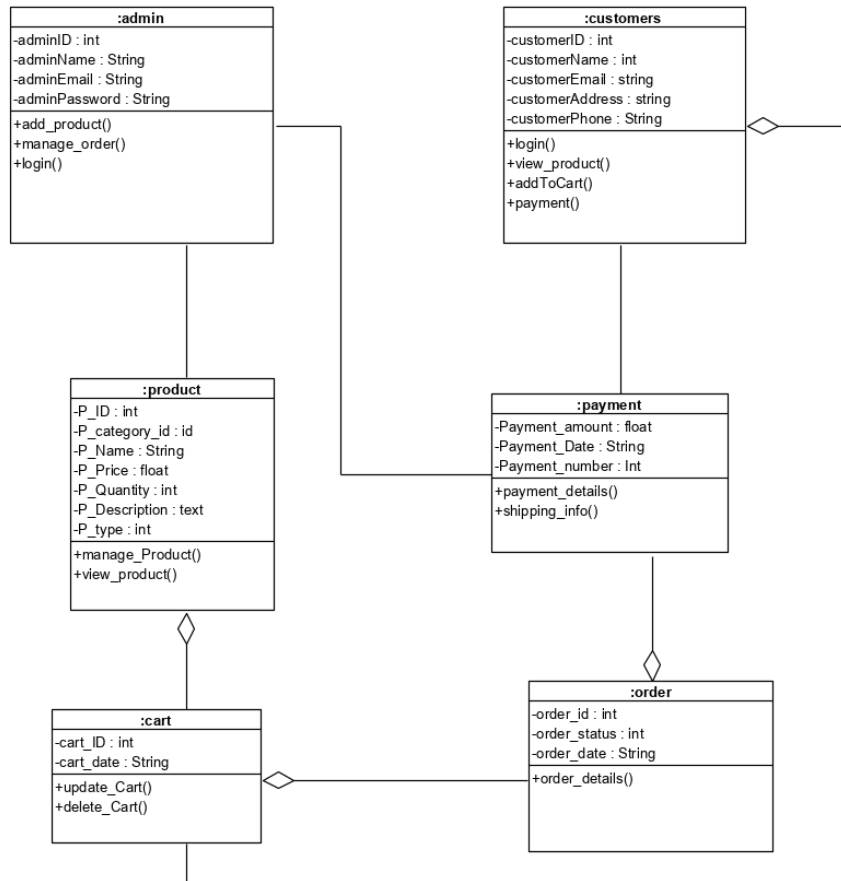


Figure 4.1: Class Diagram

4.2 Database Design Diagram

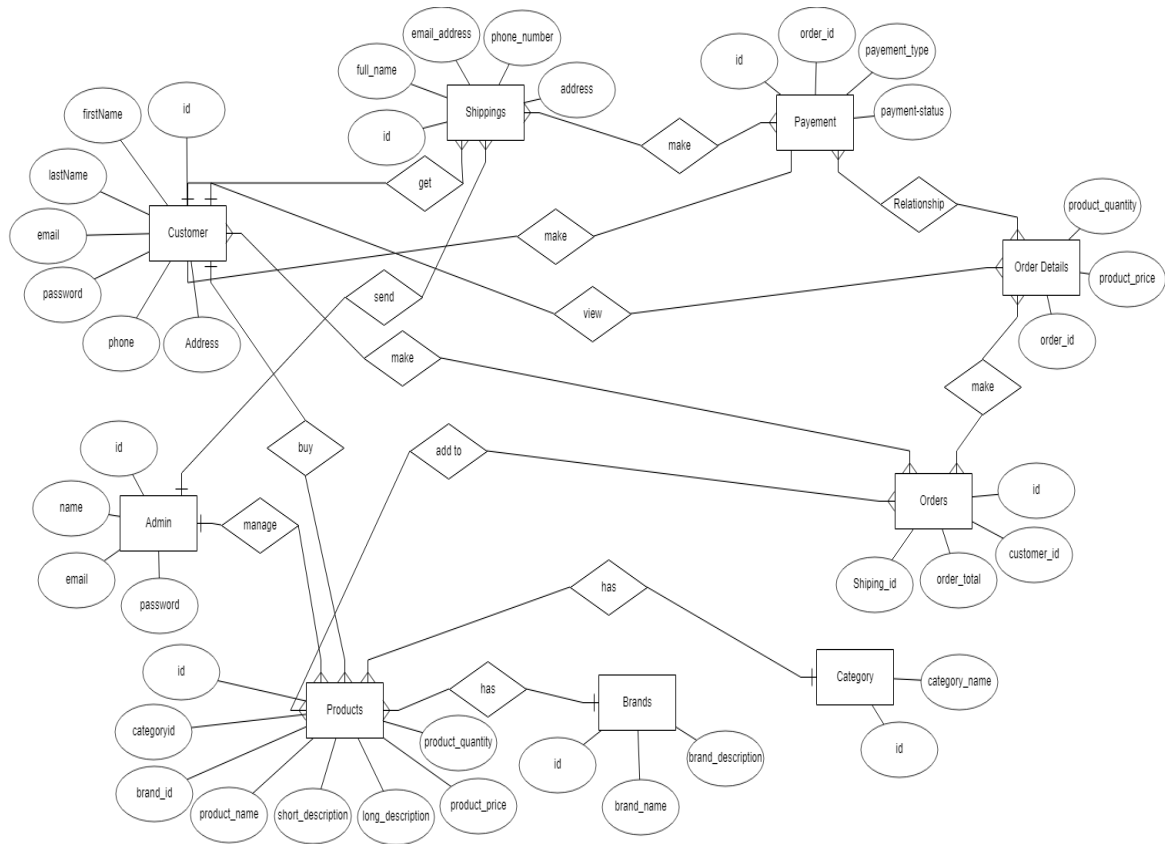


Figure 4.2: Database Design Diagram

4.3 Development Tools & Technology

4.3.1 User Interface Technology

- HTML5
- Bootstrap 3
- CSS3
- JavaScript
- Atom Editor

4.3.2 Implementation and Tool platform

- PHP
- MySql
- Xampp
- Laravel Framework
- GitBash
- Atom IDE

Chapter 5: SYSTEM TESTING

5.1 Testing Features

5.1.1 Features to be tested

- Registration
- User Login

5.1.2 Features not to be tested

- Mange profile
- View Product
- View Sales Report

5.2 Testing Strategies

5.2.1 Test Approach

- Manual Testing
- Testing based on user acceptancy

5.2.2 Pass/Fail Criteria

- Component Criteria Pass / Fail – The test will pass if the case meets the requirement for object design or if it fails.
- Integration Pass/Fail criteria – The test will pass if the case meets the object design architecture requirement or fail if not.
- System Pass/Fail criteria – The test will pass if the case meets the functional and non - functional requirements or fail if not.

5.3 Test Case Table

Table: 5.1: Test case Registration

Test Case ID: TC_01	Test Design by: Md. Koushik Kabir
Test Priority: High	Test Design Date: 5.11.2019
Module Name: Registration	Test Executed by: Md. Koushik Kabir
Test Description: Registration process is mandatory to get full access of the system. Only authenticated and validate users will have the authorization to buy products and.	Test Execute Date: 2.12.2019

Precondition: User has no precondition

Dependencies: Enter input required information

Table 5.2: Test case Table

Steps	Test Cases	Test Data	Expected Result	Result	Actual result
01	If a user put no data in any required field		Empty fields are required	pass	Empty fields are required
02	When user put 4 characters long password	1234	The password must be at least 6 characters.	pass	The password must be at least 6 characters.
