

# **GoInvestMe – A Crowdfunding Investment Platform for Startups**

**Final Year Project – Mid Report**

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## Evaluation

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## **Abstract**

In this project, we propose to create GoInvestMe-A Crowdfunding platform for start-ups. Crowdfunding is process to collecting small number of amounts from many people to start business. This system will be used to reduce the gap between the entrepreneurs and the Investors and allow them to communicate with each other. Entrepreneurship is a way to start the business in which entrepreneur lease money from the investor and investor invest his money in the proposed project. This system shall allow the entrepreneur to create campaigns and describe how much money is needed for his campaign for some time duration that will be visible to users. After time expiring, entrepreneur will not be able to collect more money. The system shall also provide the entrepreneur to edit the campaign description. The system shall also allow the investor to create campaign but as an entrepreneur with it ID. Investor can also invest in different campaigns and companies can invest in other campaigns. The system shall allow users to search different campaigns from our database based on categories and titles The system shall allow users to search different campaigns from our database on the basis of categories and titles i.e. If investor want to invest in IT project, he can search for IT project. The system shall allow the users with a chat box functionality to share ideas and experience with other users. The system shall accurately maintain a list of campaigns for user to view. Users can view all trending campaigns, successful stories and top 10 campaigns. Users can view other user profile and can give feedback using the proposed android application or web portal. The Website will be MVC based and shall be using ASP NET technologies for development and using SQL SERVER as a Database service. While the Android shall be created in Xamarin and shall be using the Web APIs to communicate with the Server. Database control and other admin responsibilities will be provided at admin panel.

## Table of Contents

Chapter 1 : Introduction .....	1
1.1 : Introduction.....	1
1.1.1 : Entrepreneurship .....	1
1.1.2 : Crowdfunding .....	1
1.1.2.1 : Types of Crowdfunding .....	1
1.1.2.2 : Working of Crowdfunding Platform.....	1
1.1.2.3 : What is in it for Investors? .....	2
1.1.3 : Entrepreneurs .....	2
1.1.3.1 : Types of Entrepreneurship .....	2
1.1.4 : Investor .....	2
1.1.4.1 : Types of Investors.....	2
1.2 : Objectives .....	2
1.3 : Problem Statement.....	3
1.4 : Assumptions.....	3
1.5 : Constraints .....	3
1.6 : Project Scope .....	3
Chapter 2 : Requirement Analysis .....	4
2.1 : Literature Review .....	4
2.1.1 : EquityNet.....	4
2.1.2 : KickStarter .....	4
2.1.3 : Patreon .....	5
2.1.4 : Pledge Music.....	6
2.2 : Stakeholders List (Actors) .....	6
2.3 : Requirements Elicitation.....	6
2.3.1 : Functional Requirements .....	6
FR01: Entrepreneur / Investor Account Registration.....	6
FR02: Company Account Registration .....	7
FR03: Sign In.....	7
FR04: Add New Campaign.....	7
FR05: Delete a Campaign .....	8
FR06: Update Campaign.....	8
FR07: Modify Profile.....	8
FR08: View Investment .....	8

FR09: Receive Payment.....	9
FR10: Make Investment.....	9
FR11: Returns of Investment .....	9
FR12: Search campaigns.....	9
FR13: Reports .....	9
FR14: Campaigns description:.....	10
FR15: Provide any help.....	10
FR16: Complains/Feedback .....	10
FR17: Display Campaigns: .....	10
FR18: Conversation .....	11
FR19: Comments .....	11
FR20: Notification .....	11
2.3.2 : Non-Functional Requirements .....	11
NFR01: Performance .....	11
NFR02: Security .....	12
NFR03: Maintenance .....	12
NFR04: Documentation .....	12
NFR05: Disaster Recovery .....	12
NFR06: Usability .....	12
NFR07: Integrity .....	12
NFR08: Flexibility .....	13
NFR09: Portability.....	13
2.3.3 : Requirement Traceability Matrix.....	13
2.4 : Use Case Diagram and Descriptions.....	16
2.4.1 : Registration .....	17
UC01: Sign Up.....	17
2.4.2 : Campaign .....	18
UC02: Add Campaign.....	19
UC03: Edit Campaign.....	19
UC04: Delete Campaign .....	20
UC05: View Campaign.....	21
UC06: Search Campaign.....	21
2.4.3 : Profile.....	22
UC07: View Profile .....	23
UC08: Edit Profile .....	23

2.4.4 : Investment.....	24
UC09: Make Investment.....	24
UC10: View Investment.....	25
UC11: Receive Investment .....	26
2.4.5 : Payroll.....	27
UC12: Manage Payroll.....	27
UC13: Run Payroll.....	28
2.4.6 : Conservation .....	29
UC14: Manage Comments.....	29
UC15: Chat .....	30
2.4.7 : Notification .....	31
UC16: Get Notification.....	31
2.4.8 : Login.....	32
UC17: Login .....	32
2.5 : Software Development Life Cycle Model .....	33
2.5.1 : Why use Waterfall Model? .....	33
2.5.2 : Why use Rapid Prototyping Model?.....	34
Chapter 3 : System Design.....	35
3.1 : Work Breakdown Structure (WBS).....	35
3.2 : Activity Diagram .....	37
3.2.1 : Sign Up .....	37
3.2.2 : Add Campaign .....	38
3.2.3 : Edit Campaign .....	39
3.2.4 : Delete Campaign.....	39
3.2.5 : Search.....	40
3.2.6 : View Profile .....	40
3.2.7 : Edit Profile.....	41
3.2.8 : Make Investment.....	42
3.2.9 : View Investment .....	42
3.2.10 : Receive Investment.....	43
3.2.11 : Manage Payroll .....	44
3.2.12 : Manage Comments .....	45
3.2.13 : Chatting.....	45
3.2.14 : Notification .....	46
3.2.15 : Login.....	46

3.2.16 : Run Payroll .....	47
3.3 : Sequence Diagram .....	47
3.3.1 : Chatting.....	48
3.3.2 : Feedback.....	48
3.3.3 : Comments .....	49
3.3.4 : Make Investment.....	49
3.3.5 : Receive Investment.....	50
3.3.6 : Sign Up and Login .....	50
3.3.7 : Profile.....	51
3.3.8 : Campaign .....	51
3.3.9 : Search and View Campaign.....	52
3.4 : Software Architecture .....	52
3.4.1 : MVC Architecture .....	52
3.5 : Class Diagram.....	53
3.6 : Database Diagram.....	54
3.7 : Network Diagram (Gantt chart).....	54
3.8 : Collaboration Diagram.....	55
3.8.1 : Chatting.....	55
3.8.2 : Feedback.....	56
3.8.3 : Make Investment.....	56
3.8.4 : Receive Investment.....	56
3.8.5 : Sign Up and Login .....	57
3.8.6 : Profile.....	57
3.8.7 : Campaign .....	58
3.8.8 : Search and View Campaign.....	58
Chapter 4 : System Testing .....	59
4.1 : Test Cases .....	59
TC-01: Sign Up.....	59
TC-02: Add Campaign.....	60
TC-03: Edit Campaign.....	60
TC-04: Delete Campaign .....	61
TC-05: View Campaign .....	62
TC-06: Delete Campaign .....	62
TC-07: View Profile .....	63
TC-08: Edit Profile .....	64

TC-09: Make Investment .....	64
TC-10: View Investment.....	65
TC-11: Receive Investment .....	66
TC-12: Login .....	66
TC-13: Payroll System.....	67
TC-14: Run Payroll.....	68
TC-15: Comments.....	69
TC-16: Chat .....	70
TC-17: Change Password.....	70
TC-18: Notification Services .....	71
4.2 : Unit Testing .....	72
4.3 : Integration Testing.....	72
4.4 : System Testing.....	72
Chapter 5 : Prototype .....	74
5.1 : Header.....	74
5.2 : Footer.....	74
5.3 : Trending Projects.....	74
5.4 : Search.....	75
5.5 : Show Campaign.....	75
5.6 : Sign Up .....	76
5.7 : Login.....	77
5.8 : Detail for Investment .....	78
Chapter 6 : Code .....	79
6.1 : _header.cshtml .....	79
6.2 : _footer.cshtml .....	82
6.3 : _layout.cshtml.....	83
6.4 : Index .....	84
6.5 : Site.css .....	90
Chapter 7 : Conclusion.....	93
7.1 : Problems .....	93
7.2 : Lessons Learnt.....	93
7.3 : Project Summary.....	93
7.4 : Future Work.....	93
7.4.1 : Translation .....	94
7.4.2 : Artificial Intelligence .....	94



7.4.3 : SSL Certification .....	94
7.4.4 : Copyrights.....	94

## List of Figures

Figure 1 : Crowdfunding Platform Working.....	1
Figure 2: TrustScore KickStarter Reputation 1.....	5
Figure 3: TrustScore KickStarter Reputation 2.....	5
Figure 4: UC – Registration.....	17
Figure 5: UC – Campaign.....	18
Figure 6: UC – Profile.....	22
Figure 7: UC – Login.....	24
Figure 8: UC – Investment.....	24
Figure 9: UC – Payroll.....	27
Figure 10: UC – Conversation.....	29
Figure 11: UC – Notification.....	31
Figure 12: UC – Login.....	32
Figure 13: Proposed SDLC Hybrid Model.....	34
Figure 14: Work Breakdown Structure.....	36
Figure 15: AD – Sign Up.....	37
Figure 16: AD – Add Campaign.....	38
Figure 17: AD – Edit Campaign.....	39
Figure 18: AD – Delete Campaign.....	39
Figure 19: AD – Search.....	40
Figure 20: AD – View Profile.....	40
Figure 21: AD – Edit Profile.....	41
Figure 22: AD – Make Investment.....	42
Figure 23: AD – View Investment.....	42
Figure 24: AD – Receive Investment.....	43
Figure 25: AD – Manage Payroll.....	44
Figure 26: AD – Manage Comments.....	45
Figure 27: AD – Chatting.....	45
Figure 28: AD – Notification.....	46
Figure 29: AD – Login.....	46
Figure 30: AD – Run Payroll.....	47
Figure 31: SD – Chatting.....	48
Figure 32: SD – Feedback.....	48
Figure 33: SD – Comments.....	49
Figure 34: SD – Make Investment.....	49

Figure 35: SD – Receive Investment .....	50
Figure 36: SD – Sign Up and Login .....	50
Figure 37: SD – Profile .....	51
Figure 38: SD – Campaign .....	51
Figure 39: SD – Search and View .....	52
Figure 40: MVC Architecture .....	52
Figure 41: Class Diagram .....	53
Figure 42: ERD – Database Diagram .....	54
Figure 43: Gantt Chart .....	55
Figure 44: CD – Chatting.....	55
Figure 45: CD – Feedback .....	56
Figure 46: CD – Make Investment.....	56
Figure 47: CD – Receive Investment.....	56
Figure 48: CD – Sign Up & Login.....	57
Figure 49: CD – Profile.....	57
Figure 50: CD – Campaign .....	58
Figure 51: CD – Search and View Campaign.....	58
Figure 52: Header.....	74
Figure 53: Footer.....	74
Figure 54: Trending Projects .....	74
Figure 55: Search.....	75
Figure 56: Show Campaign.....	75
Figure 57: Sign Up .....	76
Figure 58: Login.....	77
Figure 59: Detail for Investment .....	78

# Chapter 1 : Introduction

## 1.1 : Introduction

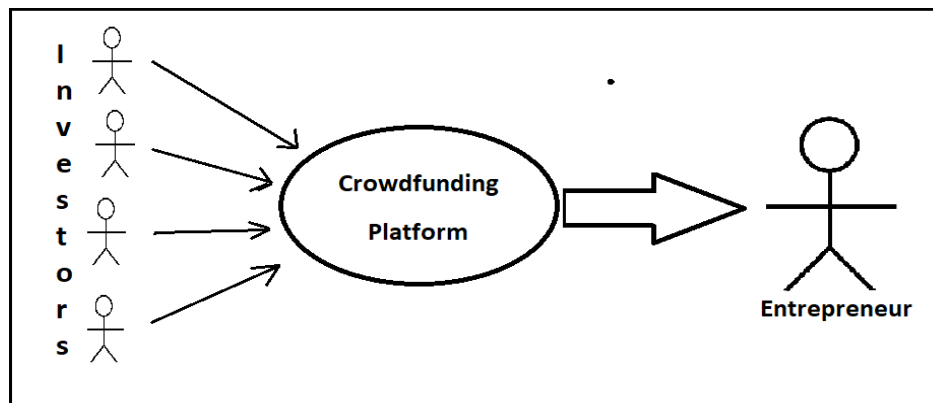
### 1.1.1 : Entrepreneurship

From the starting of human history, people use to do business in the various way. In the 20<sup>st</sup> Century Entrepreneurship taking place. Entrepreneurship is the technique or process that is used to start a new business or expanding the business. The individual who create the ideas for his business is known as Entrepreneur.

Richard Cantillon (Irish French Economist) first study the entrepreneurship in late 17<sup>th</sup> and early 18<sup>th</sup> century. In medieval time's guilds in Germany, a special permission is needed for an artisan to work as an entrepreneur.

### 1.1.2 : Crowdfunding

Crowdfunding is process of collecting small number of amounts from many people to start business Venture or expand a working business.



*Figure 1 : Crowdfunding Platform Working*

#### 1.1.2.1 : Types of Crowdfunding

- Reward
- Equity
- Donation
- Litigation
- Debt

#### 1.1.2.2 : Working of Crowdfunding Platform

Entrepreneurs can raise funds from anyone with money to invest from the Crowdfunding platform. Crowdfunding provides a platform to share the ideas with the investors. Shiroi Hana a restaurant in USA need \$ 32,000 and raised fund of \$ 429,860, which is 1,330 % of required amount via Kickstarter a reward, based crowdfunding platform. These platforms generate income from a percentage of total funds raised.

### **1.1.2.3 : What is in it for Investors?**

Mostly crowdfunding platform are reward based like Kickstarter, Patreon. They invite investors to fund the projects in exchange of gifts for their investments. Such as, the maker of a new game sends the early copies of their games to its investors.

The popularity of equity based is growing in because it allows entrepreneurs to raise funds from investors without giving up control on their venture.

### **1.1.3 : Entrepreneurs**

Entrepreneur is a person that start a new venture while taking risk, study the market opportunities and plan, organize, deploy the resources for the creating a new innovation or to improve present services or products.

#### **1.1.3.1 : Types of Entrepreneurship**

- Small Business
- Scalable Start-up
- Large Company

### **1.1.4 : Investor**

Investor may be a person or an organization that invest finance in any other business with expectation of maximum profit return. They avoid from risk, if the chance of any risk then they do not invest finance in other ideas.

#### **1.1.4.1 : Types of Investors**

- Ting
- Angel Investor
- Peer to Peer Lender
- Venture Capitalist
- Personal Investor

## **1.2 : Objectives**

In this project, we aim to develop relationship between entrepreneurs and investors keeping following objectives in mind:

- GoInvestMe will facilitate both entrepreneurs and investors.
- Our object is to develop GoInvestMe, which will help business community to increase the efficiency of their business by entrepreneurs and investors to operate online rather than moving product to traditional manual systems.
- Database access minimize risks against traditional time taking procedures.
- Increasing business opportunities by reducing time cost.
- Efficient interconnectivity between entrepreneurs, funders and investors.
- Technology shift towards smart devices.
- Generate reports, which will be helpful in business intelligence and future business plans.
- A proper look at the business or start ups
- To make easy for the entrepreneurs to start the business and launching their ideas
- To make easy for the funders and investors to make investments and funding
- To make fundraising quickly for the business proposer
- To make available the system at user's place
- No need to make organization like traditional

### **1.3 : Problem Statement**

The project we are working on “GoInvestMe – A Crowdfunding Platform” solves the problems faced by Investor and Entrepreneurs. Many people with a good prototype cannot find people to invest on the prototype to start its industrial process and some people want to invest in business but cannot find a right Platform that they can invest in. “GoInvestMe – A Crowdfunding Platform” will give investor and entrepreneurs, a right platform so they can do investment and help grow business. This solves the problem faced by investor and entrepreneurs in getting and the investment.

We investigated numerous Crowdfunding Platform to see which inadequacies they need to improve a Crowdfunding Platform, which tackles the issues and restrictions confronted. One of the major issues we saw was that mostly Crowdfunding platform are Reward based and donation based but not specific for equity based so they use APIs for equity based. Therefore, users have to go to other websites or platform where they have to create new account for that platform.

### **1.4 : Assumptions**

- The project will enable investors to invest in the projects.
- The project will enable entrepreneurs to get funds for their projects.
- The entrepreneurs decide how many investors he is working with as it is joint venture
- The project will be able to manage projects, generate reports and manage access levels.
- Admin do not have access to any sensitive information regarding to investor and entrepreneurs such that their Credit Card no.

### **1.5 : Constraints**

- The android phone was required with minimum of 4.2(Lollipop) version of android OS in it so application can test on it
- The project will be completed within given timeframe and allocated budget.
- The project will be developed in .NET framework, with Microsoft SQL server as database server.

### **1.6 : Project Scope**

The project will include the SRS document design, implementation, testing and deployment of an improved GoInvestMe – A Crowdfunding Investment Platform for Start-ups. Its main functions are creating environment between entrepreneurs and investors or lenders, opportunities for entrepreneurs to start business, to get donations from the volunteer investors and providing platform for entrepreneur to raise their funding. The project is developed through the software development perspectives. The project is divided into two different frameworks (website and mobile application). The website and application will be online available to the entrepreneurs and the investors. Whole project work will independent of daily ongoing and operations and the testing will be performed according to testing criteria and rules. All the history will be preserved in the databases. The project will be completed when the system will be tested and final report will be submitted

There is no need to configure a new server, operations will configure server already bought. New tools do not be implemented again; previously implemented tools will be reused. No recruitment required for resources of system once the new system will be launched and procurement of maintenance contracts will not be included in project.

## Chapter 2 : Requirement Analysis

The process to fulfil user needs for a new or existed product is called requirement analysis. These needs can be implemented by requirements that must be measureable, applicable and detailed. Functional means giving service to the user.

Requirement Analysis is important because all the needs can be fulfilled. The main task is to ensure all the requirements that all stakeholders understand them

### 2.1 : Literature Review

As far back as the World Wide Web, there have been actions to utilize the web to request assets for individuals, activities, and establishments that generally would battle for financing.

#### 2.1.1 : EquityNet

- <https://www.equitynet.com>

EquityNet is an equity crowdfunding platform interfacing organizations to investors. The Company was established in Fayetteville, Arkansas in 2005.

Before JOBS Act in 2013 EquityNet could just share organizations' pitches to investors privately. Upon the JOBS Act producing results, EquityNet started enabling organizations on the platform to openly request funding.

Alongside its crowdfunding platform, EquityNet additionally offers cloud Software that enables you to fabricate a strategy that will be distinguishable to investors and help them choose if your business merits a venture. Actually, you do not need to utilize EquityNet for raising money by any stretch of the imagination — on the off chance that you wish, you can simply utilize the product to examine and streamline your business planning.

#### 2.1.2 : Kickstarter

- <https://www.kickstarter.com>

Kickstarter founded in 2009 is the most common crowdfunding platform.

Kickstarter is committed to the crowdfunding of imaginative tasks. Not at all like such administrations as your undertaking must meet its raising money objectives inside a set timeframe before you get any subsidizing. Besides, when your task works out as intended, you are committed to give rewards to your backers. These prizes must be of your creation.

As indicated by their site, Kickstarter has over 4.05 billion dollars vowed to its activities, more than 155 Thousand effectively supported undertakings, and more than 15.6 million aggregate sponsor.

The Five rules of Kick Starter for every Project

- Projects must clearly have presented.
- Projects cannot be of charity
- Projects cannot offer equity
- Projects cannot involve banned items such as drugs.
- Projects must create something

Condition to Start Kickstarter Project:

- You are 18 or older
- You are creating a project in your own name
- You have an address

- You have an government-issued ID Card
- You have an bank account
- The linked bank account must belong to you
- You have a credit or debit card

Complaints proliferate from the two creators and backers over an assortment of issues. Kickstarter right now has a 0.7 out of 10 rating on Trustpilot, where you'll locate various complaints in regards to poor client benefit, inconsistent crusades that neglect to convey on their guarantees notwithstanding when completely subsidized, and lousy help for creators — even those with a reputation of effective ventures.



Figure 2: TrustScore KickStarter Reputation 1

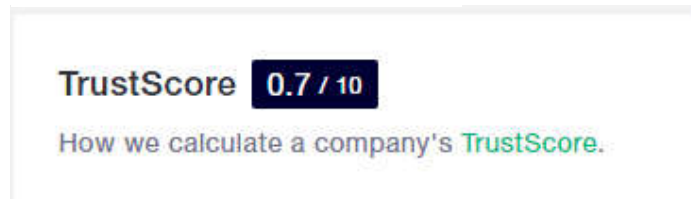


Figure 3: TrustScore KickStarter Reputation 2

### 2.1.3 : Patreon

- <https://www.patreon.com>

Patreon is a crowdfunding website gone for a specific group of people: Artist and other. As crowdfunding stages go, Patreon has delighted in a fleeting ascent in its public profile in the course of recent years.

Patreon way to deal with remunerations based crowdfunding is special, separating it from any semblance of Kickstarter. Though with the last two, backers support with one-time vows in return for rewards, Patreon model is that benefactors — patrons, as Patreon mentions them — buy in to the substance of the maker, making-repeating installments on a continuous premise in return for access to the creator's content. Patreon proclaims itself a crowdfunding stage for creator, as its stage enables makers to draw a consistent, ceaseless salary from The Crowd. This subsidizing model makes Patreon especially appropriate to creators of viral recordings, online columnists, journalists, and performers.

Their terms of use forbid users from

- Racism
- Fraud
- Abuse
- Spam



- Intellectual Property Infringement

#### 2.1.4 : Pledge Music

- <https://www.pledgemusic.com>

Pledge Music says their organization gives the most creative ways for their individuals to be required with the musicians take while releasing their new work.

Fans can sign up for Pledge Music membership free and start searching for their favorite artists to perceive what things you might be keen on "pledging" for.

Pledge Music won't offer refunds except if a circumstance has happened where a pledge has gone unfulfilled, at which time they will assess the individual conditions and refunds the fan's cash.

## 2.2 : Stakeholders List (Actors)

Stakeholder	Description
Administrator	Administrator is responsible for managing admin panel.
Entrepreneurs	Entrepreneurs can post their ideas and receive funds.
Investors	Investor invests payment on entrepreneur's ideas and get revenue.
Company	Company can invest payments, post ideas, and receive payments.

## 2.3 : Requirements Elicitation

Requirements elicitation is the process of studying and finding requirements of a software from users and other stakeholders. This process can also be called as requirement gathering.

It is important because requirements will be collected through a requirements elicitation process before requirements can be analyzed.

### 2.3.1 : Functional Requirements

Requirement is condition or capability that is to be implemented to full fill user need.

A functional requirement can be functionality of a system or tasks of the system. It also depends upon the type of users, software and system in which environment the software is being used.

Functional user requirements are what the system actually perform, upper-level statements of what the software can do. Functional requirements would be clear and in specific detail.

#### FR01: Entrepreneur / Investor Account Registration

Req. No.	Functional Requirements
----------	-------------------------

FR01-01	The System shall enable the Entrepreneur / Investor to Create/Register the Account.
FR01-02	The system shall not allow creating more than one account on same username/email. If already account exist, system shall notify and provide option to Log In directly.
FR01-03	The system shall validate the account by confirmation message.
FR01-04	The system shall allow the Entrepreneur / Investor to register through social media account.

#### **FR02: Company Account Registration**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR02-01	The System shall enable the company to Create/Register the Account.
FR02-02	The system shall not allow creating more than one account on same username/email. If already account exist, system shall notify and provide option to Log In directly.
FR02-03	The system shall the admin to validate the account by checking company's business details.
FR02-04	The system shall not allow the company to register through social media account.

#### **FR03: Sign In**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR03-01	The System shall enable the Entrepreneur/Investor /company to Log In the system.
FR03-02	The system shall allow resetting the password if password is forgotten by using email/phone or security questions.

#### **FR04: Add New Campaign**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR04-01	The System shall enable the Entrepreneur to add new campaign or new idea for the investment.
FR04-02	The System shall enable the Entrepreneur to add pictures, videos of that campaign.
FR04-03	The System shall enable the Entrepreneur to choose the estimate the fund needed.

FR04-04	The System shall enable the Entrepreneur to select maximum number of investors for that campaign.
FR04-05	The System shall enable the Entrepreneur to select the category of that campaign.
FR04-06	The System shall enable the Entrepreneur to choose the tags (max 5) for that campaign.
FR04-07	The System shall enable the Entrepreneur create a team with other Entrepreneurs

#### **FR05: Delete a Campaign**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR05-01	The system shall enable the Entrepreneur to delete recent campaign that has no investment.
FR05-02	The system shall maintain the deleted record of campaign.

#### **FR06: Update Campaign**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR06-01	The system shall enable the Entrepreneur to edit the description, pictures, videos or fund needed of campaign.
FR06-02	The system shall not able to edit the campaign title.
FR06-03	The system shall unable to edit the team of entrepreneurs.

#### **FR07: Modify Profile**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR07-01	The system shall enable the Entrepreneur and investors to modify their email, password, profile pictures, address.
FR07-02	The system shall unable the user to edit its username.

#### **FR08: View Investment**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR08-01	The system shall enable the investors to view their investment that he has invested in different campaign.
FR08-02	The system shall enable the entrepreneurs to view funds that he has received from different campaigns.

FR08-03	The system shall enable the entrepreneurs to view its investment report that contains graphs of receiving funds and remaining funds.
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#### **FR09: Receive Payment**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR09-01	The system shall enable the entrepreneurs to receive funds through payroll systems.
FR09-02	The system shall enable the entrepreneurs to check report how much payment is received.

#### **FR10: Make Investment**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR10-01	The system shall enable the investor to invest in different campaigns in which entrepreneur want funds.
FR10-02	The system shall enable the investor to invest in different companies where companies want to share.
FR10-03	The system shall enable the companies to invest in different companies where companies want to share their business.

#### **FR11: Returns of Investment**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR11-01	The system shall enable the entrepreneurs to send back profit through payroll systems to investors or companies.
FR11-02	The system shall enable the companies to send back profit through payroll systems to investors or companies.
FR11-03	The system shall not able the investors to take money back before fixed duration.

#### **FR12: Search campaigns**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR12-01	The system shall enable the entrepreneurs, companies and Investor to search campaigns using tags, categories, campaign titles or campaign region.
FR12-02	The system shall able the admin to search campaigns at admin panel with complete description that entrepreneurs provides.

#### **FR13: Reports**

<b>Req. No.</b>	<b>Functional Requirements</b>
-----------------	--------------------------------

FR13-01	The system shall enable the admin to generate the reports of campaigns and investments on daily basis, monthly and yearly. Admin also able to generate reports on status and specific date time wise.
FR13-02	The System shall allow the Entrepreneur to generate the reports that the Entrepreneur take get payment.
FR13-03	The system shall allow the investor to generate the reports that they invested in different campaigns.

#### **FR14: Campaigns description:**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR14-01	The system shall display the campaigns 'details to entrepreneurs , investors and companies
FR14-02	The system shall not able to edit that description to anyone other than the one who started campaigns

#### **FR15: Provide any help**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR15-01	The system shall provide the online help FAQ's, Sitemap to entrepreneurs or investors For any Query related to System Working process
FR15-02	The system shall display the support email on the screen.

#### **FR16: Complains/Feedback**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR16-01	The system shall enable the entrepreneurs or investors to give feedback about the system, any investor, and entrepreneur company.
FR16-02	The system shall enable the entrepreneurs or investors to give complains about the system, any investor, entrepreneur company.
FR16-03	The system shall enable the admin to proceed on complains and feedback

#### **FR17: Display Campaigns:**

<b>Req. No.</b>	<b>Functional Requirements</b>
FR17-01	The system shall display the campaigns with title name, picture and little description where investor can click to make investment.
FR17-02	The system shall display the campaigns regarding new ,top 10 and trending campaigns using different algorithms to Entrepreneurs and investors

**FR18: Conversation**

Req. No.	Functional Requirements
FR18-01	The system shall enable the entrepreneurs and investors to contact each other if any information needed about campaigns or other issues
FR18-02	The system shall enable the entrepreneurs and investors to launch group conservation if campaigns has more than one entrepreneurs.

**FR19: Comments**

Req. No.	Functional Requirements
FR19-01	The system shall enable the different entrepreneurs and investors to negotiate each other if any information needed about campaigns.
FR19-02	The system shall enable the entrepreneurs and investors to edit or update the comments
FR19-03	The system shall enable the entrepreneurs and investors to like or dislike campaigns

**FR20: Notification**

Req. No.	Functional Requirements
FR20-01	The system shall notify the entrepreneur when investor make investment for his campaign
FR20-02	The system shall notify the user when any complain or feedback is given

**2.3.2 : Non-Functional Requirements**

Non-functional requirement tells about the behaviour of the system that is being developed. It tells about the constraints on systems behaviour. It can be imagined that non-functional requirements are quality attributes of a system. It tells about the system performance, usability, security and maintainability at straw.

**NFR01: Performance**

Req. No.	Non Functional Requirements
NFR01-01	The starting page must be opened in average time of 4 seconds.
NFR01-02	The system should take less than 8 seconds for processing any transaction.
NFR01-04	The average responding time of s system must not be more than 5 seconds
NFR01-06	The system must enable 1000 users to do operations at a time

**NFR02: Security**

Req. No.	Non Functional Requirements
NFR02-01	User can only access the system through log in.
NFR02-02	When the user expires, no data must be saved in the user computer.

**NFR03: Maintenance**

Req. No.	Non Functional Requirements
NFR03-01	After releasing the system, the bugs should not exceed 5 bugs per year.
NFR03-02	Fixing the bus should be in 5 hours after releasing the system.

**NFR04: Documentation**

Req. No.	Non Functional Requirements
NFR04-01	Help documentation contain data about each module and functionality defined by system must be completed.
NFR04-02	There should be help option at all web pages to help the user.

**NFR05: Disaster Recovery**

Req. No.	Non Functional Requirements
NFR05-01	If the system crash ,the information should be recovered in 40 minutes after the event

**NFR06: Usability**

Req. No.	Non Functional Requirements
NFR-06	The usability scale of the system must be strong enough, it should be effective so that the user can achieve goals successfully, it should be efficient so that the less efforts and resources would be utilized to achieve those goals and it must satisfy the user needs.

**NFR07: Integrity**

Req. No.	Non Functional Requirements
NFR-07	System's integrity should be maintained on highest priority the disruptions, changes in the external and internal environment do not affect the system, and system will perform its functions without being interrupt.

**NFR08: Flexibility**

Req. No.	Non Functional Requirements
NFR-08	The system should be flexible, which can adapt several internal changes. System recovery will also be ensured.

**NFR09: Portability**

Req. No.	Non Functional Requirements
NFR-09	System should be portable enough which can be operate on several o web browsers such as Chrome, Opera, Firefox and Microsoft Edge.

**2.3.3 : Requirement Traceability Matrix**

Requirements Traceability Matrix (RTM) is a tool to ensure that test cases can fulfil the requirements, project scope when compared to user requirements.

It is a solution to keep requirements and tests is a Requirements Traceability Matrix (RTM)

Typically, requirements are defined in one column and test cases are defined is other column and compared to each other.

It is important because, we can track the record which requirements is tested or which is not.

ID	FR-ID	FR-Description	Business needs	Project Objective	Priority	Use Case	Test Case
1	FR-01	The System shall enable the Entrepreneur / Investor to Create the Account.	User will have access to enter the system	Registration of Entrepreneur / Investor	H	Register	Sign in
2	FR-02	The System shall enable the company Create the Account.	Company will have access to enter the system	Registration of company	H	Register	Sign in
3	FR-03	The system shall allow user to login the system	User logged into the system	Log in in the system	H	Log in	Log in
4	FR-04	The System shall enable the Entrepreneur to add new campaign or new idea for the investment.	User add new campaign	Add Campaign in the system	H	Add Campaign	Add Campaign



5	FR-05	The system shall enable the Entrepreneur to delete recent campaign that has no investment.	User delete recent campaign	Delete Campaign from the system	H	Delete Campaign	Delete Campaign
6	FR-06	The system shall enable the Entrepreneur to edit the description, pictures, videos or fund needed of campaign.	User update campaign	Update Campaign from the system	H	Edit Campaign	Edit Campaign
7	FR-07	The system shall enable the Entrepreneur and investors to modify their email, password, profile pictures, address.	User edit his profile	Update profile from the system	H		
8	FR-08	The system shall enable the investors to view their investment that he has invested in different campaign.	User can view his investments	View investments from the system	H	View investments	View investments
9	FR-09	The system shall enable the entrepreneurs to receive funds through payroll systems.	User can receive his payments	Receive payments from investor	H	Receive payments	Receive payments
10	FR-10	The system shall enable the investor to invest in different campaigns in which entrepreneur want funds.	Investor can invest in campaign	Invest in campaign	H	Make investment	Make investment

11	FR-11	The system shall enable the entrepreneurs to send back profit through payroll systems to investors or companies.	Investor get back profit	Return of investment	H	Manage payroll	Payroll System
12	FR-12	The system shall enable the entrepreneurs, companies and Investor to search campaigns using tags ,categories ,campaign titles or campaign region	User can search for campaign	Finding any campaign	H	Search campaign	Search campaigns
13	FR-13	The system shall allow the investor to generate the reports that they invested in different campaigns.	User can generate report	Generate report	M	View report	View report
14	FR-14	The system shall display the campaigns 'details to entrepreneurs , investors and companies	User can view campaign description	Campaign in detail	M	View campaign	View campaign
15	FR-15	The system shall provide the online help FAQ's, Sitemap to entrepreneurs or investors For any Query related to System Working process	User can rake help from admin	Providing help	M	Get notification	Not services notification
16	FR-16	The system shall enable the entrepreneurs or investors to give feedback about the system, any	User give feedback or complain any user	Report a bug or user	M	Get notification	Notification services

		investor, entrepreneur and company.					
17	FR-17	The system shall display the campaigns with title name ,picture and little description where investor can click to make investment	User can view campaigns	Displaying campaigns in order	H	View campaign	View campaign
18	FR-18	The system shall enable the entrepreneurs and investors to contact each other if any information needed about campaigns or other issues	User can contact each other	Chat room for user	M	Chat	chatting
19	FR-19	The system shall enable the different entrepreneurs and investors to negotiate each other if any information needed about campaigns.	User can comments at campaign	Managing comments	M	Manage comments	Comments
20	FR-20	The system shall notify the entrepreneur when investor make investment for his campaign or comments	To notify user when any operation happens	Notification service	M	Get notification	Notification services

## 2.4 : Use Case Diagram and Descriptions

Use cases are used to identify system functionality for the analysis of a project

A use case is a description of how different users will execute operations on your software. It tells about user's aspect; a software responds as it reacts to an application. Every use case is signified as

an order of steps, beginning with a pre-condition then flow of steps and ending when that post condition. It also highlights what can be exceptions in that module implemented in this system.

Use case diagram is a graphic description of any system. How system elements interact with each other. A use case is a method used in system for analysis, organizing and identification of system requirements. Use case diagram contain actors, external systems and use cases. How actors interact with use case and how use cases are linked with the external system.

#### 2.4.1 : Registration

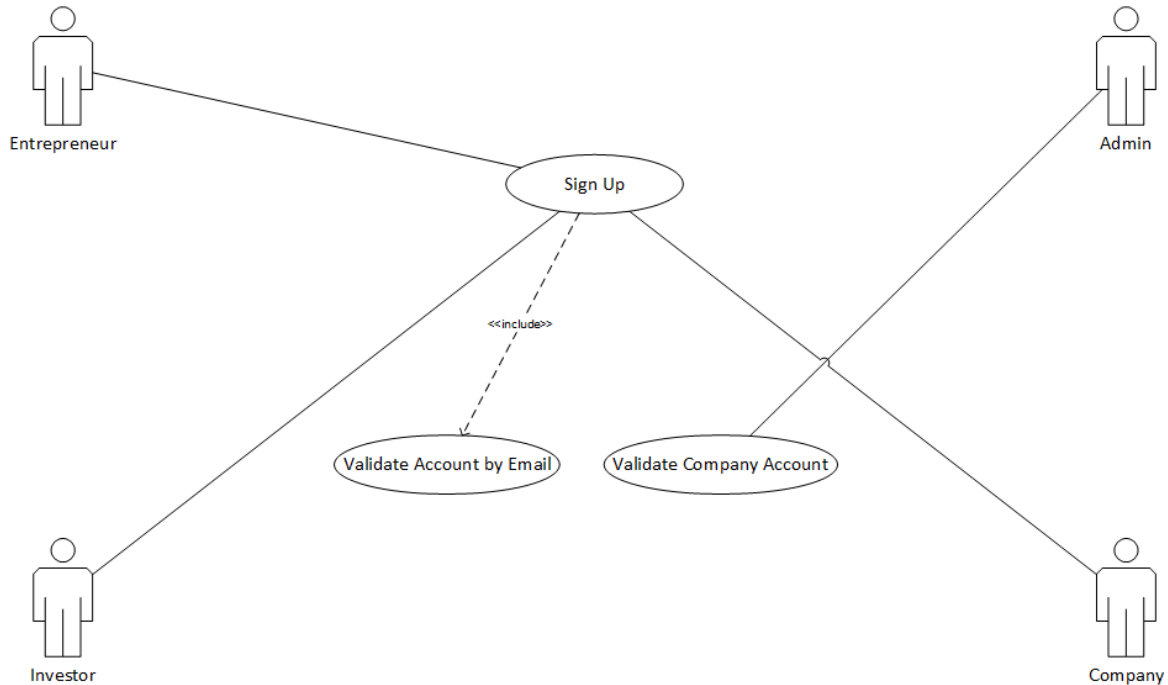


Figure 4: UC – Registration

#### UC01: Sign Up

ID : 001		Name : Sign Up
Priority	High	
Actors	Investors, Entrepreneurs	
Summary	Before using this platform functionality , first user will be sign up on this platform	
Precondition	User must have valid data	
Normal Flow of Events		Alternative Path
This use case will start when web site will launch		

User enter valid email and First Name, last name, and address, gender and contact information.	
After that user set his password. And click on sign up button	User will not follow the password regex then user will receive error notification.
User will be receive confirmation mail.	
<b>Post Conditions</b>	
User will be registered in this platform. Data base will be updated	
<b>References:</b>	
<b>Includes</b>	Validity account by email
<b>Extends</b>	
<b>Exceptions:</b>	
May be email is already registered by another account, and then exception will be arise.	

## 2.4.2 : Campaign

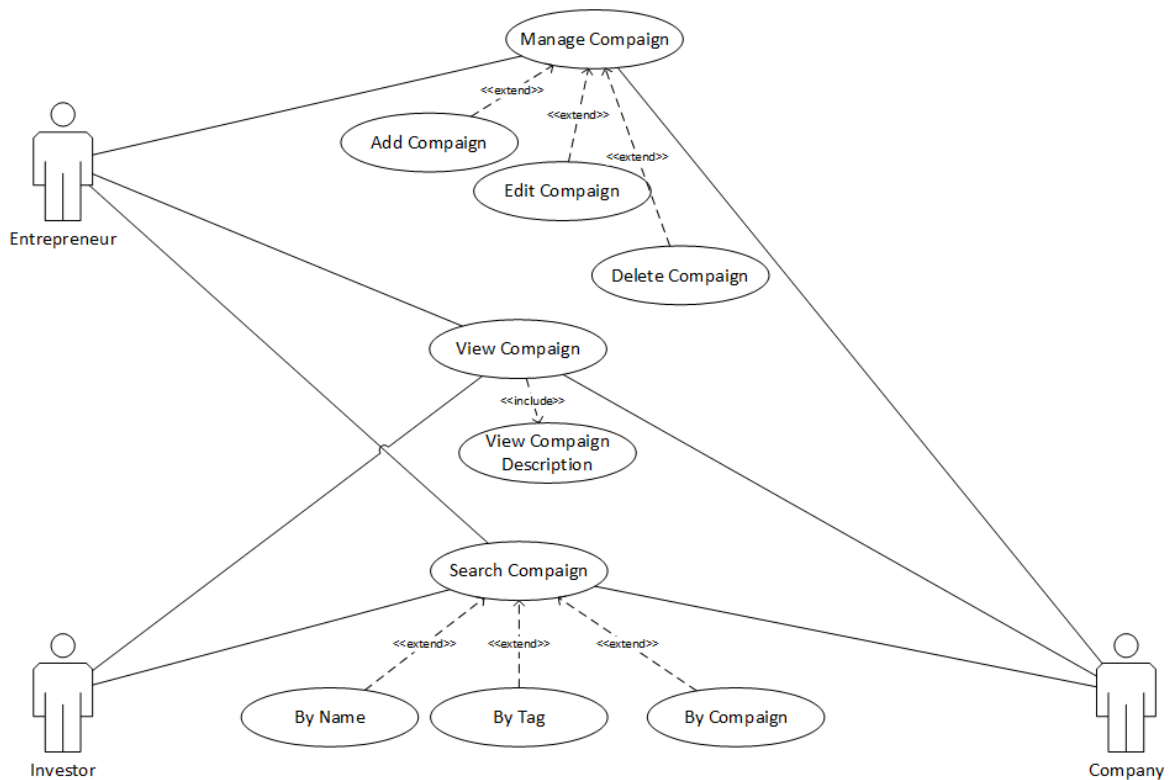


Figure 5: UC – Campaign

### UC02: Add Campaign

ID : 002		Name : Add campaign
Priority	High	
Actors	Entrepreneurs	
Summary	User will add an idea or project campaign for investments.	
Precondition	User will be the member of platform and in mode of entrepreneurs.	
Normal Flow of Events		Alternative Path
Entrepreneurs first enter the name of project and idea. Put some information about projects.		
Enter deadline of collection or share deadline		
Also add some constraint about project share and investment		
User will enter the add		
Post Conditions		
Campaign will be posted on platform publically. In addition, add in user record database.		
References		
Includes		
Extends	Manage Campaign	
Exceptions:		
Same type of campaign from one id will give duplication error.		

### UC03: Edit Campaign

<b>ID : 003</b>		<b>Name : Edit Campaign</b>
<b>Priority</b>	High	
<b>Actors</b>	Entrepreneurs	
<b>Summary</b>	User can edit its campaign.	
<b>Precondition</b>	Campaign must be exist for editing.	
<b>Normal Flow of Events</b>		<b>Alternative Path</b>

First user will select the campaign.	
User can edit the description of project	
User Click on Editing confirm button	
<b>Post Conditions</b>	
Campaign content will be edited and updated in record of database.	
<b>References</b>	
<b>Includes</b>	
<b>Extends</b>	Manage Campaign
<b>Exceptions:</b>	
If user will edit the price or share content then exception will if any investor invest money.	

#### UC04: Delete Campaign

<b>ID : 004</b>		<b>Name : Delete Campaign</b>
<b>Priority</b>	High	
<b>Actors</b>	Entrepreneurs	
<b>Summary</b>	User will delete campaign which have no investments	
<b>Precondition</b>	Campaign will be exist and no investments on it.	
<b>Normal Flow of Events</b>		<b>Alternative Path</b>
Entrepreneurs first select campaign		
After that user will check no investment on that campaign.		
Click on delete button		
<b>Post Conditions</b>		
Campaign will be deleted from user console. Also deleted from record of database.		
<b>References</b>		
<b>Includes</b>		
<b>Extends</b>	Manage Campaign	

<b>Exceptions:</b>
If any investment on that project will be exist then exception will be rise.

#### UC05: View Campaign

ID : 005		Name : View Campaign
Priority	High	
Actors	Entrepreneurs, Investor, Company	
Summary	User will view campaign and read investment policy that set by entrepreneurs.	
Precondition	Campaign will be exist.	
Normal Flow of Events		Alternative Path
User select or click on campaign		
After that user will read project idea and policy description about project.		
User will also read comment about project		
Post Conditions		
User will view campaign and after that may be they will have interest and invest on that project		
References		
Includes	View Campaign description	
Extends		
Exceptions:		
After view that may be user interested to invest but no share will be available and exception will be raise.		

#### UC06: Search Campaign

<b>ID : 006</b>		<b>Name : Search Campaign</b>
<b>Priority</b>	High	
<b>Actors</b>	Entrepreneurs, Investors and Company	
<b>Summary</b>	User will search project or idea according to interest	



Precondition	User must be logged in	
Normal Flow of Events		Alternative Path
The use case will be start when user will be on home page		
The User will enter the query in search bar.		
Click on search button		User will be enter valid query then page display otherwise display error message.
Post Conditions		
Now the user is able to view what he visions for.		
References:		
Includes		
Extends	By Tag, By name, by campaign	
Exceptions:		
If user enter invalid project name then exception will be rise		

### 2.4.3 : Profile

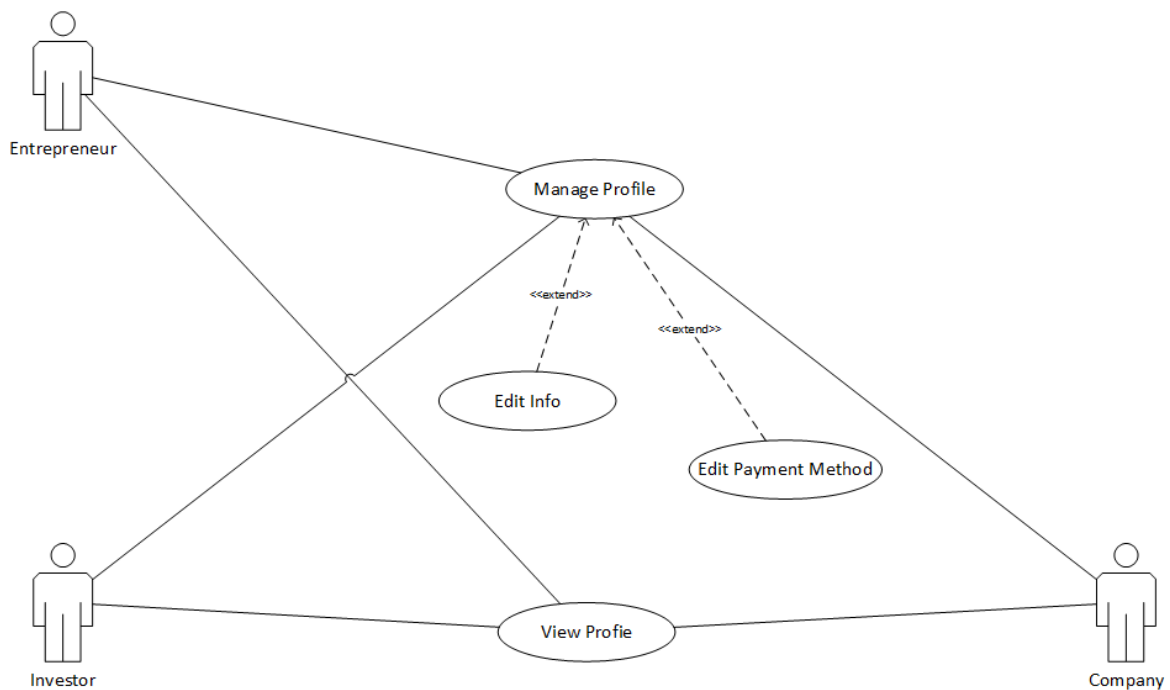


Figure 6: UC – Profile

**UC07: View Profile**

ID : 007		Name : View Profile	
Priority	High		
Actors	Entrepreneur ,Investor, Company		
Summary	User are able to view any profile.		
Precondition	User must be Logged in by their perspective accounts		
Normal Flow of Events		Alternative Path	
1. User select the profile of User he want to view			
2. The System displays non critical information to the User			
Post Conditions			
References			
Includes			
Extends			
Exceptions:			

**UC08: Edit Profile**

<b>ID : 008</b>		<b>Name : Edit Profile</b>
<b>Priority</b>	High	
<b>Actors</b>	Entrepreneur ,Investor, Company	
<b>Summary</b>	User are able to edit their profile.	
<b>Precondition</b>	User must be Logged in by their perspective accounts	
<b>Normal Flow of Events</b>		<b>Alternative Path</b>
1.The User click on edit profile		
2. The System Shall displays the Information that can edited.		