03	When a user enters invalid email id	adhajd@aaa	The email must be a valid email address.	pass	The email must be a valid email address.
04	When a user enters email id that is registered before.	admin@gmail.com	The email has already been taken.	pass	The email has already been taken.
05	When a user try to input different inputs in password and confirm password fields	123456 & 123467	The password confirmation does not match.	pass	The password confirmation does not match.

Chapter 6: PROJECT SUMMERY

6.1 Limitations

- Lack of touch and feel of materials
- Lack of shopping experience.
- Lack of close examination in online shopping.

6.2 Obstacles & Achievements

In this everyday updating technological era, everything is continuously changing. New features, medias are coming to the technological inventory. The system is based on Laravel framework which is updating radically. Even new features are so good that may eliminate some technology in this system and replace it with a new one.

6.3 Future Scope

If it can overcome its limitation, it will be more efficient. We must try to develop our plan in the future so that we can provide these facilities and the verification of the credit card will not be completed. Further features can be provided to the website administrator, finding specific customer generate invoice from customer admin panel to present for decision making. Adding SMS gateway to verify the effective submission of the customer order, as well as the current stats of the order that means any change in the state of the order customer will receive notification.

CONCLUSION

All though I've developed the system "Clothing and Gears sales management System" there are lots of limitation in there. I tried my best to overcome my limitations. The Project will help the customers to booking reservation table easily. Alhamdulillah I've developed the system for Food lover people and this make me proud.

REFERENCE

- <https://stackoverflow.com>
- <https://www.officetimeline.com/online/gantt-chart-maker>
- <https://github.com>
- <https://www.visual-paradigm.com/>