3. The User Save the Information	3a. The User do not save the Information
<b>Post Conditions</b>	
The Updated Information is Saved in Database	
<b>References</b>	
<b>Includes</b>	
<b>Extends</b>	Manage Profile
<b>Exceptions:</b>	

Figure 7: UC – Login

#### 2.4.4 : Investment

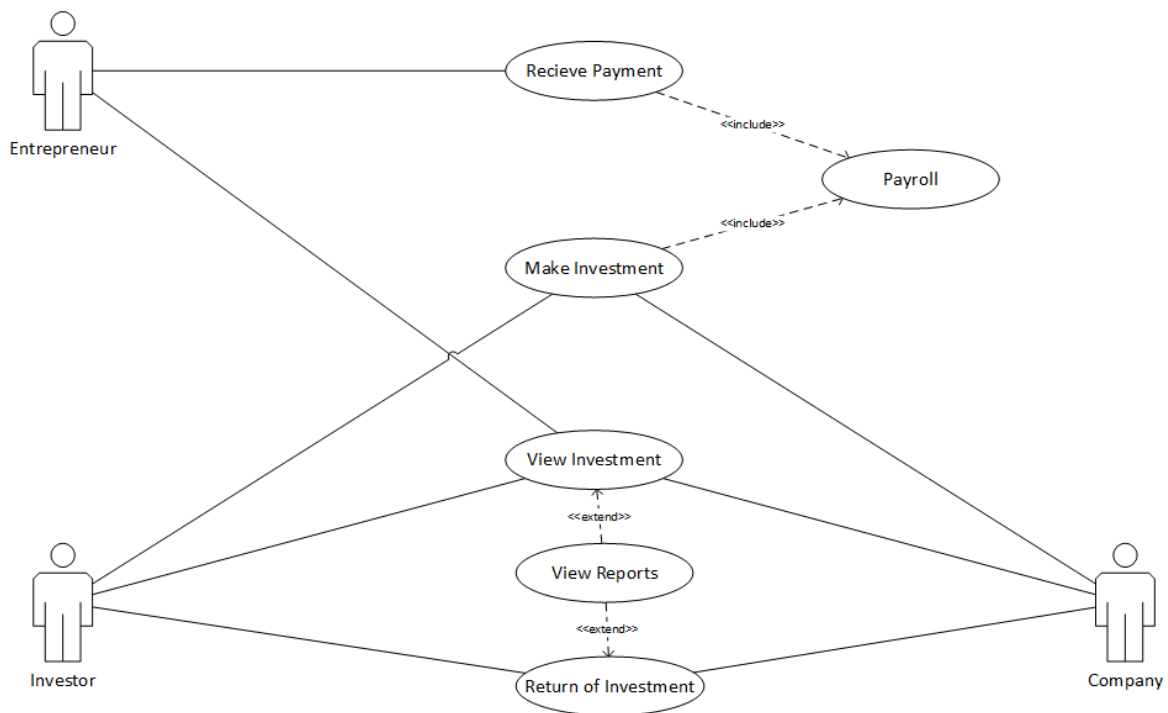


Figure 8: UC – Investment

#### UC09: Make Investment

<b>ID : 009</b>	<b>Name : Make Investment</b>
<b>Priority</b>	High
<b>Actors</b>	Investor, Company

Summary	User are able to make investment on the Campaign	
Precondition	User must select the Campaign they want to invest in	
Normal Flow of Events		Alternative Path
User click on make investment button		
The system shall take the User to Payroll System		
The Notification of Investment is Received by Investor or Company		
Post Conditions		
References		
Includes	Payroll	
Extends		
Exceptions:		

#### UC10: View Investment

<b>ID : 010</b>		<b>Name : View Investment</b>
<b>Priority</b>	Moderate	
<b>Actors</b>	Entrepreneur ,Investor, Company	
<b>Summary</b>	User are able to view investment on all Campaign they make or receive.	
<b>Precondition</b>	The User make or receive an investment	
<b>Normal Flow of Events</b>		<b>Alternative Path</b>
User click on View investment button		
The system shall display a list of all the investment they receive or make on their account		
The User select the make report to download the report of the investments		The User do not select the make report to download the report of the investments
<b>Post Conditions</b>		

<b>References</b>	
<b>Includes</b>	
<b>Extends</b>	
<b>Exceptions:</b>	

### UC11: Receive Investment

ID : 011		Name : Receive Investment
Priority	High	
Actors	Entrepreneur , Company	
Summary	The User Shall Receive The Payment on their Campaign	
Precondition	The User make an investment on Campaign	
Normal Flow of Events		Alternative Path
1. Payroll System return the details on the investment		
2. User receive the information of the investment and Investment		
Post Conditions		
Email is Generated for the Entrepreneur and Company		
References		
Includes	Payroll	
Extends		
Exceptions:		

## 2.4.5 : Payroll

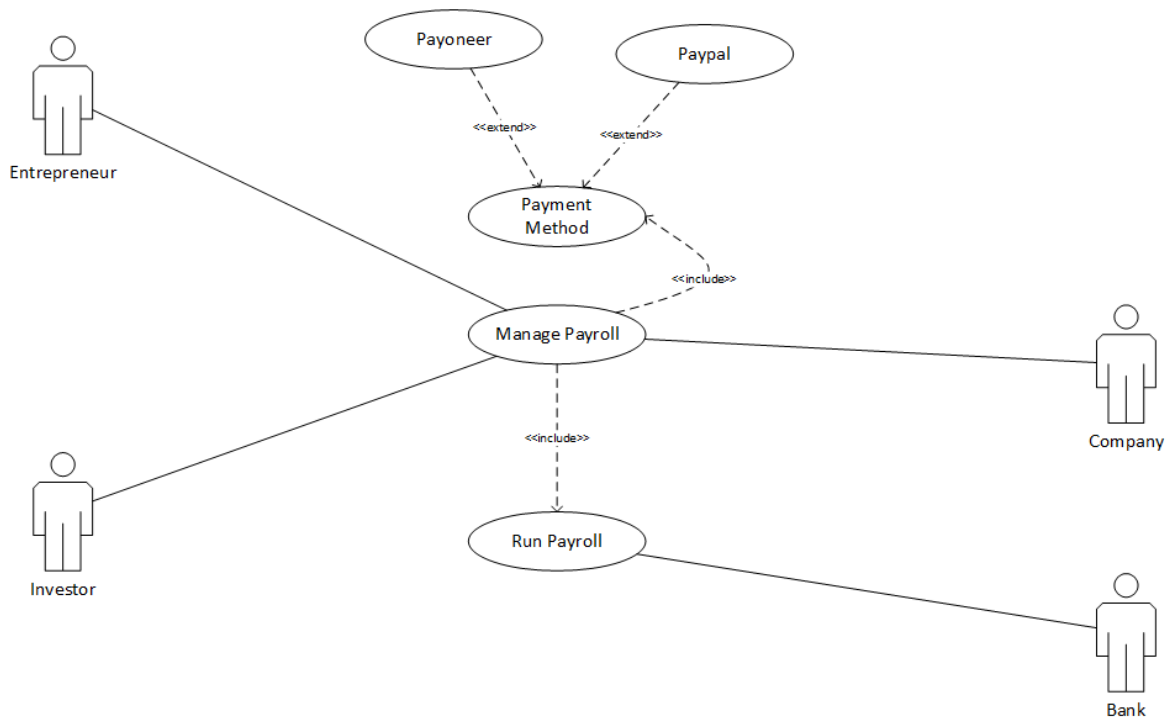


Figure 9: UC – Payroll

### UC12: Manage Payroll

ID : 012		Name : Manage payroll
Priority	High	
Actors	Entrepreneur ,Investor, Company	
Summary	User will be able to make investment or receive payment through payroll system	
Precondition	User must have selected the campaign where investment happens	
Normal Flow of Events		Alternative Path
1. User have selected the campaign where investment needed.		
2.user will select the payment method of PayPal to make or receive investment		2a. user will select the payment method of Payoneer to make or receive investment
3.User will provide account information		
4. the information will be sent to bank for validation		

<b>Post Conditions</b>	
After validating the payroll method, the investment will be happened.	
<b>References</b>	
<b>Includes</b>	Payment method
<b>Extends</b>	PayPal , Payoneer
<b>Exceptions:</b>	
If user provide wrong information, the user will not be able to get payment or receive payment	

### UC13: Run Payroll

ID : 013		Name : Run payroll
Priority	Medium	
Actors	Bank	
Summary	Bank will validate the user’s account information	
Precondition	User mush have sent the account information to the bank	
Normal Flow of Events		Alternative Path
1. User have selected the campaign where investment needed and provide information.		
2.The information will be sent to bank for validation		
3.Bank related PayPal will verify the account information		3a.Bank related Payoneer will verify the account information
4. User will investment or receive payment		
Post Conditions		
After validating the payroll method ,user can be able to get or receive payment		
References		
Includes		
Extends		
Exceptions:		

If user provide wrong information, the bank will notify the user that provided information is wrong

#### 2.4.6 : Conservation

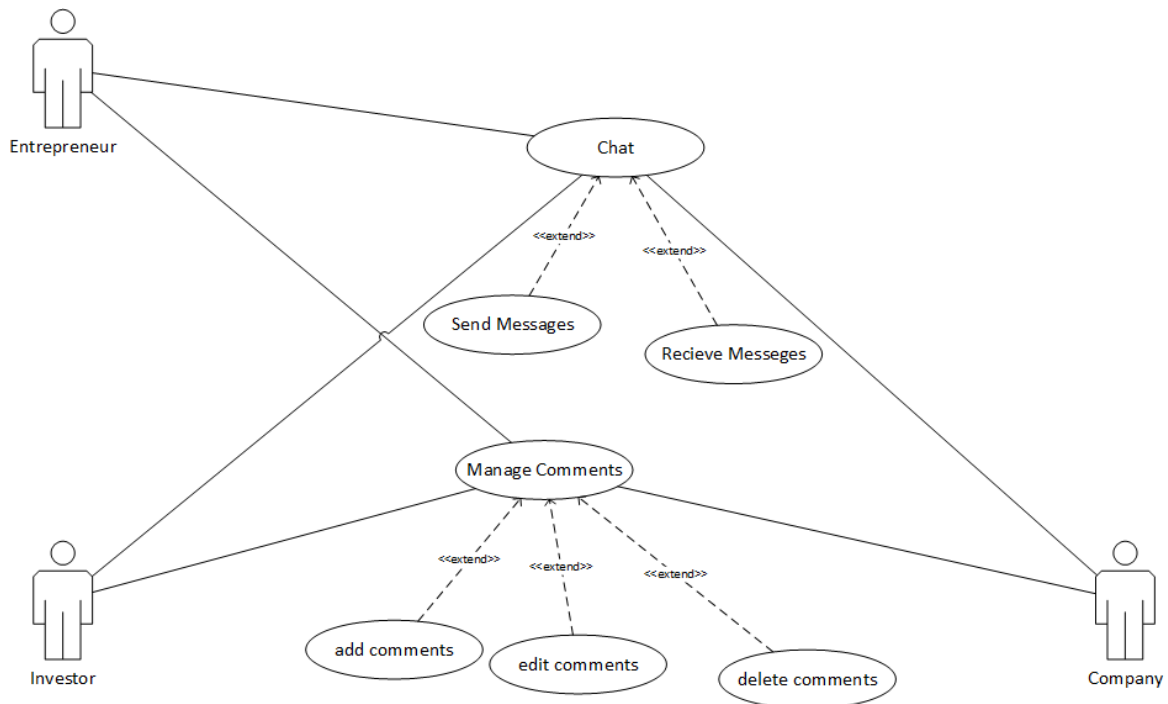


Figure 10: UC – Conversation

#### UC14: Manage Comments

ID : 014		Name : Manage Comments
Priority	High	
Actors	Entrepreneur ,Investor, Company	
Summary	User can chat to make comments about any campaign where general info required	
Precondition	User mush have selected the campaign where he want to comment	
Normal Flow of Events		Alternative Path
1.User will add the comment at campaign		
2.User can edit the comment at that campaign		2a. User can delete the comment at that campaign
3. Other user will receive notification for the comment		



4. Other user will view the comment	
5-Other user will reply the comment	
<b>Post Conditions</b>	
After sending /receiving the message, user will be notified message has been sent /receive	
<b>References</b>	
<b>Includes</b>	
<b>Extends</b>	Add comments, edit comments, delete comments
<b>Exceptions:</b>	

### UC15: Chat

<b>ID : 015</b>		<b>Name : Chat</b>
<b>Priority</b>	High	
<b>Actors</b>	Entrepreneur ,Investor, Company	
<b>Summary</b>	User can chat to make discussion about campaign or send/receive file	
<b>Precondition</b>	User must have selected the chat box	
<b>Normal Flow of Events</b>		<b>Alternative Path</b>
1.User will select the other user to send message		
2.User will write the message to send		2a.User will send the file
3. Other user will receive notification for the message		3a. Other user will receive the file
4. Other user will receive the message		
<b>Post Conditions</b>		
After sending /receiving the message, user will be notified message has been sent /receive		
<b>References</b>		
<b>Includes</b>		
<b>Extends</b>	Send message, receive message	

**Exceptions:**

If user will send the message ,but failed due to wrong type of message

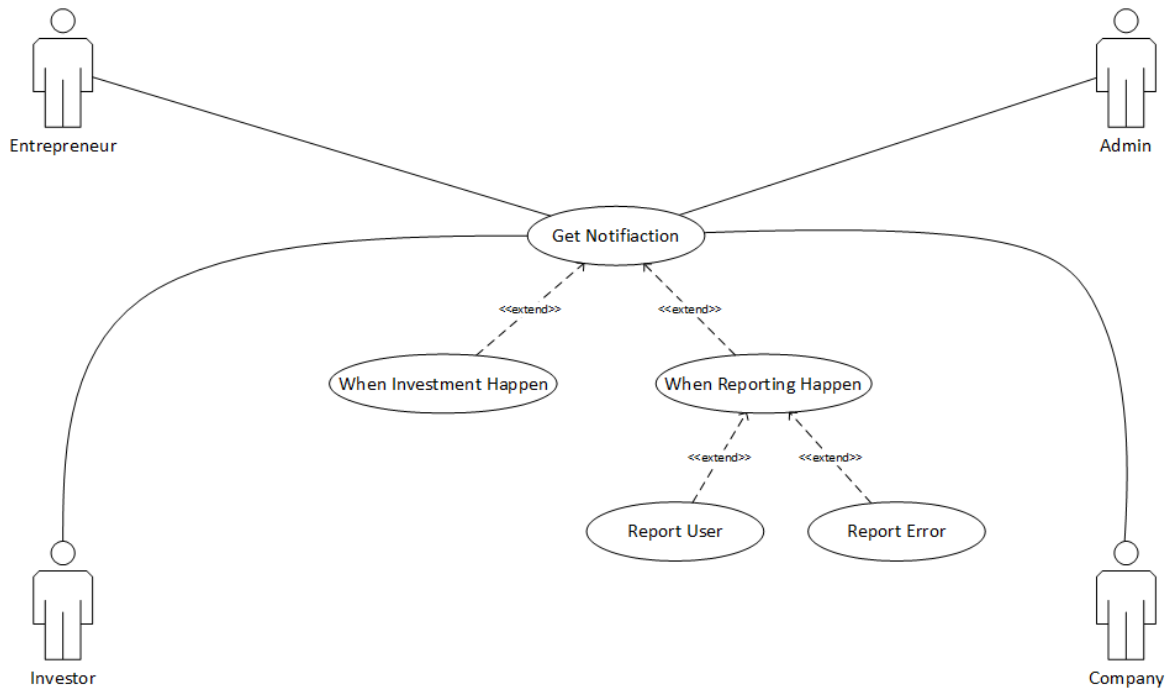
**2.4.7 : Notification**

Figure 11: UC – Notification

**UC16: Get Notification**

<b>ID : 016</b>		<b>Name : Get Notification</b>
<b>Priority</b>	High	
<b>Actors</b>	Entrepreneur ,Investor, Company, Admin	
<b>Summary</b>	After completion of any activity, a notification will be sent to all related users.	
<b>Precondition</b>	User mush have completed activity where he want to be notified	
<b>Normal Flow of Events</b>		<b>Alternative Path</b>
1.User will get notification when any other user comment		1a. User will get notification when any other user send message
2. User will get notification when investment happens		2a.User will get notification when payment receives

3. Admin will get notification when any user report other user		3a. Admin will get notification when any user report bugs	
Post Conditions			
After getting notification ,user will do task related to that notification			
References			
Includes			
Extends		Report user, report bugs	
Exceptions:			
If user will not get notification if he is not logged in.			

#### 2.4.8 : Login

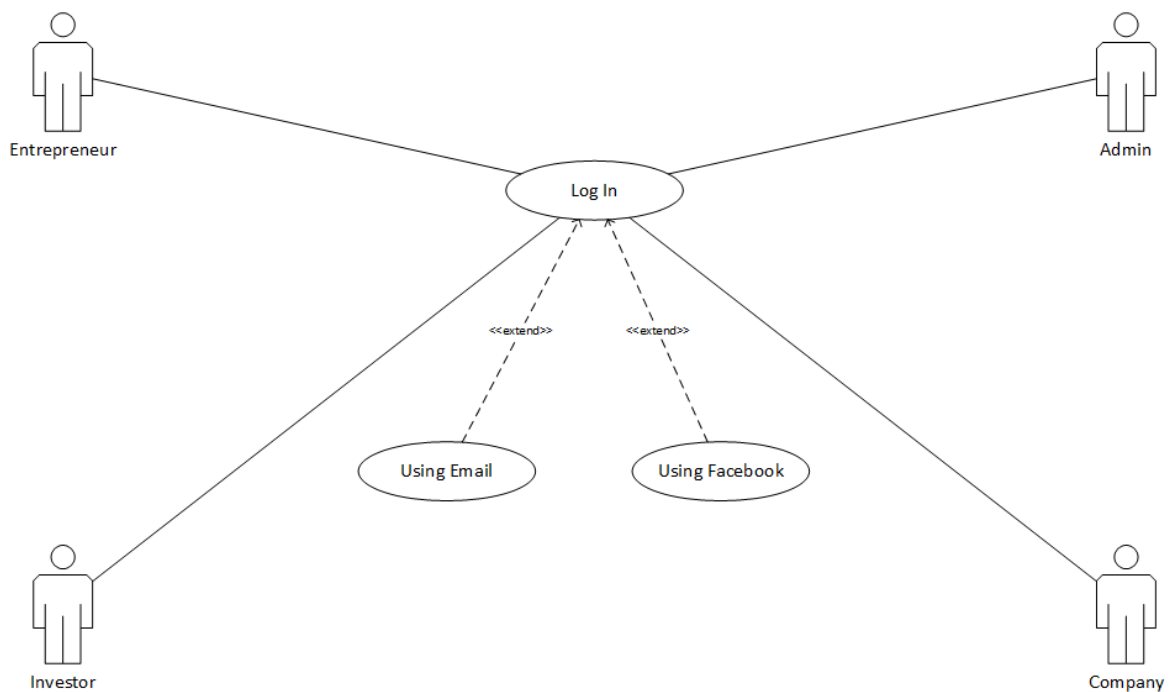


Figure 12: UC – Login

#### UC17: Login

ID : 017		Name : Get Notification	
Priority	Medium		

Actors	Entrepreneur , Investor , Company	
Summary	User will be able to login to the application (Android and Web)	
Precondition	User should be registered.	
Normal Flow of Events		Alternative Path
1. User will enter username and password in the field provided		
2. User will click on the login button		2a. If the login details are wrong user will get the error message that credential details are wrong.  2b. System will also offer the “forget details” option to reset them.
3-User can log in by Email or Facebook		
Post Conditions		
After getting notification ,user will do task related to that notification		
References:		
Includes		
Extends	Report user, report bugs	
Exceptions:		
If user will not get notification if he is not logged in.		

## 2.5 : Software Development Life Cycle Model

The software development life cycle model, also known as creation cycle for an application used in information and engineering systems, to describe the planning, analysis, design, implementation, testing and maintenance of processes. These concepts are also applying in software as well as hardware applications as we know that the system is the combination of software, hardware or both.

Our SDLC is Waterfall Model with Rapid Prototyping:

We are going to use a mix of Waterfall Model with Rapid Prototyping.

### 2.5.1 : Why use Waterfall Model?

It is used when the requirements are clear, product description is sure and tools and technology is known.

### 2.5.2 : Why use Rapid Prototyping Model?

It is used where customers are non-technical and usually do not know what they want and what they can have.

Due to unclear requirements of what will be easy for the users and moderate chances of requirement changes, we will use prototyping model to provide users with prototypes and they will update our prototypes, which will help us in clearing our requirements according to those feedbacks provided by the users, until all requirements are captured and are cleared.

Then we will use waterfall model to implement those requirements. Because waterfall model needs clear requirements, the clear requirements will be taken to start the waterfall phases. In waterfall model, we get a complete document at the end of a phase to verify that all the requirements are implemented according to requirement plan. Because of these documents, maintenance of app becomes easy.

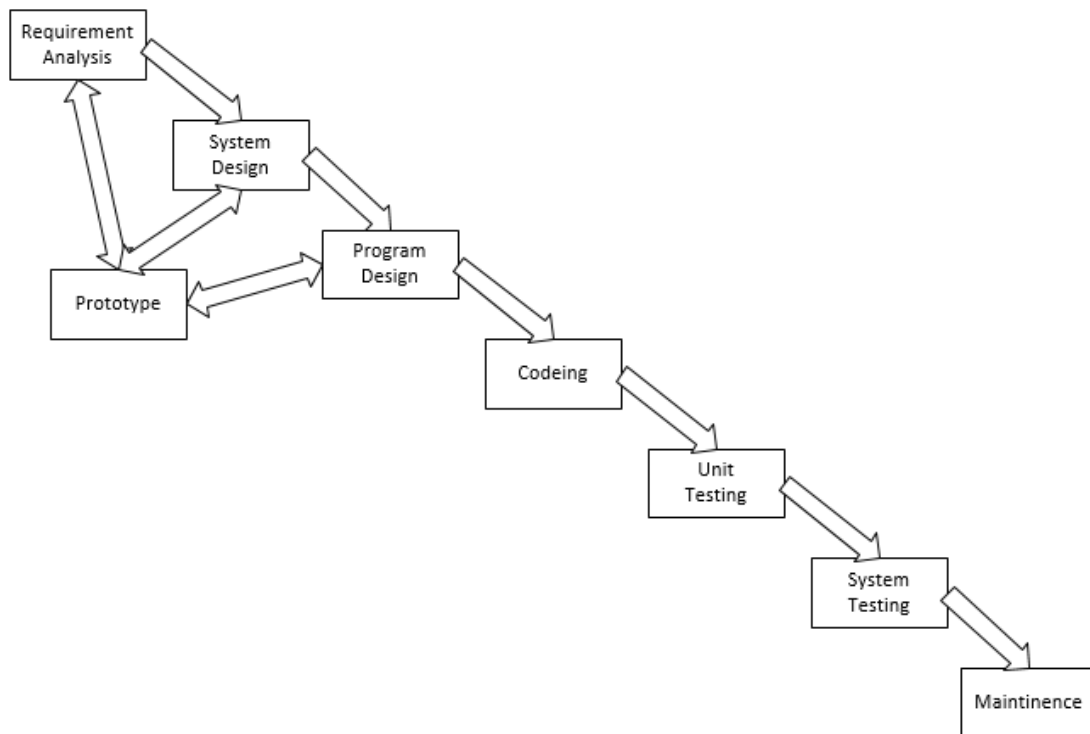


Figure 13: Proposed SDLC Hybrid Model

## **Chapter 3 : System Design**

Systems design is the practice of identify the system structure (architecture), its components and information for a system to fulfil the given requirements. Systems design can be represented as system development. It contains different type of diagrams like activity diagram, sequence diagram, database diagram, class diagram, system architecture and collaboration diagrams.

### **3.1 : Work Breakdown Structure (WBS)**

A work breakdown structure is a representation of deliverables of team's work into manageable sections. WBS is hierarchal description of software developments life cycle or software development phases. It tells about how your system modules are classified and how they will be completed in given order. The WBS provides the foundation for all project management work.

It is important because it makes the deliverables cleaner and precise so that the project team can easily understand what has to be accomplished in each deliverable.

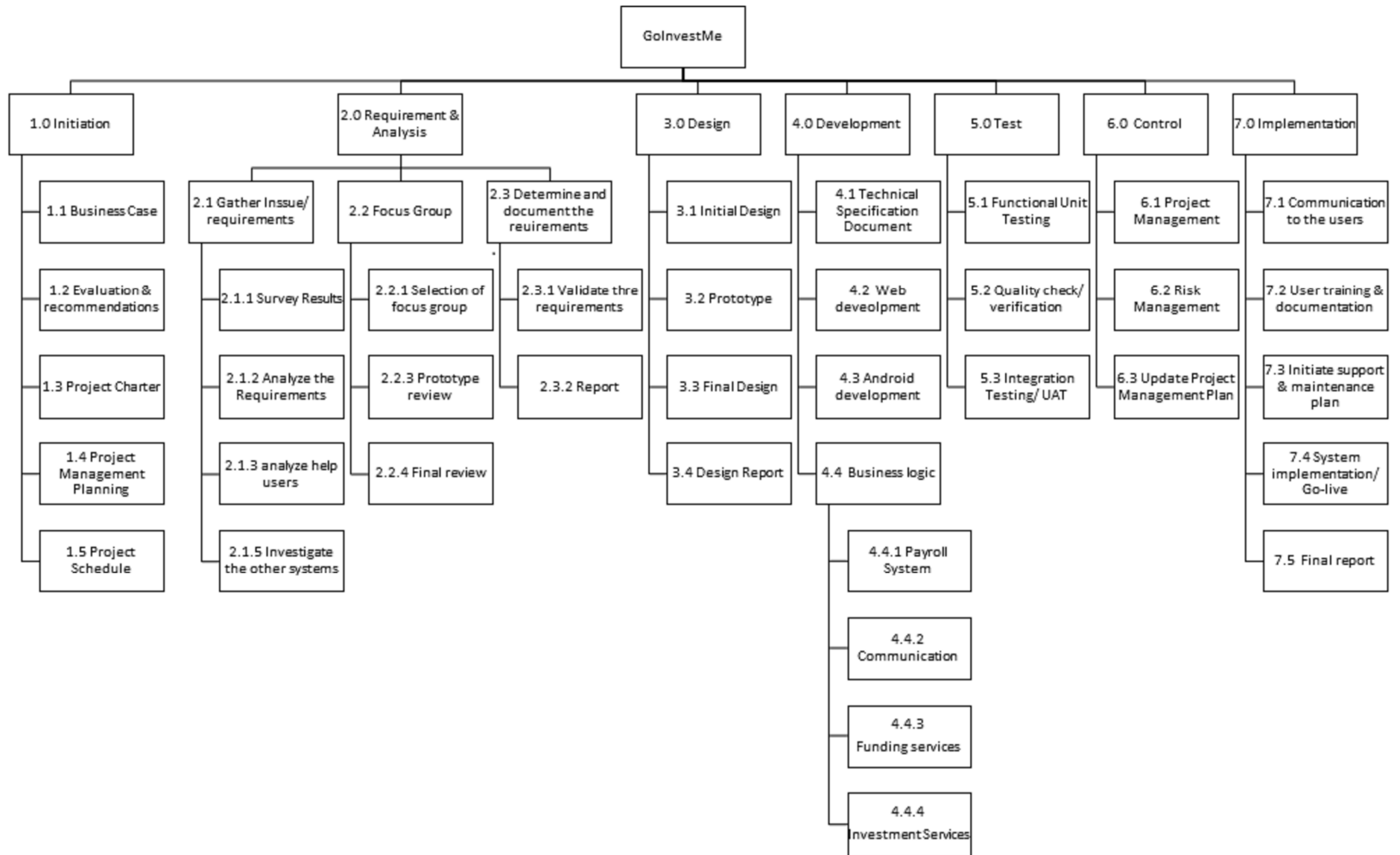


Figure 14: Work Breakdown Structure

### 3.2 : Activity Diagram

Activity diagram is used to describe the different features of the system in UML (unified modelling language). Activity diagram is like a flowchart to show the order from one feature to another feature. These features can be called activities. The activity can be called as an action of the system. The control order is described as from one action to another.

It is important because it is flow from one activity to another activity but in different diagrams, the flow is from one object to another object.

#### 3.2.1 : Sign Up

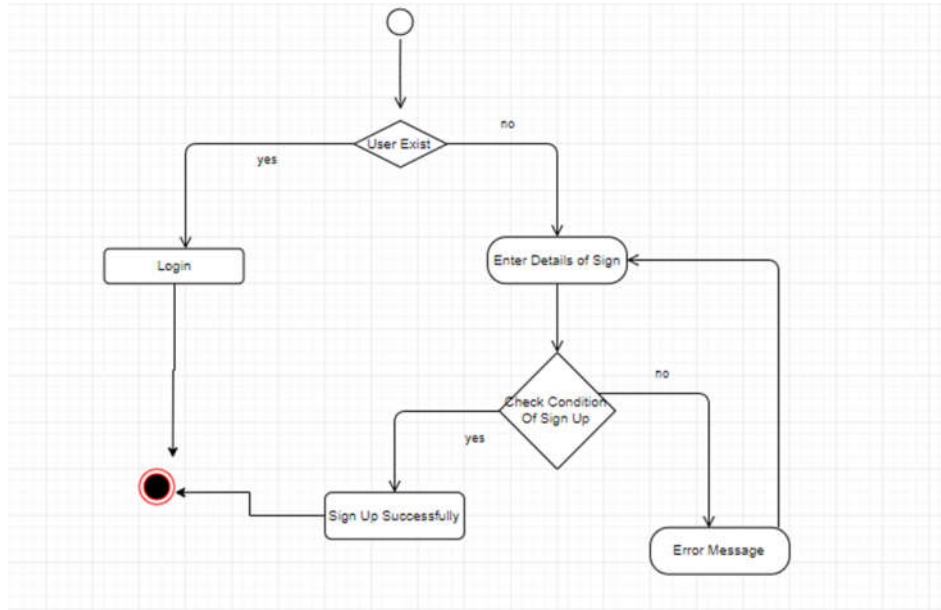


Figure 15: AD – Sign Up



### 3.2.2 : Add Campaign

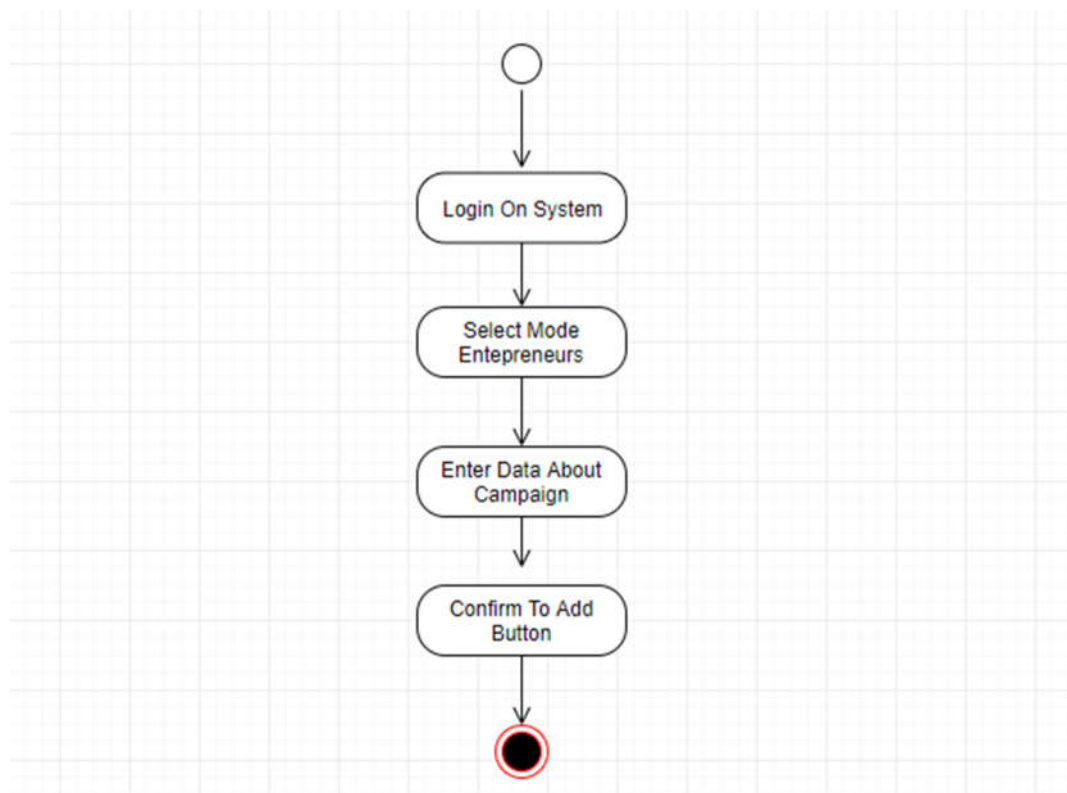


Figure 16: AD – Add Campaign

### 3.2.3 : Edit Campaign

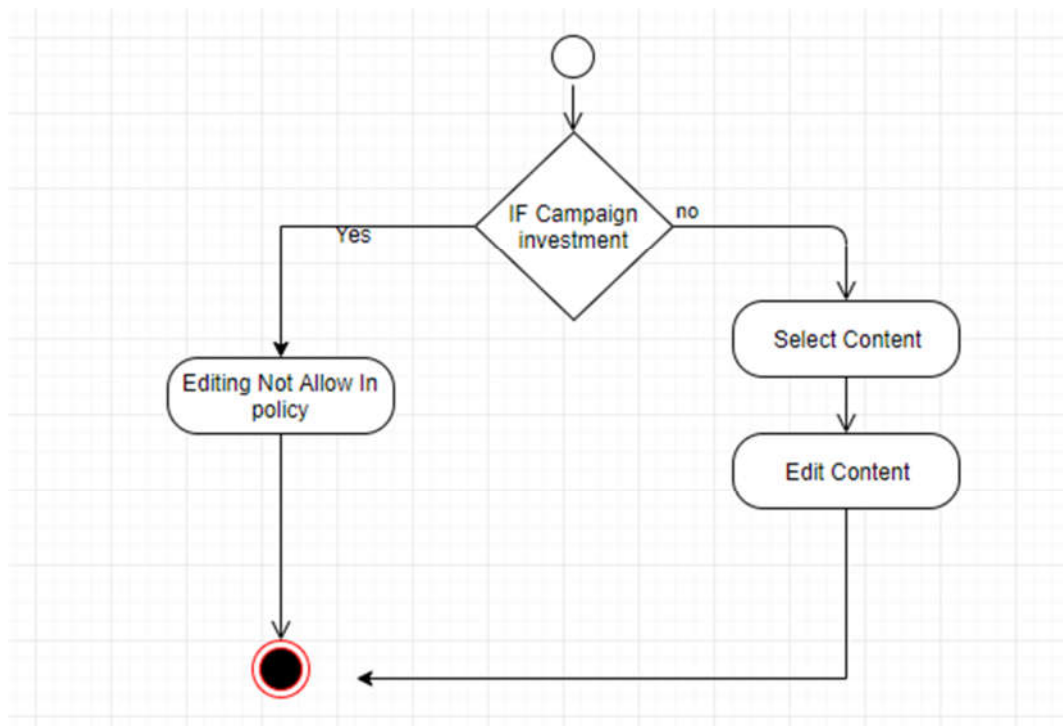


Figure 17: AD – Edit Campaign

### 3.2.4 : Delete Campaign

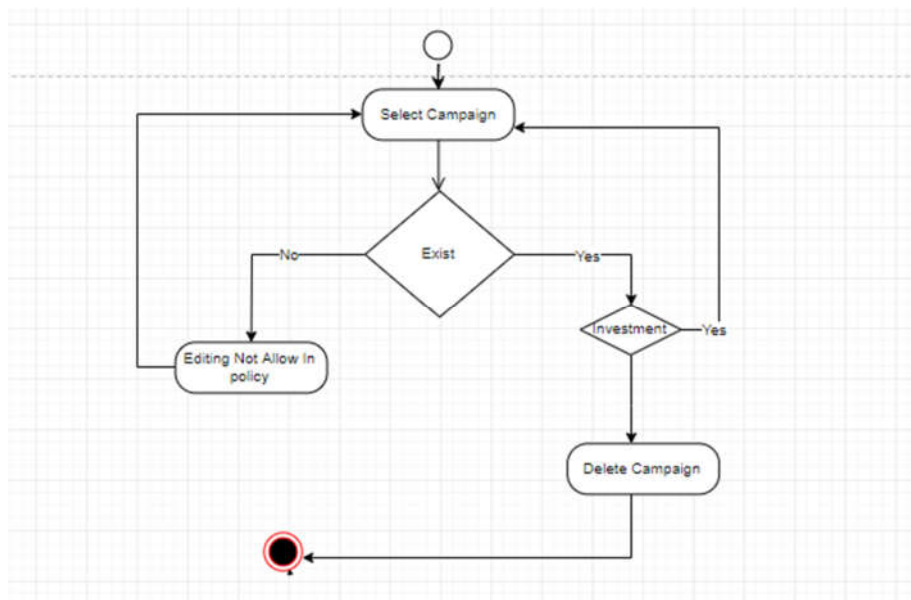


Figure 18: AD – Delete Campaign

### 3.2.5 : Search

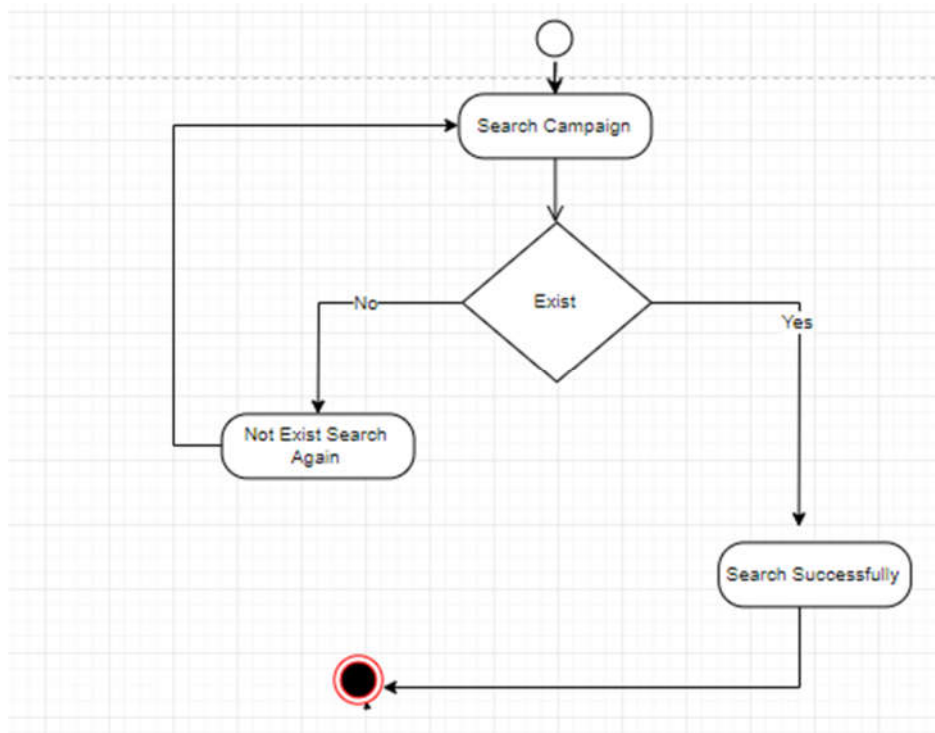


Figure 19: AD – Search

### 3.2.6 : View Profile

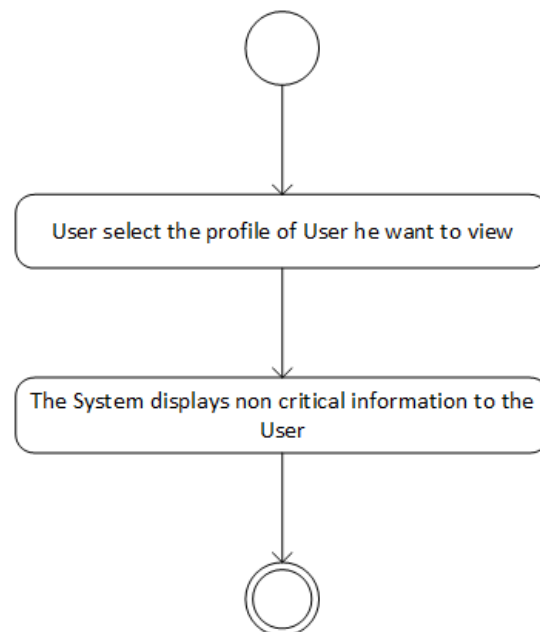


Figure 20: AD – View Profile

### 3.2.7 : Edit Profile

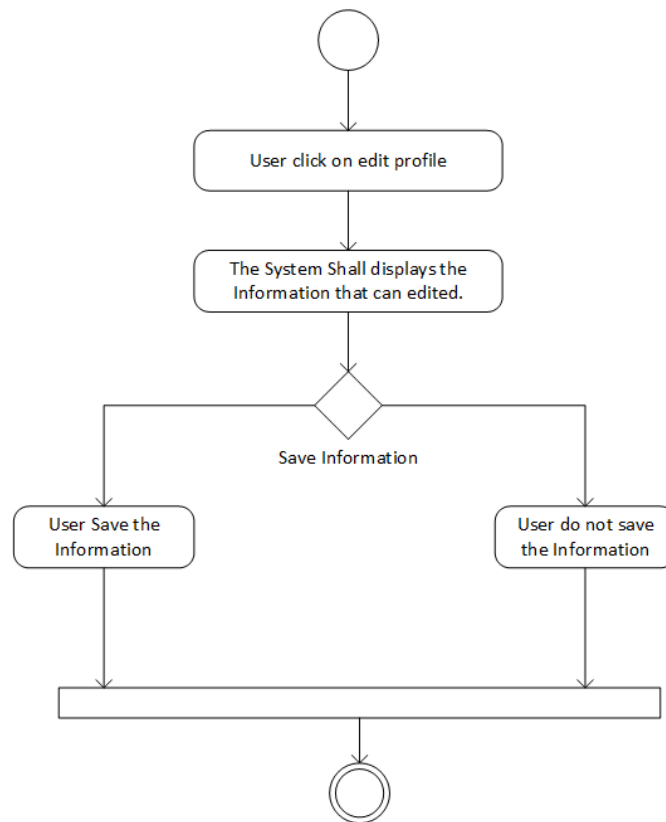


Figure 21: AD – Edit Profile

### 3.2.8 : Make Investment

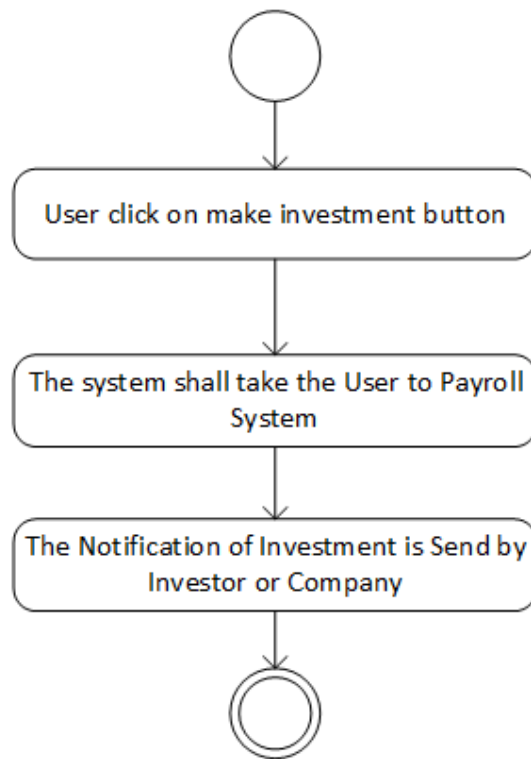


Figure 22: AD – Make Investment

### 3.2.9 : View Investment

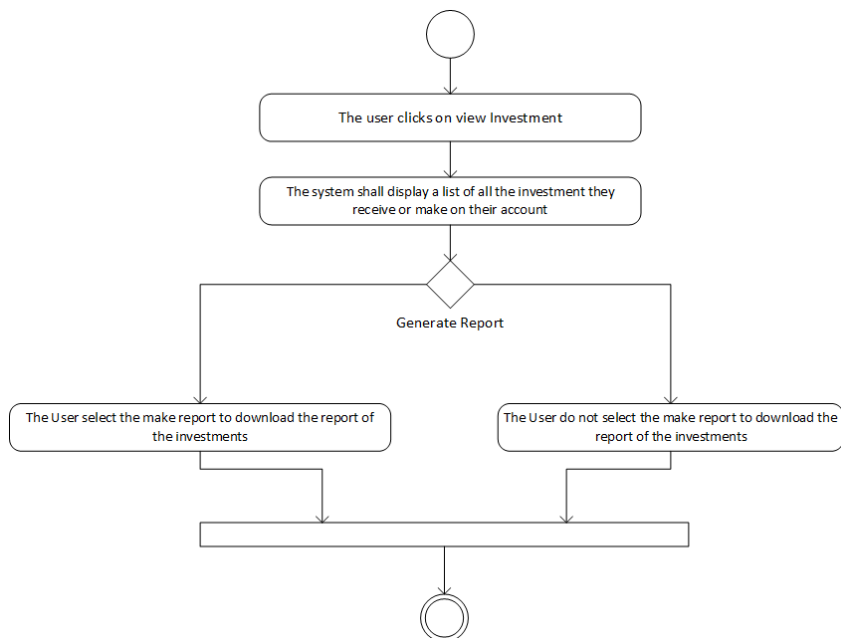


Figure 23: AD – View Investment

### 3.2.10 : Receive Investment

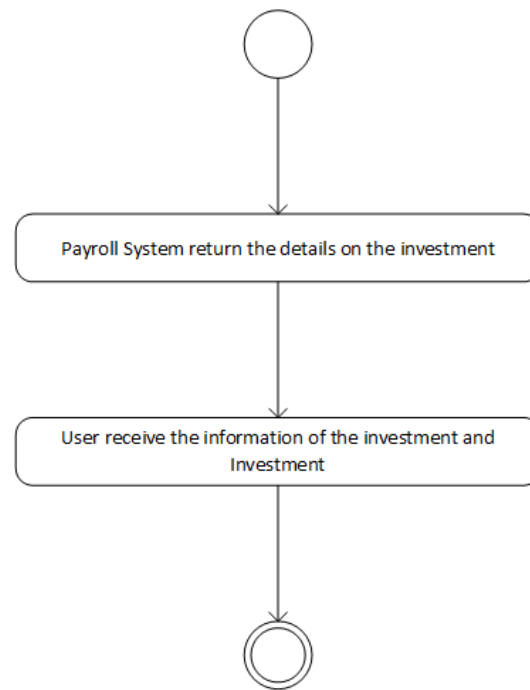


Figure 24: AD – Receive Investment

### 3.2.11 : Manage Payroll

Maange  
payrol

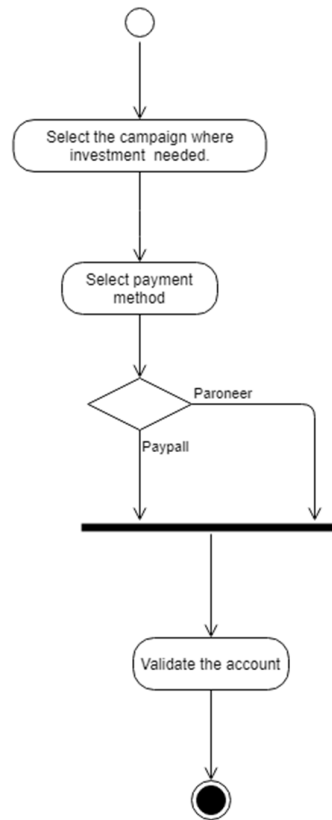


Figure 25: AD – Manage Payroll

### 3.2.12 : Manage Comments

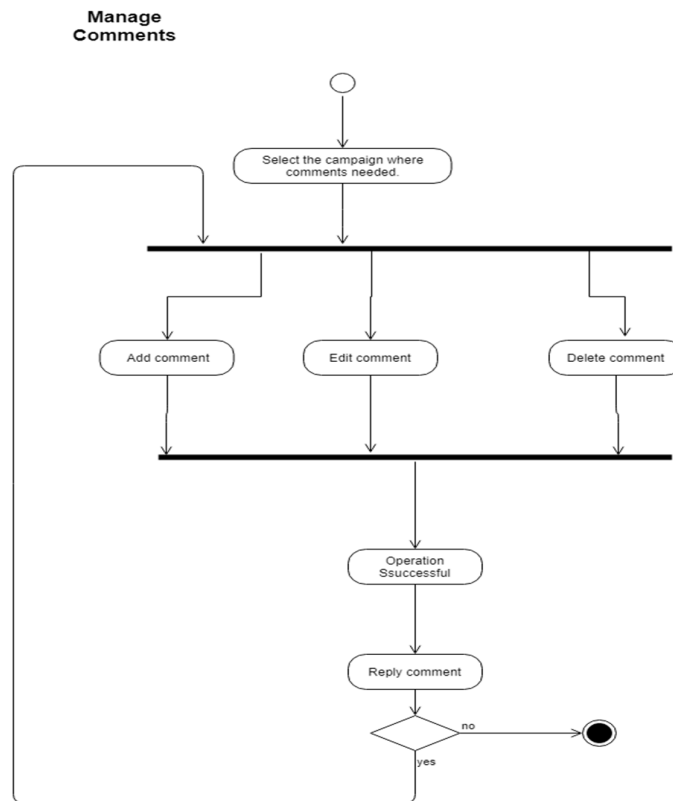


Figure 26: AD – Manage Comments

### 3.2.13 : Chatting

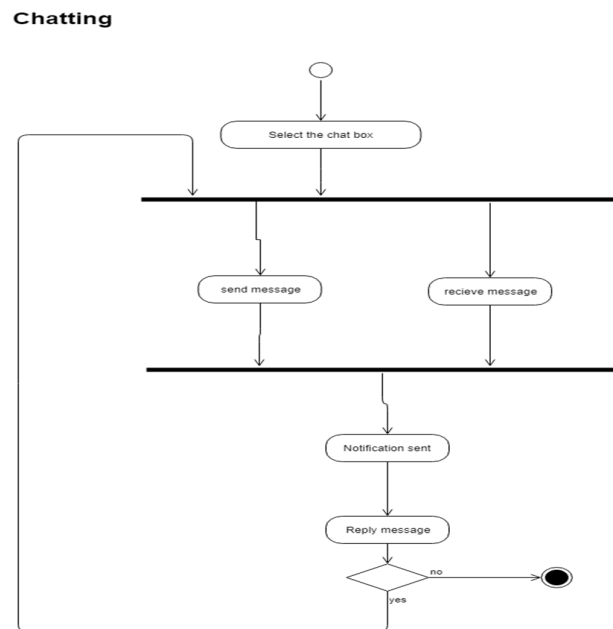


Figure 27: AD – Chatting



3.2.14 : Notification

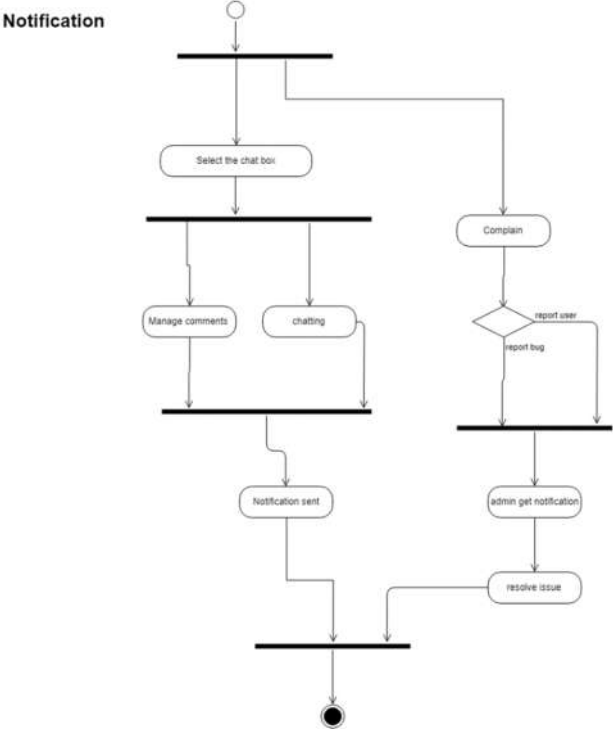


Figure 28: AD – Notification

3.2.15 : Login

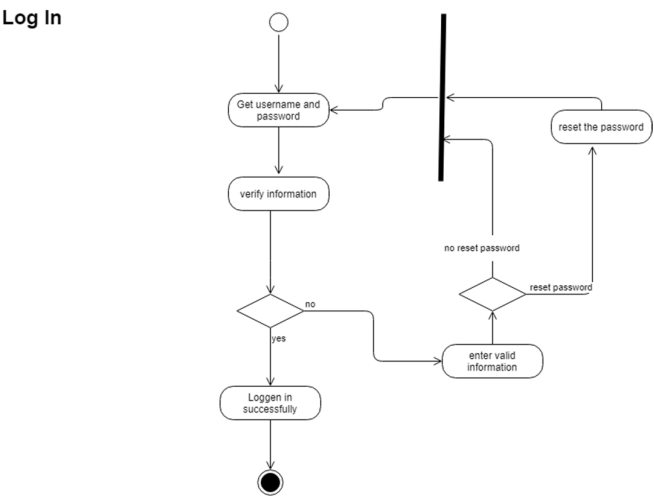


Figure 29: AD – Login

### 3.2.16 : Run Payroll

#### Run payroll

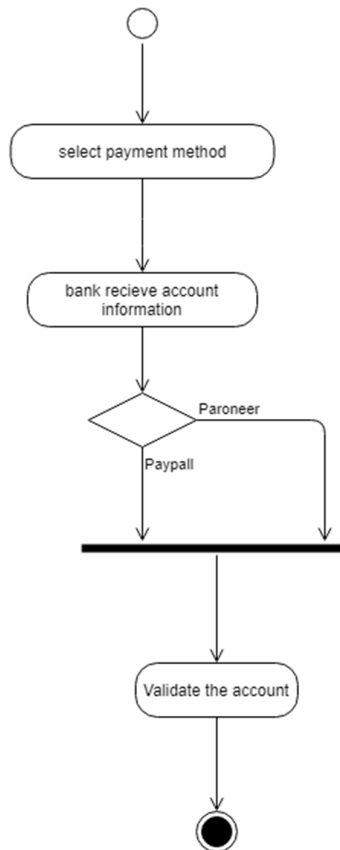


Figure 30: AD – Run Payroll

### 3.3 : Sequence Diagram

Sequence diagrams are also defined as event scenarios. A sequence diagram display, as corresponding vertical lines, different actors and modules that linked with horizontal arrows, the communications replaced between them by maintaining the flow.

It is important because it is used to describe software requirements and to ensure a system's design. Why it is useful because it shows the communication logic between the actors and modules in the time that the communication occurs.

### 3.3.1 : Chatting

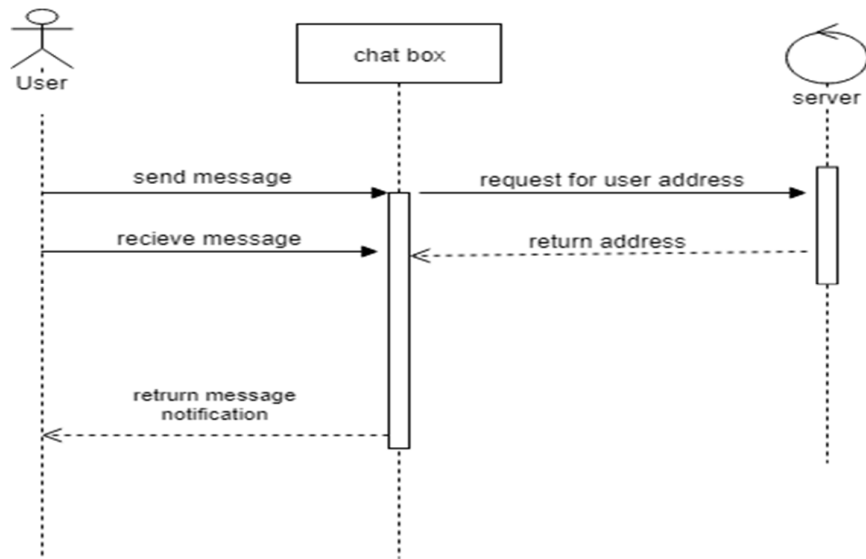


Figure 31: SD – Chatting

### 3.3.2 : Feedback

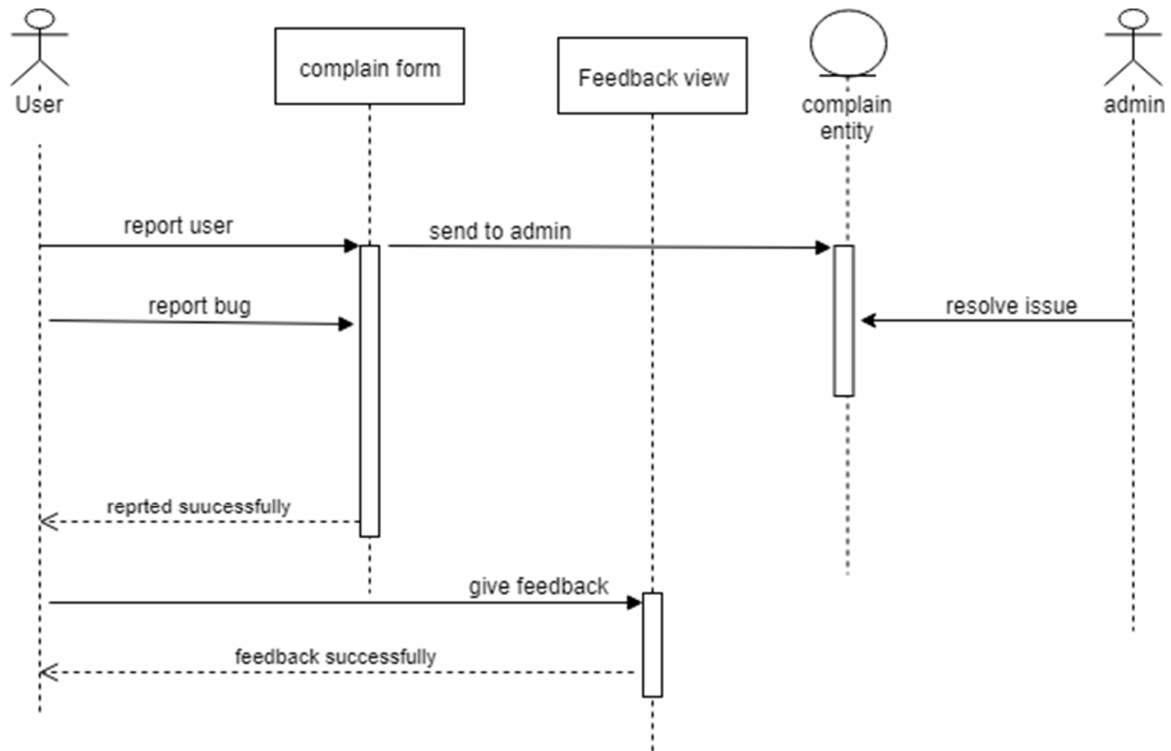


Figure 32: SD – Feedback

### 3.3.3 : Comments

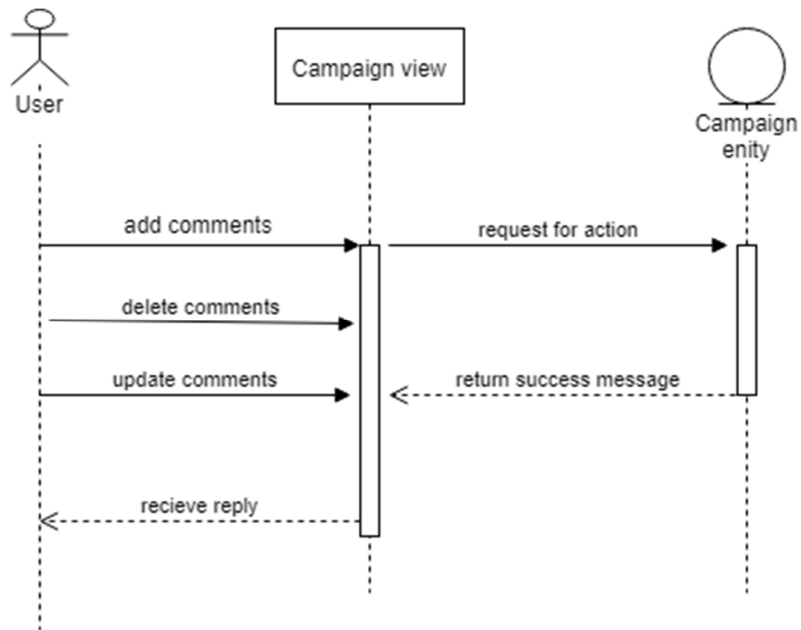


Figure 33: SD – Comments

### 3.3.4 : Make Investment

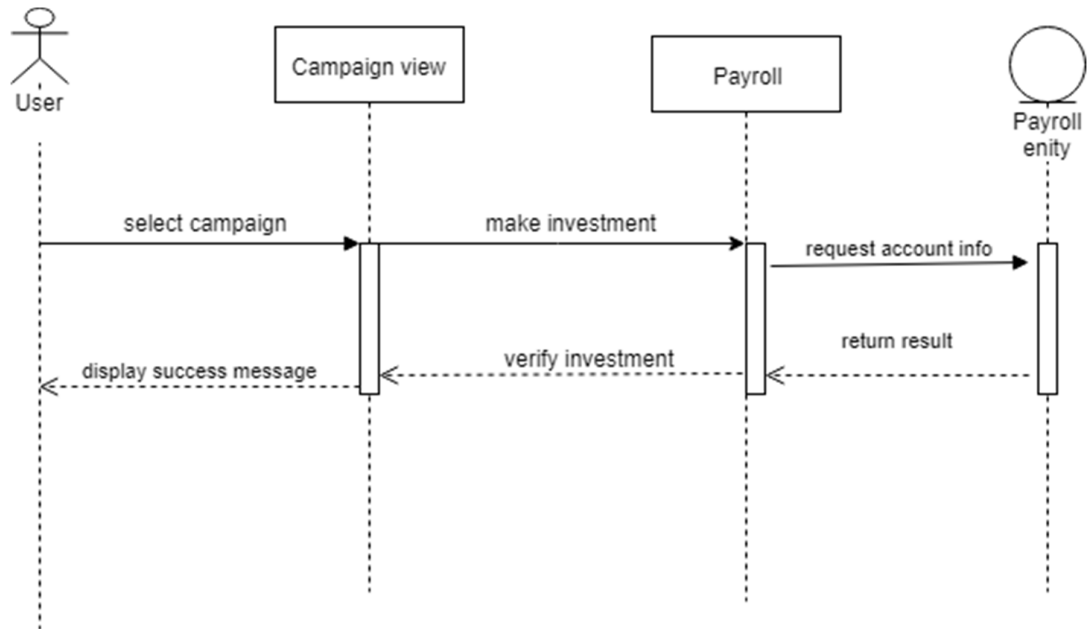


Figure 34: SD – Make Investment

### 3.3.5 : Receive Investment

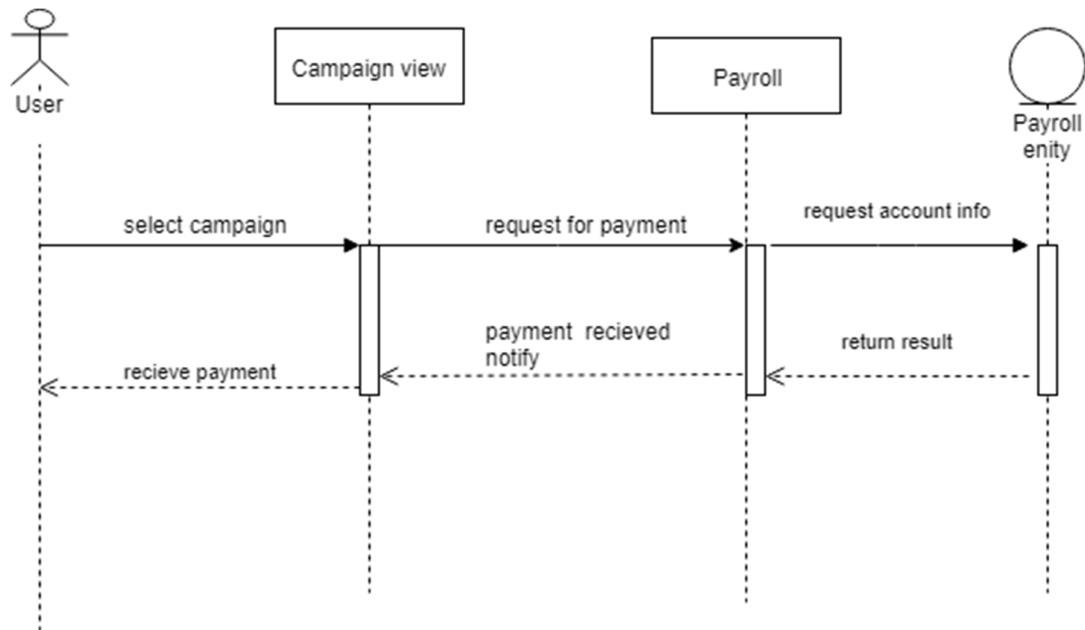


Figure 35: SD – Receive Investment

### 3.3.6 : Sign Up and Login

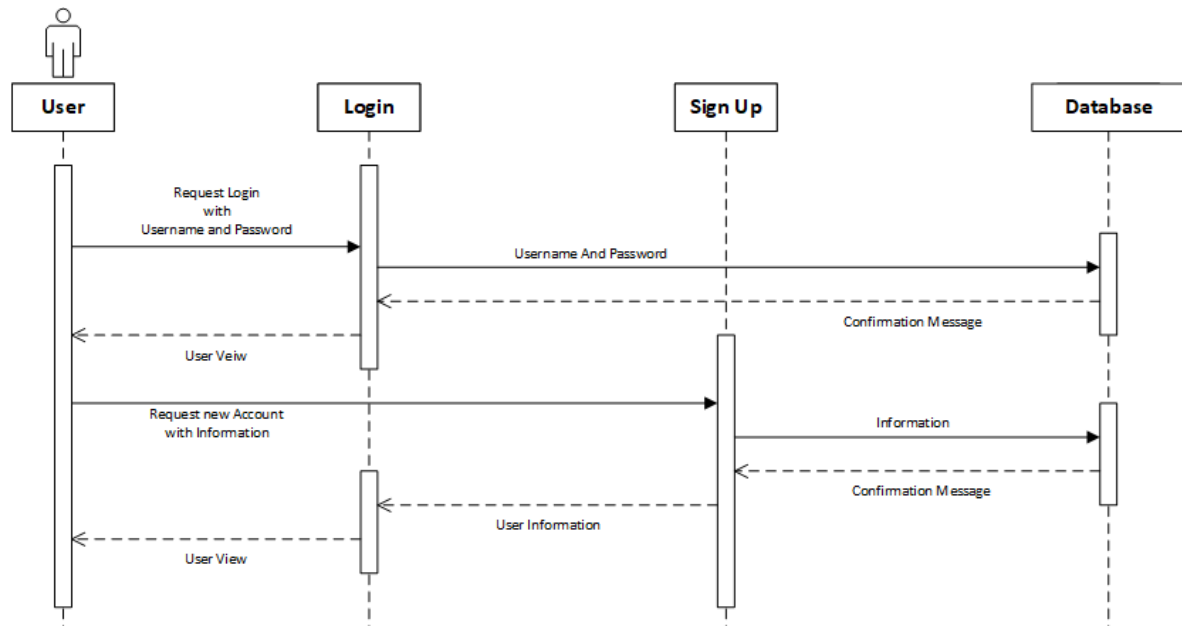


Figure 36: SD – Sign Up and Login

### 3.3.7 : Profile

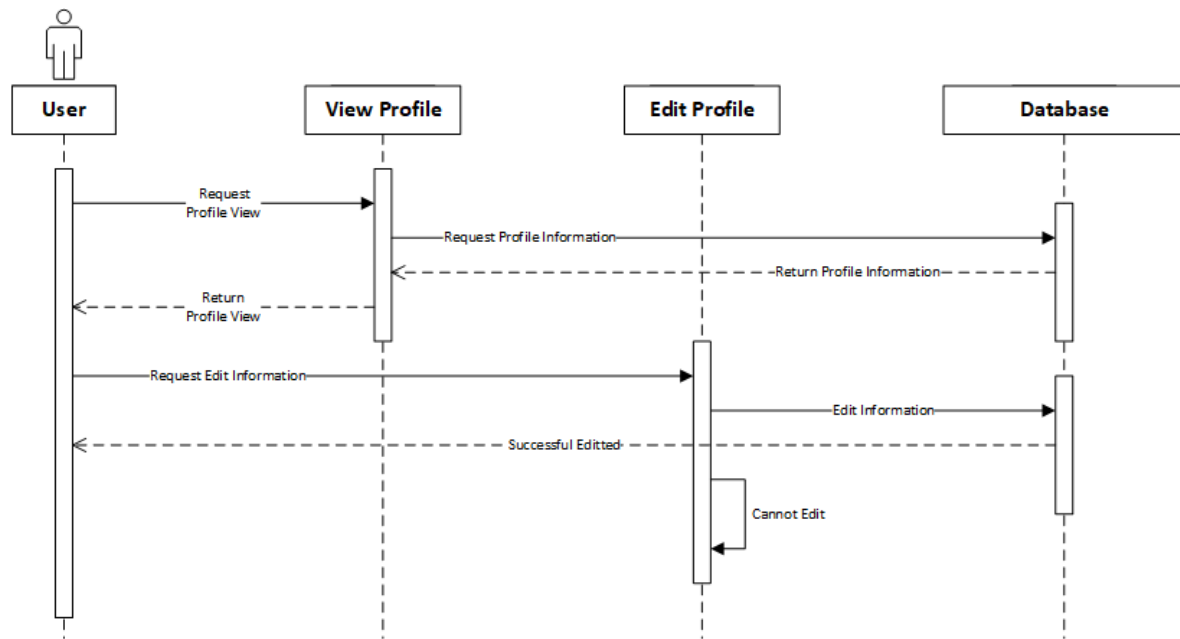


Figure 37: SD – Profile

### 3.3.8 : Campaign

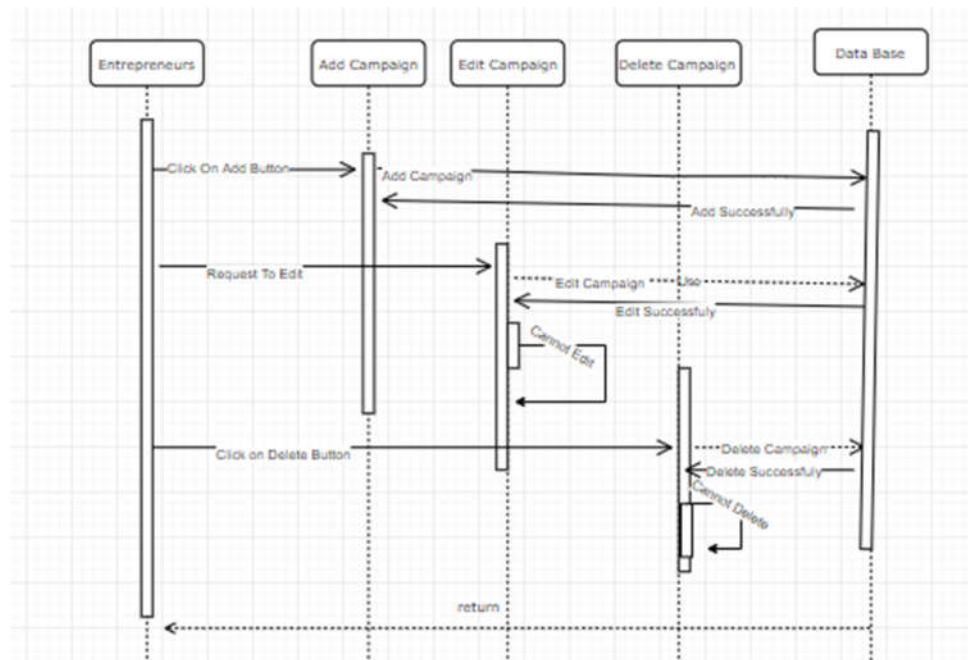


Figure 38: SD – Campaign

### 3.3.9 : Search and View Campaign

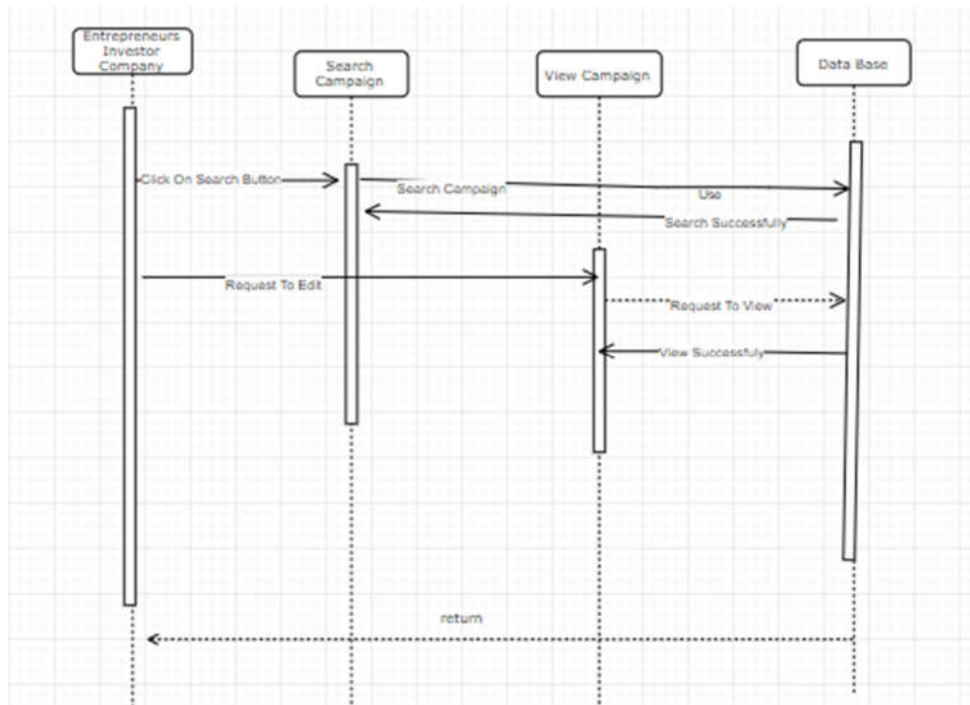


Figure 39: SD – Search and View

## 3.4 : Software Architecture

Software architecture is representation of functional structures of a system and the discipline of making structures and systems. Every structure includes software modules, links between them, and characteristics of both modules and links.

### 3.4.1 : MVC Architecture

The software architecture, which we are using, is MVC stand for Model View Controller.

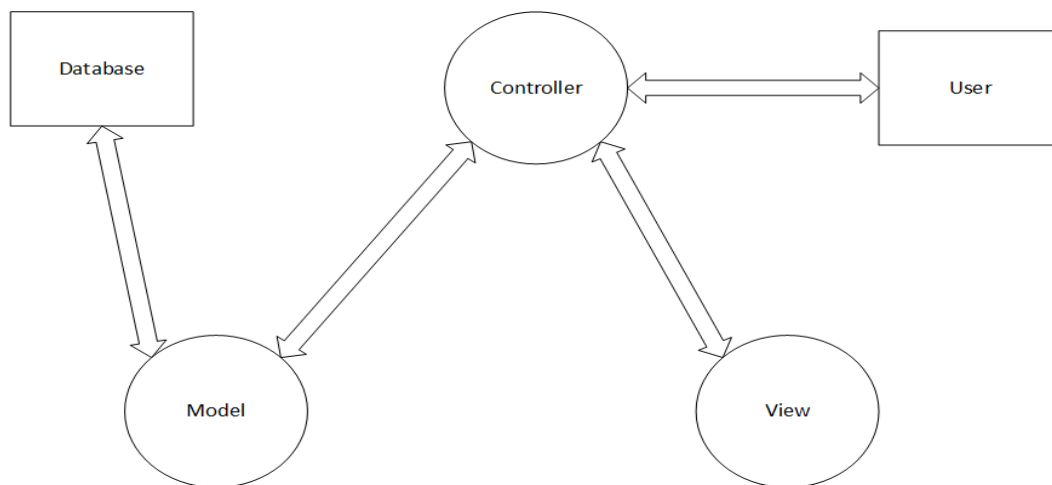


Figure 40: MVC Architecture

GoInvestMe A crowdfunding platform for start-ups is a huge system, which is based on web-application and android created for Entrepreneurs and Investors. This system records all campaigns, entrepreneur, investor, and company information etc. Our project is based on MVC architecture with ability to take large number of data.

The model view controller (MVC) architecture is used to implement interfaces. MVC is a famous choice for web apps.it separates the logic in three parts i.e. model, view and controller. The model will inform the view to update its display according to data as it contains the data that app should use. In our project, the model will specify what data the interfaces should contain that campaigns interface, user's interface and category's interface and it will inform the view to update display according to the changes that has occurred. The controller will handle all the logic that updates view and model in reply to input from the users. Our project could have input buttons and forms to add delete and edit information from their profiles, in registration etc.

Our project data model will be contained in database (SQL Server) our applications controlling code will be written in java script and interfaces will be written using CSS/HTML. This is similar to MVC.

This separation of responsibilities in MVC architecture will help to make our project more flexible, secure and will increase performance.

### 3.5 : Class Diagram

Class diagram in the Unified Modelling Language tells about architecture of a software system by presenting classes, their characteristics, methods, and objects. The relationships can be one to one, one to many, many to many between different classes.

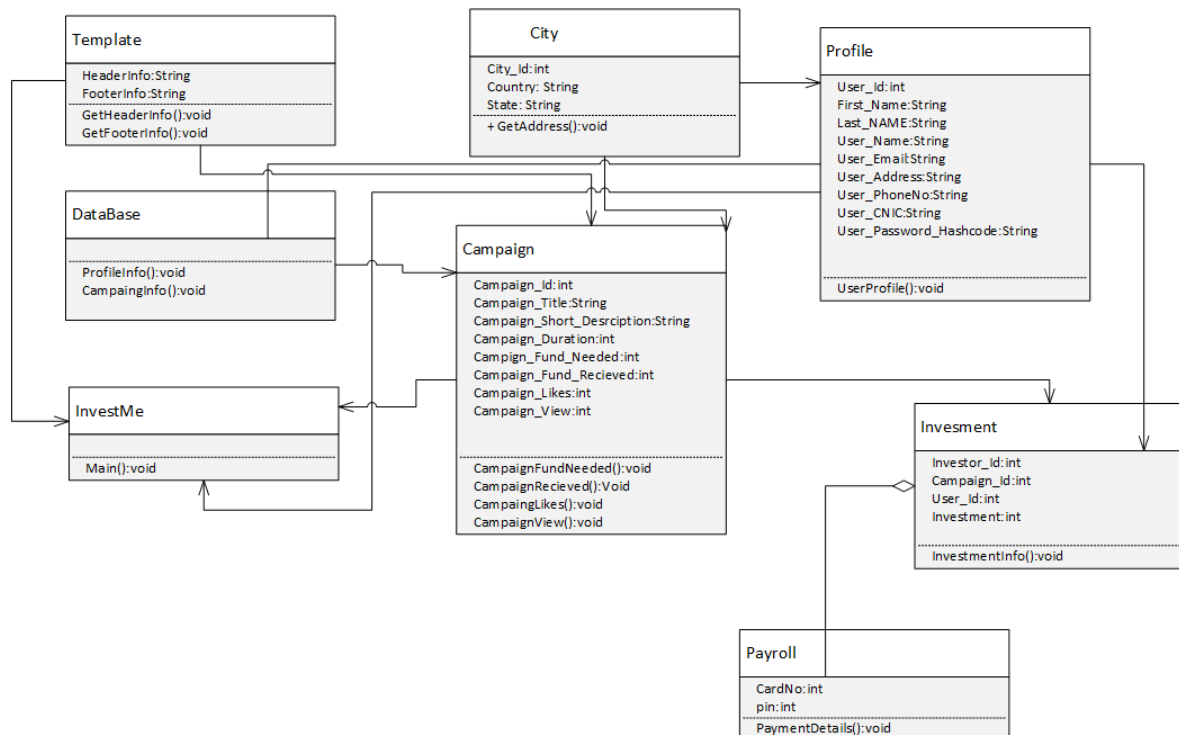


Figure 41: Class Diagram



### 3.6 : Database Diagram

Database diagram is also called entity relationship diagram. It tells about the relations between schemas. A database schema is the designs of your database; it represents the description of a database structure, data types, and the restrictions on that database. It is important step to start developing any software by designing database schemas.

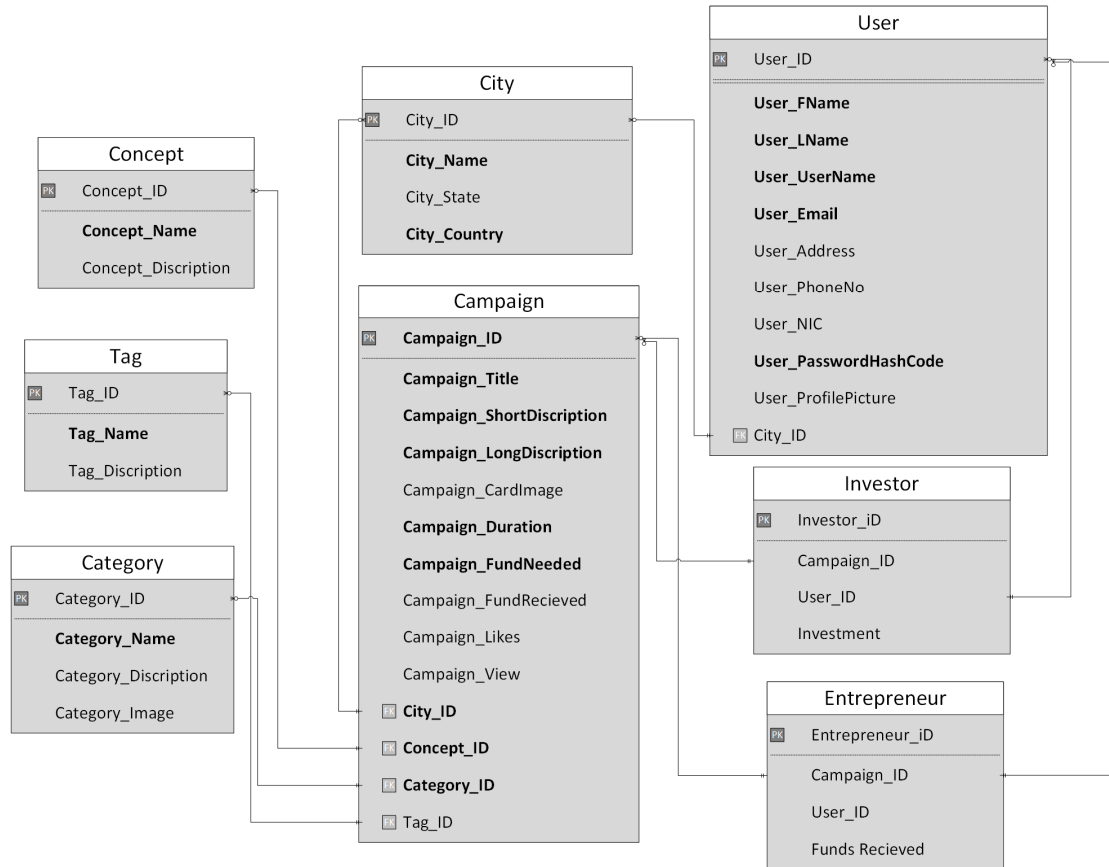


Figure 42: ERD – Database Diagram

### 3.7 : Network Diagram (Gantt chart)

A Gantt chart is a tool used for project management. It can be used to signify the timing of several jobs that are essential to fulfil a project requirement. A network diagram describes the several jobs of project in sequential flow by connecting links.

. Gantt chart is important because it tells about how much time is required to complete this phase and which team will complete it.

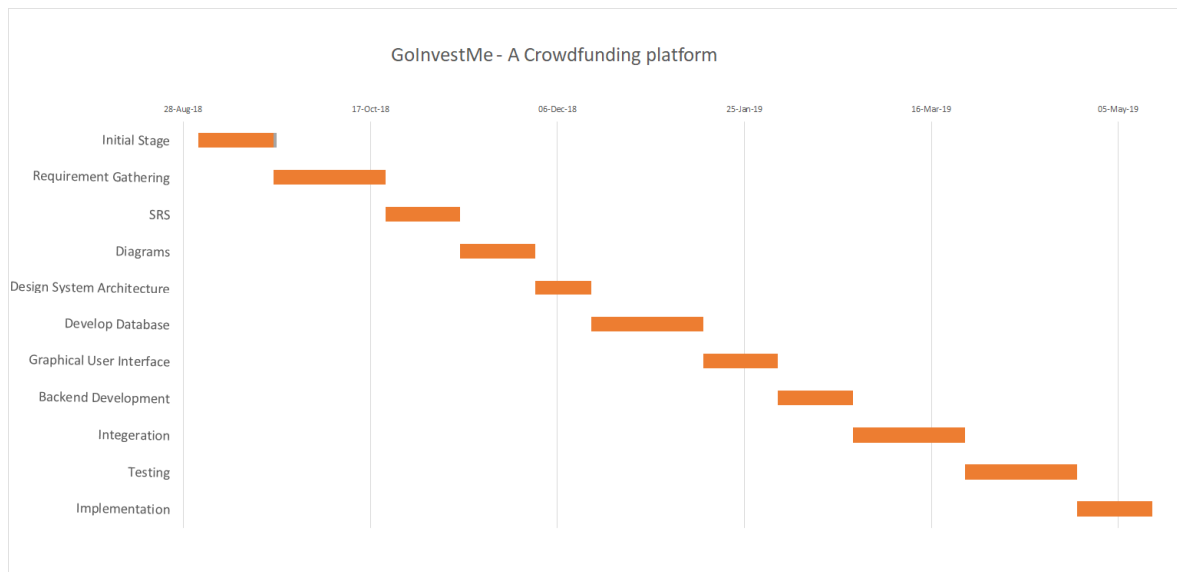


Figure 43: Gantt Chart

## 3.8 : Collaboration Diagram

A collaboration diagram is sometime called communication or interaction diagram, is a representation of the relationships and interactions among software objects in Unified Modelling Language. Every sequence diagram will have collaboration diagram. It helps the developer to understand the communication between different modules.

### 3.8.1 : Chatting

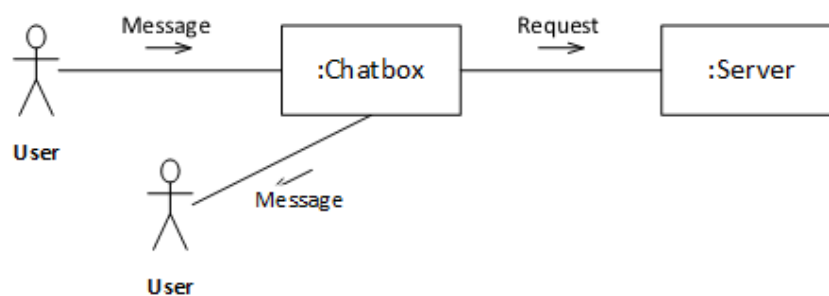


Figure 44: CD – Chatting

### 3.8.2 : Feedback

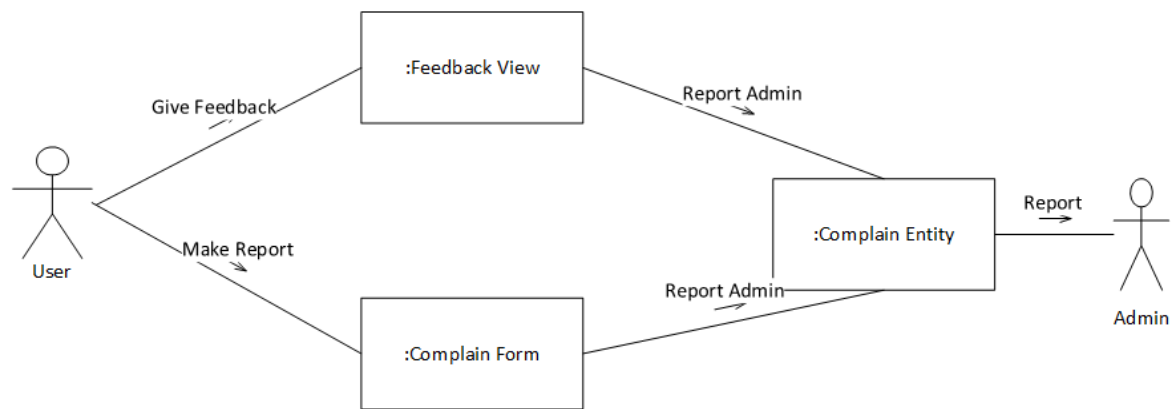


Figure 45: CD – Feedback

### 3.8.3 : Make Investment

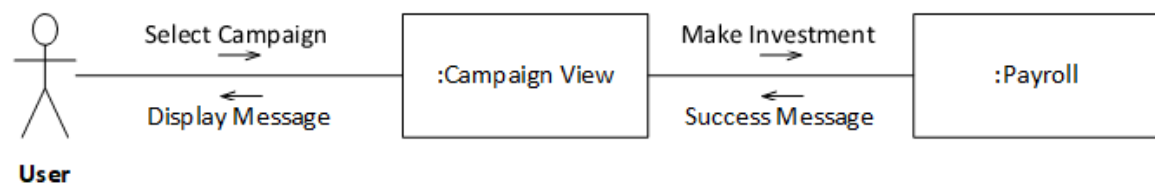


Figure 46: CD – Make Investment

### 3.8.4 : Receive Investment

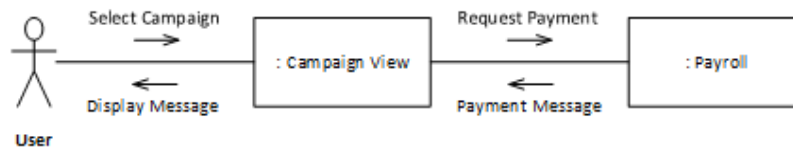


Figure 47: CD – Receive Investment

### 3.8.5 : Sign Up and Login

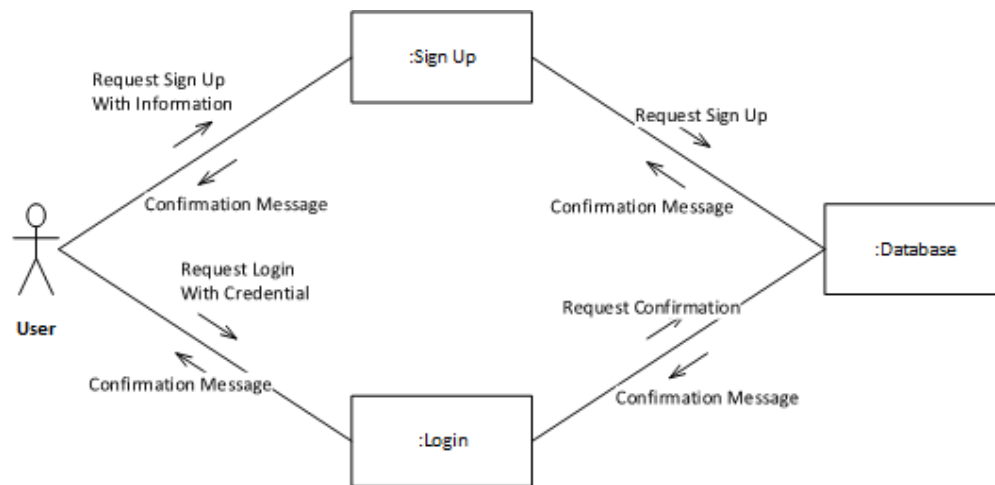


Figure 48: CD – Sign Up & Login

### 3.8.6 : Profile

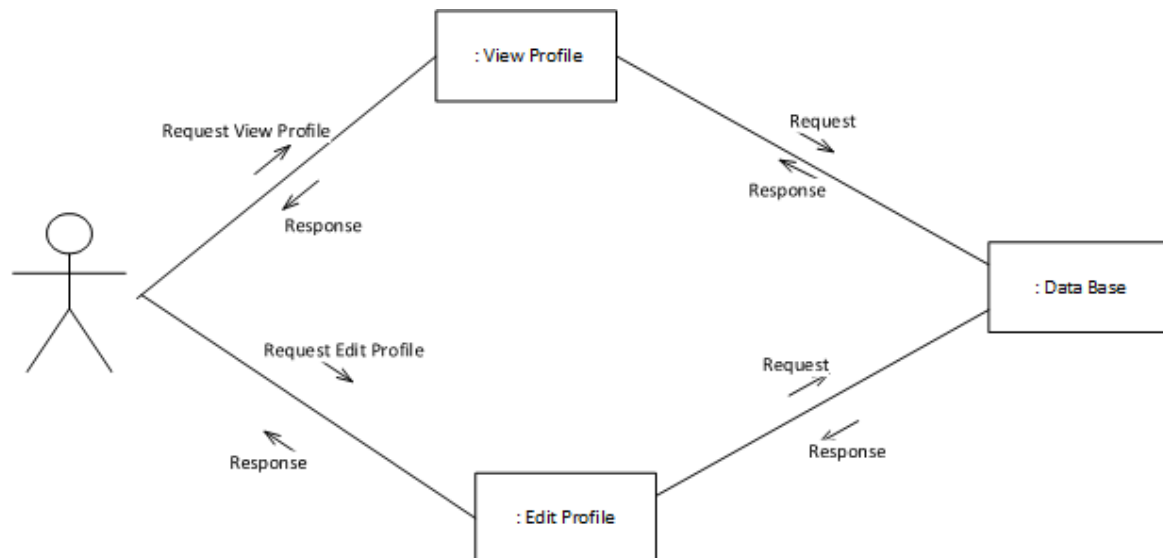


Figure 49: CD – Profile

### 3.8.7 : Campaign

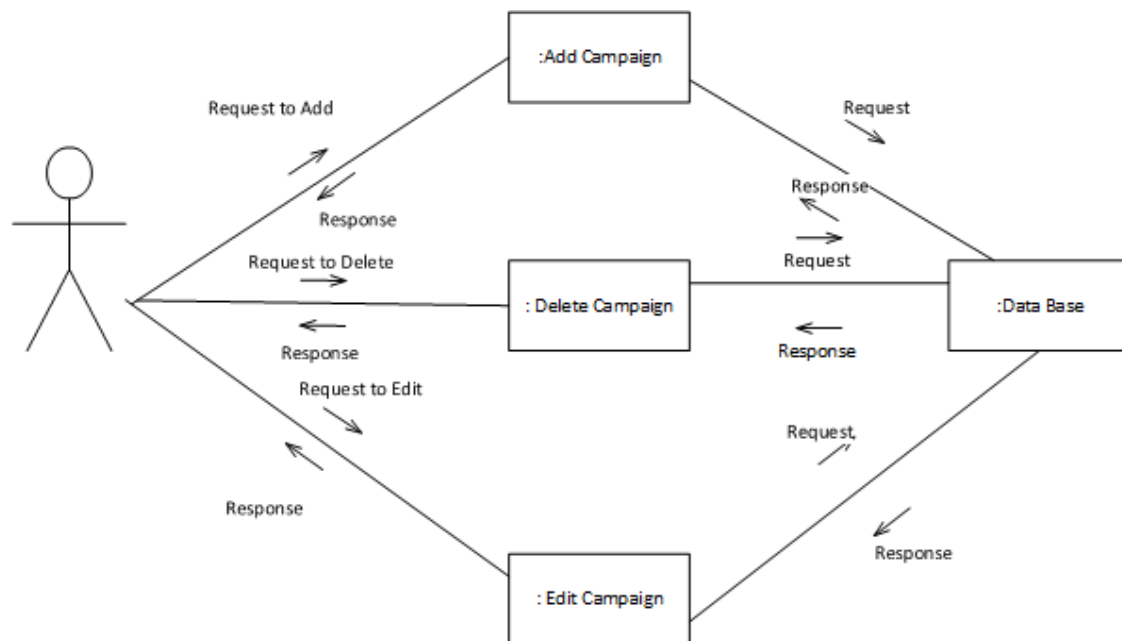


Figure 50: CD – Campaign

### 3.8.8 : Search and View Campaign

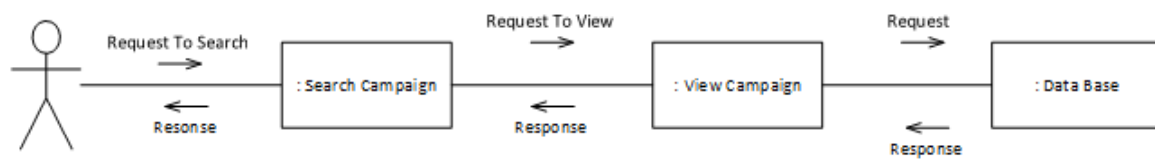


Figure 51: CD – Search and View Campaign

## Chapter 4 : System Testing

System Testing is the testing of fully integrated and complete system project. When all the tested modules are gathered and testing is performed that is called system testing. Eventually, software is interacted with other software/hardware systems.

Two types of Software Testing

- White Box
- Black Box

System test is actually black box testing.

White box testing is used for testing the internal structure or code of a software. However, black box or System Testing is used for testing the external structure of the software system from the user's viewpoint.

### 4.1 : Test Cases

A test case is a description of the user inputs, implementing conditions, testing requirement, and estimated results that express a single test to be implemented to achieve a particular software-testing module. It can be following the path in which test case execute in some order. Test cases is actually representation of every requirement that is to be implemented.

#### TC-01: Sign Up

Overview					
ID	01	Name		Sign Up	
Application	GoInvestMe – A Crowdfunding platform	Priority		High	
Description	Before using this platform functionality , first user will be sign up on this platform				
Assumption	Client will enter information				
Pre-Condition					
Client has valid information					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1.	Insert data in require field	Fill the sign up details according to policy	1)Sign up successfully 2) Incomplete details again sign up	Sign up successfully	pass

<b>Post-Condition</b>
User will be registered in this platform. Data base will be updated

### TC-02: Add Campaign

Overview					
ID	02	Name		Add Campaign	
Application	GoInvestMe – A Crowdfunding platform	Priority		High	
Description	User will add an idea or project campaign for investments.				
Assumption	Client will add new campaign that he/she would not be add before				
Pre-Condition					
User will be the member of platform and in mode of entrepreneurs.					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1.	Enter valid data for campaign	Pick Information is valid, how many data is plagiarism	1)Campaign add successfully 2) Campaign is already add	Campaign added successfully	pass
Post-Condition					
Same type of campaign from one id will give duplication error.					

### TC-03: Edit Campaign

<b>Overview</b>			
<b>ID</b>	03	<b>Name</b>	Edit Campaign
<b>Application</b>	GoInvestMe – A Crowdfunding platform	<b>Priority</b>	High
<b>Description</b>	User can edit its campaign.		

<b>Assumption</b>		Client will edit its content that is related to campaign.			
<b>Pre-Condition</b>					
Campaign must be exist for editing.					
<b>Steps</b>	<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Result</b>	<b>Actual Result</b>	<b>Status</b>
1.	First user will select campaign	Not edit those campaign policy that have some investment	1)Campaign Edit Successfully 2) Not edit campaign	Campaign edit successfully	pass
<b>Post-Condition</b>					
Campaign content will be edited and updated in record of database.					

#### TC-04: Delete Campaign

Overview					
ID	04		Name	Delete campaign	
Application	GoInvestMe – A Crowdfunding platform		Priority	High	
Description	Entrepreneurs will delete campaign which have no investments				
Assumption	Entrepreneurs can delete campaign				
Pre-Condition					
Campaign will be exist and no investments on it.					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1.	First entrepreneur will select campaign f or delete	Not delete those campaign that have some investment	1)Campaign Delete Successfully 2) Not Delete campaign some constraint exist	Campaign delete successfully	pass



<b>Post-Condition</b>
Campaign will be deleted from user console. Also deleted from record of database.

#### TC-05: View Campaign

Overview					
ID	05		Name	View campaign	
Application	GoInvestMe- A Crowdfunding platform		Priority	High	
Description	User will view campaign and read investment policy that set by entrepreneurs.				
Assumption	All user can view campaign				
Pre-Condition					
Campaign will be exist.					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1.	First entrepreneur will select campaign f or view	Campaign policy View content	1)Campaign View Successfully 2) Not View campaign some constraint exist due to platform	Campaign view successfully	pass
Post-Condition					
User will view campaign and after that may be they will have interest and invest on that project					

#### TC-06: Delete Campaign

<b>Overview</b>			
<b>ID</b>	06	<b>Name</b>	Search Campaign

Application	GoInvestMe - A Crowdfunding platform	Priority	High		
Description	User will search project or idea according to interest				
Assumption	User may recommend the project according to their interest, beyond the list.				
Pre-Condition					
User must be logged in					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1.	User will click on search button and select campaign	Campaign data will be select for testing	1)Campaign Search Successfully 2) Not relate to any campaign.	Campaign view successfully	pass
Post-Condition					
Project will be executed on the basis of the search					

#### TC-07: View Profile

Overview					
ID	07		Name		View Profile
Application	GoInvestMe – A Crowdfunding Platform		Priority		High
Description	User are able to view any profile.				
Assumption	User has Logged in.				
Pre-Condition					
User must be Logged in by their perspective accounts					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status

1	Click on View Profile		1) The Profile which has been clicked on Show in the view	The Profile is Shown	Pass
<b>Post-Condition</b>					

#### TC-08: Edit Profile

Overview					
ID	08	Name	Edit Profile		
Application	GoInvestMe – A Crowdfunding Platform	Priority	High		
Description	User are able to Edit their profile.				
Assumption	User has Logged in.				
Pre-Condition					
User must be Logged in by their perspective accounts					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Click on Edit Profile	Fill the Profile Form according to the required information	1)Profile Updated 2)Incorrect Information Entered	The Profile is Updated	Pass
Post-Condition					
The Data in Database is updated					

#### TC-09: Make Investment

Overview			
<b>ID</b>	09	<b>Name</b>	Make Investment

Application	GoInvestMe – A Crowdfunding Platform	Priority	High		
Description	User are able to make investment on the Campaign				
Assumption	User has Logged in.				
Pre-Condition					
User must select the Campaign they want to invest in					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Click on make Investment Button		1) Go to the Payroll system	The Payroll System is in the view	Pass
Post-Condition					
The Notification is send to the Investor					

#### TC-10: View Investment

Overview					
ID	10	Name		View Investment	
Application	GoInvestMe – A Crowdfunding Platform	Priority		High	
Description	User are able to view investment on all Campaign they make or receive.				
Assumption	User has Logged in.				
Pre-Condition					
The User make or receive an investment					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Click on View		1) List all the Investment of user in the	The Investment	Pass

	Investment Button		investment view button	Page is in the view	
<b>Post-Condition</b>					

#### TC-11: Receive Investment

Overview					
ID	11		Name	Receive Investment	
Application	GoInvestMe – A Crowdfunding Platform		Priority	High	
Description	User are able to view any profile.				
Assumption	User has Logged in.				
Pre-Condition					
The U make an investment on Campaign					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Click on Notification button	Data Coming from Payroll System about the Investment	1) The Investment is shown	The Investment is Shown	Pass
Post-Condition					
Email is Generated for the Entrepreneur and Company					

#### TC-12: Login

Overview			
<b>ID</b>	12	<b>Name</b>	Login
<b>Application</b>	GoInvestMe - A crowdfunding platform	<b>Priority</b>	High

Description	Registration for log in to the system.				
Assumption	User has valid login details				
Pre-Condition					
User has opened login page					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Click on login button.	Fill the registration form according to the required information. (First name, Last name etc.)	1) Login successful 2) Incomplete details; try again with valid and complete data.	Logged in successfully	Pass
2	Click on login by Facebook	User must be register with Facebook	1) Login successful 2)sign up first	sign up first	fail
Post-Condition					
After login client can access the system according to system rights.					

### TC-13: Payroll System

Overview			
ID	13	Name	Payroll System
Application	GoInvestMe – A crowdfunding platform	Priority	High
Description	Payroll is used to make investment or receive payment		
Assumption	User should has account		
Pre-Condition			
User has selected campaign where investment happens			

Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Select payment method	Fill the account information according to the required information.	1) Payment sent 2) Incomplete details; try again with valid and complete data.	Payment sent successfully	Pass
<b>Post-Condition</b>					
After entering the data ,payment will be sent or receive					

#### TC-14: Run Payroll

Overview					
ID	14	Name		Run Payroll	
Application	GoInvestMe - A crowdfunding platform	Priority		medium	
Description	Bank will validate the account				
Assumption	User should be connected with the system				
Pre-Condition					
User has selected the payment method					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Select Payoneer account	Bank will validate the account information according to the required information.	1) account validated 2)record is not present in Payoneer records	account validated successfully	Pass
Post-Condition					

After validating the data ,user will get notification that account us verified

#### TC-15: Comments

Overview					
ID	15	Name		Comments	
Application	GoInvestMe - A crowdfunding platform	Priority		medium	
Description	User comments at campaign where he need information				
Assumption	User should selected campaign where he needs help				
Pre-Condition					
User has selected the campaign					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Add comments	User will comment at the campaign	1) commented successfully 2)other user did not get notification	Commented successfully	Pass
2	Edit comments	User will update comment at the campaign where he commented	1) updated commented successfully 2)did not updated	updated commented successfully	pass
3	Delete comments	User will delete comment at the campaign where he commented	1) deleted commented successfully 2)did not deleted	deleted commented successfully	pass
Post-Condition					



After validating the data ,user will get notification that comments happen

#### TC-16: Chat

Overview					
ID	16		Name	Chat	
Application	GoInvestMe - A crowdfunding platform		Priority	High	
Description	User will chat with other user				
Assumption	User should be connected with the system				
Pre-Condition					
User has selected the chatting service					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Select chat box	Message will be sent and received	1) message sent 2) message not sent due to connectivity issue	message sent successfully	Pass
Post-Condition					
After sending the message user will receive the message at other side					

#### TC-17: Change Password

ID	17	Name	Change Password
Application	GoInvestMe - A crowdfunding platform	Priority	High
Description	System related stakeholders have option to change password by following some steps.		

Assumption		Password may be forgotten			
Pre-Condition					
User has an active account					
Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1.	In case of change password enter old password	Ahmadm123456	1) Password changed 2) Retry again	Password changed	Pass
2.	In case of password lost, enter the security question.	Before five years, my nickname was oozy.	1) Answer correct u can change password. 2) Wrong answer tries another security question	Password changed	Pass
Pre-Condition					
A confirmation email will be sent to the actor who changed password					

#### TC-18: Notification Services

Overview			
ID	18	Name	Notification Services
Application	GoInvestMe - A crowdfunding platform	Priority	High
Description	User will be notified when complain / feedback happen		
Assumption	User must have legal way to do this		
Pre-Condition			
User has selected campaign where he want to complain			

Steps	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Click on feedback	User will give feedback about any campaign and notification will be sent to other user	1) notification received 2) feedback is not possible	notification received successfully	Pass
2	Click on complain	User will complain about any bug or other user and notification will be sent to admin	1) notification received 2) you can't complain is not possible	notification received successfully	Pass
<b>Post-Condition</b>					
After sending the message user will receive the message at other side					

## 4.2 : Unit Testing

Unit testing is the component of test driven development and will be done against each requirement as the requirement is implemented we make the test cases against each requirement and same with the use cases and on the basis of test data we came to conclusion that whether the requirement gives positive or negative results. It is the continuous process and will be continue until the requirement passes the test. Our main components are Log in, sign up, Change password, Notification service, add campaign, edit campaign, delete campaign, edit profile, search campaign, comments and payroll system.

## 4.3 : Integration Testing

As all the requirements in unit testing will be tested separately as a unit we will test the requirements in module as the requirements of one module will be completed we will test that module with the previously completed module and make test cases. Add the valid test data until the test case will give positive results. This will be done after unit testing. The main modules of our project are manage campaigns, manage profile, reports, manage investment and conversation.

## 4.4 : System Testing

Once all the requirements will be gathered and modelled, we will do system testing. This will done on the end when all the requirements are completely modelled us test the whole system's requirement set once, model the requirements in test cases and start testing. Enter the test data continuously until the required results will achieve. When system testing is complete then our system is ready to launch.



## Chapter 5 : Prototype

### 5.1 : Header

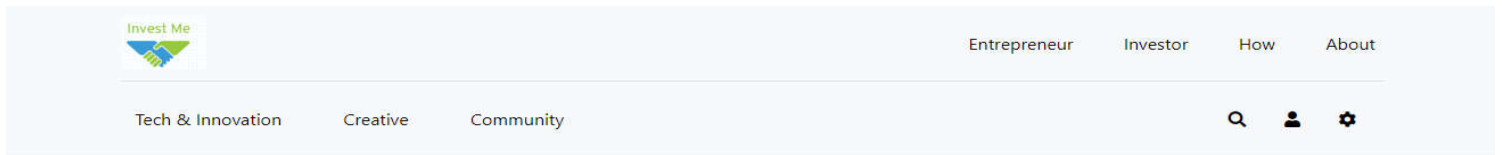


Figure 52: Header

### 5.2 : Footer

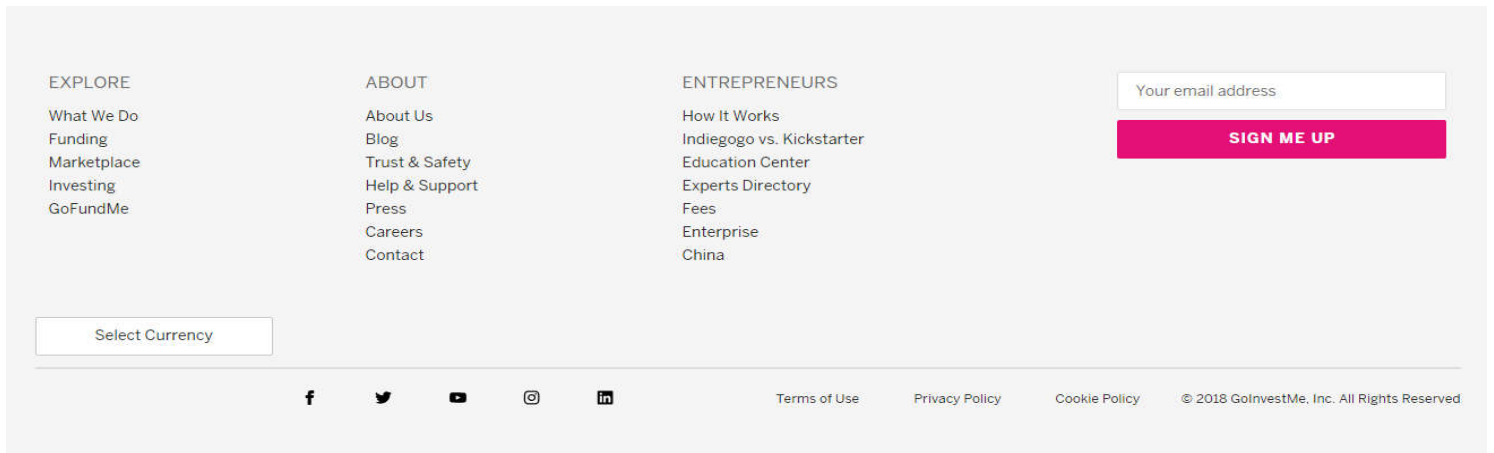


Figure 53: Footer

### 5.3 : Trending Projects

#### Trending Campaign



Figure 54: Trending Projects

## 5.4 : Search

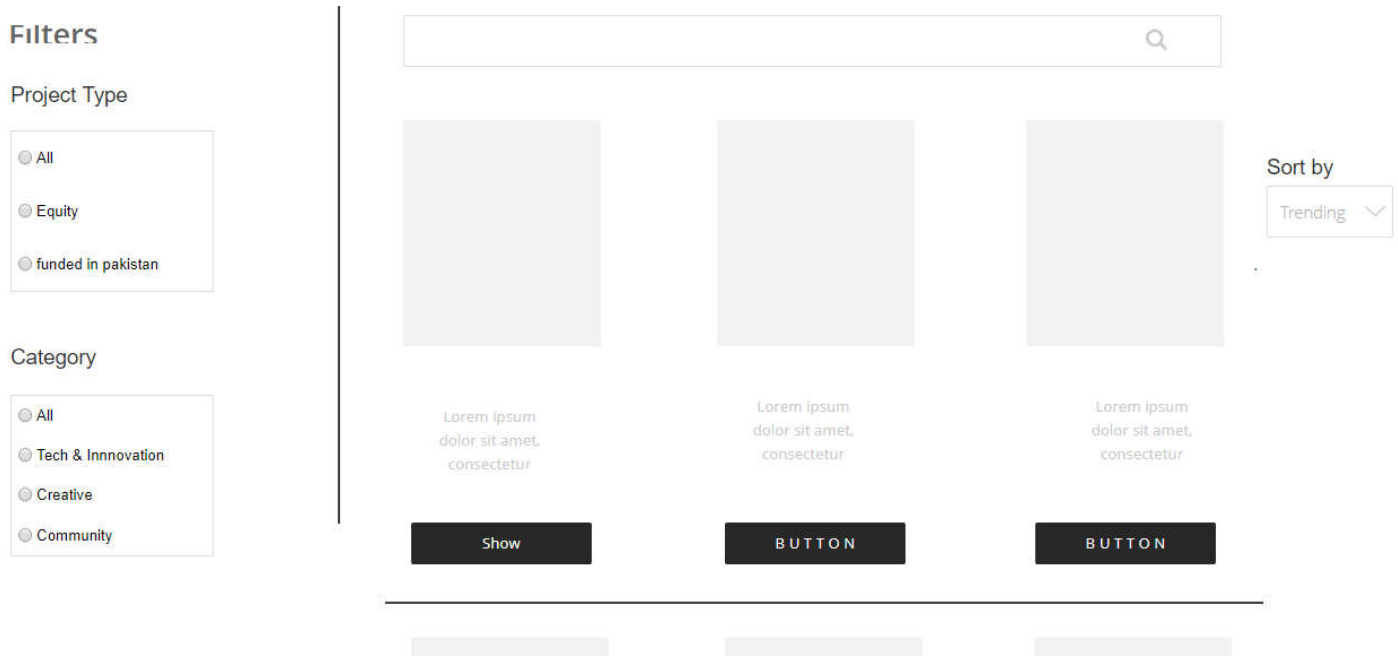


Figure 55: Search

## 5.5 : Show Campaign

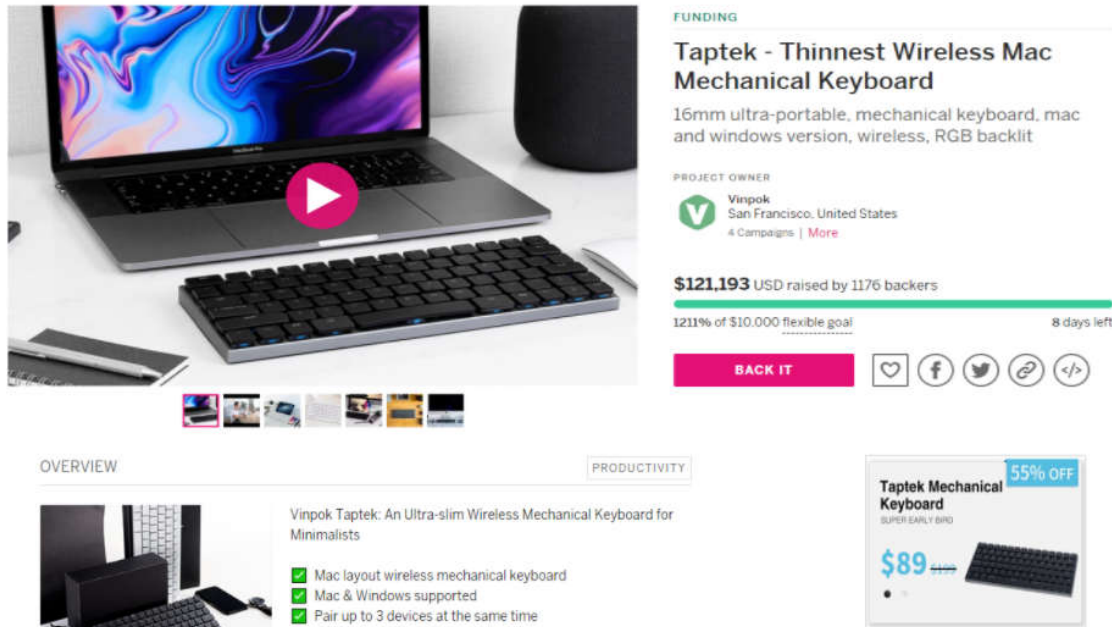


Figure 56: Show Campaign

## 5.6 : Sign Up

Tech And InnovationCreativeCommunity

Q

U

⚙

Sign Up

FIRST NAME

LAST NAME

ADDRESS

CITY

ZIP CODE

STATE

COUNTRY

EMAIL

REPEAT EMAIL

Password

Passsword

SignUp

Trending

>Lorem ipsum dolor sit amet,  
consectetur adipisicing elit.

>Lorem ipsum dolor sit amet,  
consectetur adipisicing elit.

>Lorem ipsum dolor sit amet,  
consectetur adipisicing elit.

>Lorem ipsum dolor sit amet,  
consectetur adipisicing elit.

Figure 57: Sign Up

## 5.7 : Login

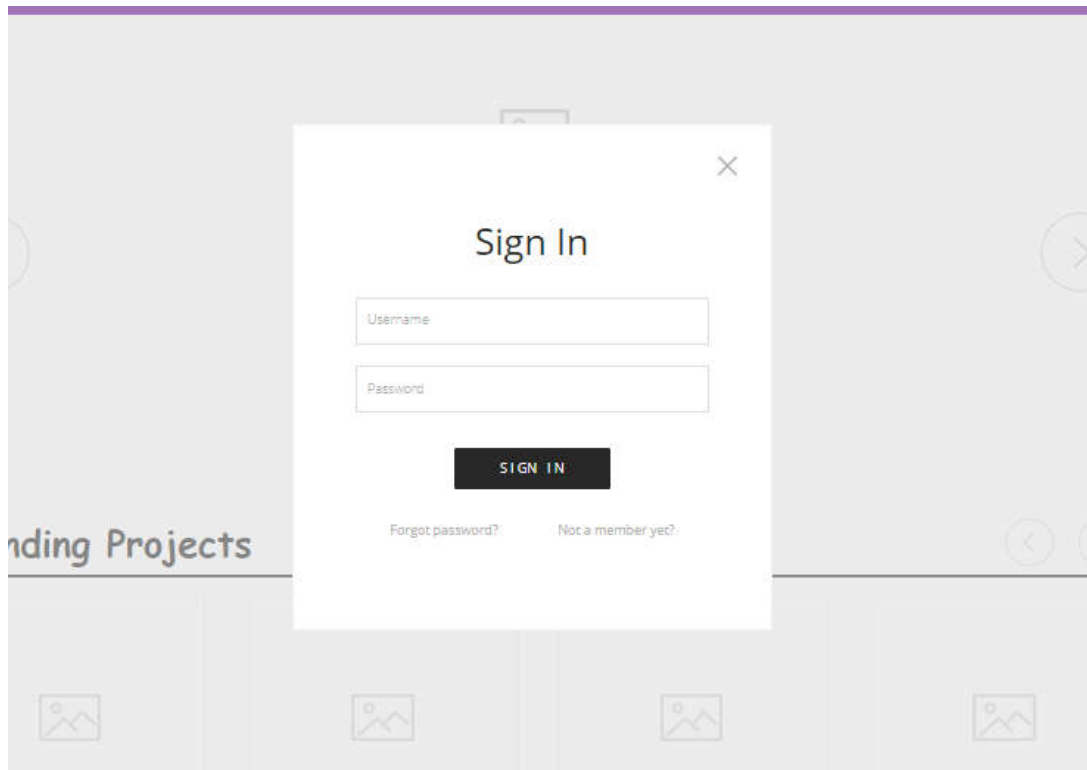


Figure 58: Login



# 5.8 : Detail for Investment

Customer information

FIRST NAME

LAST NAME

EMAIL

ADDRESS

COUNTRY

Payment details

CARD NUMBER

NAME ON CARD

CARD TYPE

VALID THROUGH

CVC CODE

BUTTON

Figure 59: Detail for Investment

## Chapter 6 : Code

### 6.1 : \_header.cshtml

```
<header class="container-fluid header bg-light">
  <nav class="navbar navbar-expand-lg">
    <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="
#navbarTogglerDemo01" aria-controls="navbarTogglerDemo01" aria-expanded="false"
aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>

    <div class="collapse navbar-collapse" id="navbarTogglerDemo01">
      <div class="container">
        <div class="row header-top">

          <a class="col-md-2" href="/">
            
          </a>

          <div class="col-md-5"></div>

          <div class="col-md-5 HeaderTopRightBtns">
            <ul>
              <li>
                <a href="#">Entrepreneur</a>
              </li>
              <li>
                <a href="#">Investor</a>
              </li>
              <li>
                <a href="#">How</a>
              </li>
              <li>
                <a href="#">About</a>
              </li>
            </ul>
          </div>
        </div>
      </div>
```

```

<hr id="hr1" />

<div class="row header-bottom">
  <div class="col-md-5 HeaderBottomLeftBtns">
    <ul>
      <li>
        <div class="dropdown">
          <button class="btn" type="button" id=
"TechInnovationButton" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
            Tech & Innovation
          </button>
          <div class="dropdown-menu" aria-labelledby="TechInnovationButton">
            <a class="dropdown-item" href="#">Action</a>
            <a class="dropdown-item" href="#">Another action</a>
            <a class="dropdown-item" href="#">Something else here</a>
          </div>
        </div>
      </li>
      <li>
        <div class="dropdown">
          <button class="btn" type="button" id="CreativeButton"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
            Creative
          </button>
          <div class="dropdown-menu" aria-labelledby="CreativeButton">
            <a class="dropdown-item" href="#">Action</a>
            <a class="dropdown-item" href="#">Another action</a>
            <a class="dropdown-item" href="#">Something else here</a>
          </div>
        </div>
      </li>
      <li>
        <div class="dropdown">
          <button class="btn" type="button" id="CommunityButton"
|data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
            Community
          </button>

```



## 6.2 : \_footer.cshtml

```
<footer>
  <div class="container">
    <div class="row ">
      <div class="col-md-4 lmt">
        
        <p>Privacy Policy | Term of Services</p>
        <div class="row copyRightIcon">
          <p>&copy; Invest me Int. Lmt.2018</p>
        </div>
      </div>
    </div>
  </div>
  <div class="container footer-top ">
    <div class="row">
      <div class="col-md-3">
        <h3>Categories</h3>
        <ul>
          <li><a href="#">Graphics Design</a></li>
          <li><a href="#">Graphics Design</a></li>
          <li><a href="#">Graphics Design</a></li>
          <li><a href="#">Graphics Design</a></li>
          <li><a href="#">Graphics Design</a></li>
        </ul>
      </div>
      <div class="col-md-3">
        <h3>About</h3>|
      </div>
      <div class="col-md-3">
        <h3>Support</h3>
      </div>
      <div class="col-md-3">
        <h3>Community</h3>
      </div>
    </div>
  </div>
  <hr />
</footer>
```

### 6.3 : \_layout.cshtml

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>@ViewBag.Title - My ASP.NET Application</title>
  @Styles.Render("~/Content/css")

</head>
<body>

  @RenderPage("Layout/_Header.cshtml")

  <div class="container body-content">

    @RenderBody()

  </div>

  @RenderPage("Layout/_Footer.cshtml");

  @Scripts.Render("~/bundles/js")
  @RenderSection("scripts", required: false)
</body>
</html>
```

## 6.4 : Index

```
@{
    ViewBag.Title = "Home Page";
}

<div class="row">
    <div id="HomeSlider" class="carousel">
        <div class="carousel-inner">
            <div class="active carousel-item">
                
            </div>
            <div class="carousel-item">
                
            </div>
            <div class="carousel-item">
                
            </div>
            <div class="carousel-item">
                
            </div>
        </div>
        <button class="carousel-control float-left" href="#HomeSlider" data-slide="prev">
            
        </button>
        <button class="carousel-control float-right" href="#HomeSlider" data-slide="next">
            
        </button>
    </div>
</div>
```

```

<div class="campaign trendingCampaign">
  <div class="row heading">
    <div class="col-md-5">
      <h1>Trending Campaign</h1>
    </div>
    <div class="col-md-5"></div>
    <div class="col-md-2 slider">
      <button class="float-left" href="#">
        
      </button>
      <button class="float-right" href="#">
        
      </button>
    </div>
  </div>
  <hr />
  <div class="content">
    <div class="card-deck row">
      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 1
        </div>
        <div class="card-body">
          Some Text of Campaign 1
        </div>
        <div class="card-footer">
          Budget of Campaign 1
        </div>
      </div>

      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 2
        </div>
        <div class="card-body">
          Some Text of Campaign 2
        </div>
        <div class="card-footer">
          Budget of Campaign 2
        </div>
      </div>

      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 3
        </div>
        <div class="card-body">
          Some Text of Campaign 3
        </div>
        <div class="card-footer">
          Budget of Campaign 3
        </div>
      </div>

      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 4
        </div>
        <div class="card-body">
          Some Text of Campaign 4
        </div>
        <div class="card-footer">
          Budget of Campaign 4
        </div>
      </div>
    </div>
  </div>
</div>

```



```

<div class="campaign newCampaign">
  <div class="row heading">
    <div class="col-md-5">
      <h1>New Campaign</h1>
    </div>
    <div class="col-md-5"></div>
    <div class="col-md-2 slider">
      <button class="float-left" href="#">
        
      </button>
      <button class="float-right" href="#">
        
      </button>
    </div>
  </div>
  <hr />
  <div class="content">
    <div class="card-deck row">
      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 1
        </div>
        <div class="card-body">
          Some Tect of Compaign 1
        </div>
        <div class="card-footer">
          Budget of Compaign 1
        </div>
      </div>
      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 2
        </div>
        <div class="card-body">
          Some Tect of Compaign 2
        </div>
        <div class="card-footer">
          Budget of Compaign 2
        </div>
      </div>
      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 3
        </div>
        <div class="card-body">
          Some Tect of Compaign 3
        </div>
        <div class="card-footer">
          Budget of Compaign 3
        </div>
      </div>
      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 4
        </div>
        <div class="card-body">
          Some Tect of Compaign 4
        </div>
        <div class="card-footer">
          Budget of Compaign 4
        </div>
      </div>
    </div>
  </div>
</div>

```

```

<div class="fourBanner">
  <div class="row">
    <div class="col-md-6 ">
      <div class="Banner1 centre">
        <h1>Top 10 Finds</h1>
      </div>
    </div>

    <div class="col-md-6 ">
      <div class="Banner2 centre">
        <h1>Invest in Companies</h1>
      </div>
    </div>
  </div>
  <div class="row">
    <div class="col-md-6 ">
      <div class="Banner3 centre">
        <h1>Funded in Pakistan</h1>
      </div>
    </div>

    <div class="col-md-6 ">
      <div class="Banner4 centre">
        <h1>Donation Based Funding</h1>
      </div>
    </div>
  </div>
</div>

<div class="fourBanner">
  <div class="row">
    <div class="col-md-6 ">
      <div class="Banner1 centre">
        <h1>Top 10 Finds</h1>
      </div>
    </div>

    <div class="col-md-6 ">
      <div class="Banner2 centre">
        <h1>Invest in Companies</h1>
      </div>
    </div>
  </div>
  <div class="row">
    <div class="col-md-6 ">
      <div class="Banner3 centre">
        <h1>Funded in Pakistan</h1>
      </div>
    </div>

    <div class="col-md-6 ">
      <div class="Banner4 centre">
        <h1>Donation Based Funding</h1>
      </div>
    </div>
  </div>
</div>

```

```

<div class="campaign sucessStories">
  <div class="row heading">
    <div class="col-md-5">
      <h1>Sucess Stories</h1>
    </div>
    <div class="col-md-5"></div>
    <div class="col-md-2 slider">
      <button class="float-left" href="#">
        
      </button>
      <button class="float-right" href="#">
        
      </button>
    </div>
  </div>
  <hr />
  <div class="content">
    <div class="card-deck row">
      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 1
        </div>
        <div class="card-body">
          Some Tect of Compaigh 1
        </div>
        <div class="card-footer">
          Budget of Compaigh 1
        </div>
      </div>

      <div class="card col-md-4">
        <div class="card-img">
          
        </div>
        <div class="card-header">
          Heading 2
        </div>
        <div class="card-body">
          Some Tect of Compaigh 2
        </div>
        <div class="card-footer">
          Budget of Compaigh 2
        </div>
      </div>
    </div>
  </div>

```

```

<div class="card col-md-4">
  <div class="card-img">
    
  </div>
  <div class="card-header">
    Heading 3
  </div>
  <div class="card-body">
    Some Text of Compaigh 3
  </div>
  <div class="card-footer">
    Budget of Compaigh 3
  </div>
</div>
<div class="card col-md-4">
  <div class="card-img">
    
  </div>
  <div class="card-header">
    Heading 4
  </div>
  <div class="card-body">
    Some Text of Compaigh 4
  </div>
  <div class="card-footer">
    Budget of Compaigh 4
  </div>
</div>
</div>
</div>
</div>

```

## 6.5 : Site.css

```
a, a:active, a:focus, a:hover select,
input:focus,
button, button:focus, button:active,
.btn.active:focus, .btn.focus,
.btn.focus:active, .btn.active.focus .nav-link:hover {
  outline: none !important;
  box-shadow: none !important;
  text-decoration: none !important;
  cursor: pointer;
  border-radius: 2px !important; }

hr {
  margin-top: 0;
  margin-bottom: 0; }

.centre {
  display: flex;
  align-items: center;
  justify-content: center; }

.navbar {
  padding: 0; }

.header-top {
  height: 75px;
  display: flex;
  align-items: center; }
.header-top > a > img {
  width: 75px; }
.header-top > hr {
  margin-top: 0;
  margin-bottom: 0; }
.header-top > .HeaderTopRightBtns > ul {
  list-style-type: none;
  margin-bottom: 0; }
.header-top > .HeaderTopRightBtns > ul > li {
  padding-left: 40px;
  display: inline-block; }
.header-top > .HeaderTopRightBtns > ul > li > a {
  color: #000000; }

#hr1 {
  margin-top: 0;
  margin-bottom: 0; }
```

```

.header-bottom {
  height: 75px;
  display: flex;
  align-items: center; }
.header-bottom > .HeaderBottomLeftBtns > ul {
  padding-left: 0px;
  list-style-type: none;
  margin-bottom: 0; }
.header-bottom > .HeaderBottomLeftBtns > ul > li {
  padding-right: 24px;
  display: inline-block; }
.header-bottom > .HeaderBottomRightBtns > button {
  background: transparent;
  border: 0;
  margin-left: 17px; }

.dropdown > button {
  background: transparent; }

.filter {
  margin-top: 20px;
  border-right: 6px solid;
  height: 100%;
  position: fixed; }

.filter h2 {
  border: 1px solid lightgray;
  border-radius: 5px;
  background-color: lightgray;
  margin-top: -9px;
  width: 100%;
  padding: 8px; }

.filter p {
  margin-left: 40px; }

.project-type, .category {
  margin-left: 40px;
  border: 1px solid lightgray;
  border-radius: 10px;
  width: 70%; }

.project-type :hover, .category :hover {
  box-shadow: 6px 6px 10px grey; }

.project-type form input, .category form input {
  margin-left: 20px;
  margin-bottom: 10px; }

.filter h4 {
  margin-top: 35px; }

.seachr1 {
  width: 115%;
  margin-top: 15px;
  margin-left: 15px; }

.category-card {
  margin-top: -320px;
  margin-left: 30px; }

.category-card :hover, .category-card1 :hover {
  box-shadow: 6px 6px 10px grey;
  margin-left: 5px; }

.category-card a, .category-card1 a {
  margin-left: 50px; }

.card-img {
  width: 200px;
  height: 200px; }

.category-card p, .category-card1 p {
  text-align: center; }

.category-card1 {
  margin-left: 30px; }

.showMore {
  margin-top: 60px;
  margin-left: 44%;
  width: 300px;
  margin-bottom: 20%; }

```

```

#HomeSlider > .carousel-inner > .carousel-item > .d-block {
  height: 500px;
  width: 1120px; }

#HomeSlider > .carousel-control {
  background: transparent;
  border: 0;
  margin-top: -250px;
  position: relative; }

.compaaign > .heading > .slider {
  display: flex;
  align-items: center; }
.compaaign > .heading > .slider > button {
  background: transparent;
  border: 0; }
.compaaign > .heading > .slider > button > img {
  height: 40px; }

.compaaign > .content > .card-deck > .card {
  padding: 0;
  margin-top: 15px;
  margin-bottom: 30px; }
.compaaign > .content > .card-deck > .card > .card-img > img {
  width: 200px; }

.Banner1, .Banner2, .Banner3, .Banner4 {
  height: 250px;
  background: #eeeef2;
  margin-top: 7.5px;
  margin-bottom: 7.5px; }

.categories > .content > .card-deck > .card {
  padding: 0;
  margin-top: 15px;
  margin-bottom: 30px; }
.categories > .content > .card-deck > .card > .card-img > img {
  width: 200px; }

.funds {
  background-color: #f4f4f4; }
|

```

## **Chapter 7 : Conclusion**

To work in new domain cannot much straight forward, many problems faced while working on the project and learnt lessons.

### **7.1 : Problems**

- As this project was not of our domain, so we faced many problems while gathering data of this domain.
- Requirements were not precise and clear and were mostly changing with time.
- Scope changes due to requirement changing.
- We choose the frameworks that we did not study in our degree so we have to study it.
- Difficult to work with modern tools, as we have no experience before.
- This project was risk oriented because investment so was difficult to solve this.
- Main problem was to validate the account information from bank that was confidential for bank.

### **7.2 : Lessons Learnt**

We learnt

- How to work professionally.
- How to tackle changing requirements
- How risks are countered.
- How to work with new technology.
- How to work for other domains
- Also, learn the modern tools and techniques how to use them.
- How to fulfil stakeholder needs.
- How to standardize methods, processes, tools and techniques?
- How to connect with other APIs.

### **7.3 : Project Summary**

This Platform is designed for people who wants invest and get investment for their projects. It is place where entrepreneurs add their campaign and wait for investment. It is also give benefits to investor because they can increase their business scope. It saves a lot of time and effort of the people who to starts their own business but they have no investment they can get benefits from this platform. Data for the project collected by entrepreneur who fails in their ideas due to no more investment and by investors. Different website who are already working on some relative idea and we designed a project which compensated for the functionalities they all lacked while fulfilling all the other requirements of entrepreneur and investors. Moreover, give opportunity to companies invest money, add their campaign, and collect investment for their project. Keeping in view the advancement in web development, automation and upcoming web structure (WEB 3.0) all of the work is done by making and merging different ontologies with functionalities that will keep the user interacted with our project.

### **7.4 : Future Work**

The future work that we plan to be done in this domain is as follow:



#### **7.4.1 : Translation**

We can translate our Platform into Multiple Language like Chinese, Korean, and Japanese because in some countries like China or Japan they prefer to use their Language instead of English. So our Platform is translated into their language they can also avail the services of our Platform in their Language.

Example, there are more than 250 Wikipedia Based on Language differences

#### **7.4.2 : Artificial Intelligence**

We can add Artificial Intelligence so that the Campaign is analyzed before any investment happen and the entrepreneur have idea how much investment he can receive.

#### **7.4.3 : SSL Certification**

We can get SSL Certificate for our platform, which inform our user that this platform is Safe to Use.

#### **7.4.4 : Copyrights**

We can get Copyrights by an accreditation body so that no one can copy our work without our Permission.

## Chapter 8 : References

- [1] Brewer and Anthony, "Richard Cantillon: Pioneer of Economic Theory. Routledge," 1992.
- [2] W. S. Jevons, "Richard Cantillon and the Nationality of Political Economy," 1881.
- [3] R. Afschar, "Entry regulation and entrepreneurship: a natural experiment in German craftsmanship," 2013.
- [4] "Crowdfunding," 2018. [Online]. Available: <https://www.investopedia.com/terms/c/crowdfunding.asp>.
- [5] B. Feldman, "Why would a company choose to use an SQL server Over open-source databases," 27 October 2014. [Online].
- [6] "Pledge Music Reviews - Legit or Scam?," 2017. [Online]. Available: <https://www.reviewopedia.com/pledge-music-reviews>.
- [7] "Indiegogo Review," 2018. [Online]. Available: <https://www.merchantmaverick.com/reviews/indiegogo-review/>.
- [8] "Kickstarter Review," 2018. [Online]. Available: <https://www.merchantmaverick.com/reviews/kickstarter-review/>.
- [9] "kickstarter Review," 2018. [Online]. Available: <https://www.trustpilot.com/review/www.kickstarter.com>.
- [10] Kalyan1052, "Advantages of asp.net over php," 22 June 2011. [Online].
- [12] T. G. Flouris and D. Lock, in *Managing Aviation Projects from Concept to Completion*. Ashgate Publishing Limited, 2012.
- [13] "Uml Sequence," 2018. [Online]. Available: <https://www.lucidchart.com/pages/uml-sequence-diagram>.
- [14] R. Fulton and R. Vandermolten, "Chapter 4: Requirements - Writing Requirements," in *Airborne Electronic Hardware Design Assurance: A Practitioner's Guide to RTCA/DO-254.*, CRC Press, 2017, p. 89–93.
- [15] L. Chen, M. Ali Babar and B. Nuseibeh, "Characterizing Architecturally Significant Requirements," p. 38–45, 2013.

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