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# **Web-Based Investment Finding System For Entrepreneurs**

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## Abstract

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Our country is an under developing country. People in our country are engaged in different occupations to change their destiny. Many people are working and many are trying to set up their businesses. In our country, it is difficult to find success in both areas. In this case, there are a variety of factors which include lack of social identity, lack of competence or lack of money. In our website, we are specifically working with those who want to establish their status as entrepreneurs. Many entrepreneurs have the special abilities to build a business but with little investment and lack of money, it does not happen. Many traders are unable to expand their business due to a lack of money. There are many private investors and investment companies in our country who are looking to provide financial support to such entrepreneurs. We are trying to provide services to such entrepreneurs and investors through our website. When an entrepreneur needs financial assistance, he can apply for financial assistance to various investors using our website. In the same way, different investors will be able to provide financial support to various venture entrepreneurs through our website.

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# **Chapter 1**

## **Introduction**

The following chapter describes about our project in briefly. The chapter starts with a project overview, which gives a basic outline of the project.

### **1.1 Project Overview**

Entrepreneurship is a business process for designing, launching and running a new business.

There are lots of people in our country who have many good ideas to start a new business but somehow they do not become succeeded because of a lack of opportunity and money. Besides, investment is associated with entrepreneurship. There are lots of personal investors who are looking forward to investing in some projects to increase money. But for lack of source they can not do that. Therefore, we are putting effort to implements a web based platform for both entrepreneurs and investors to solve their issues with proper solutions.

### **1.2 Motivation**

In our country, it is difficult to manage a loan from the bank as a new entrepreneur. As a new entrepreneur, he/she can not ask for a loan to someone for lack of reliable sources. There will be so much trust issues that any investor does not want to give his/her money to a new business.

On the other side, personal investors and investment companies are looking for investing in their projects with helpful ideas. Before investing in their project, investors and investment companies always require a piece of reliable information about the business. But there is no such a platform where he can get all the information. There is less number of investment relevant platforms for investors in our country. And also many people do not know how to start and manage a business. Due to a lack of adequate business education and guidance, they fail to establish their business. So basically we are interested to make a website in our country that can help both of them with the following issues.

## 1.3 Objectives

In this project, our main objective is putting effort to create a website with different services for both entrepreneurs and investors to solve their issues. It will have these features:

- (a) Entrepreneurs and investors will be able to create their own profile.
- (b) Entrepreneurs can apply for investment.
- (c) Investors can search entrepreneurs for investing.
- (d) Through this website, entrepreneurs and investors will find reliable information about each other.
- (e) The user can chat directly with the website authority or advisor for any important information or advice.
- (f) If an entrepreneur wants to meet investors or an investor wants to meet them, the website authority will arrange a meeting for them.
- (g) Website authority will ensure the security of every user's information.
- (h) Through this website, an entrepreneur and an investor can easily solve the various problems between them.

We will create a website for both entrepreneurs and investors. Using our website new entrepreneurs can get facilities to set up their business. Both entrepreneurs and investors can get to know each other with authentic information. If both entrepreneurs and investors want then they can meet with each other with the help of website authority. The website authority will arrange each formality to make the session successful. we will provide counsel for investors and entrepreneurs in online or offline. We will also provide different law services through our website.

## 1.4 Organization of the Report

The material presented in this project report is divided into five chapters.

- **Chapter 1** describes the introduction, purpose of our project, discuss the problem, set the target and summary.
- **Chapter 2** contains some related works and benchmark analysis of our project and comparison of the features.
- **Chapter 3** discusses architecture design and description.
- **Chapter 4** Standards and impact are discussed in this chapter.
- **Chapter 5** Concludes the whole project in a nutshell.

## 1.5 Summary

In the first chapter, we have discussed the idea of the project in the “Project Overview” section. The motivation section discusses the reasons why we are interested in creating the website. Also discussed in the “Objectives of the Project” and “Methodology” section about what services we are going to provide through our website and what steps we have taken to create this website respectively.

# **Chapter 2**

## **Background**

In this chapter, we will give a short description about the rate of the art technique. Literature review and benchmark analysis are the most important part to start and establish the context of the research that can help us in our project.

### **2.1 Preliminaries**

Developing a consultant and secure website for making handshakes and building trust between investors and startup companies. It gives services like finding funds and investors for startup companies and making a contract between them. Use facebook Digital marketing API's (marketing API) for promoting companies and investors. Secure Money exchange system like bKash, OFX, pioneer payment gateway for transferring money implemented on this website. Keep tracking of contracts between inventors and companies for building a secure and trustworthy platform for a better and oriented service. For example, Gust where they build a platform for making trust and handshake between investors and companies.

### **2.2 Literature Review**

We have searched found some related papers for our project. There are some related works that we found -

Sudek et al [1] show that external financing needed to run a startup business. External financing is considered as seed capital. Those who invest in the capital often are rich people. Investors are called angels. A group of Southern California returning investors has studied the benefits of investing. This study consists of two stages in the experiment. There has been little research on how angel investors select their investments.

Marija et al [2] show that investors set specific criteria when they invest their money, which is called investment criteria. Entrepreneurs need to know the rules and conditions of these criteria to coordinate their business plans. Researchers around the world have tried to identify investors criteria. After many studies, it has not been found any meaning-

ful answer. The purpose of this research article was to better understand investors criteria for facilitating investments.

Xanthopoulos et al [3] show that native mobile apps are good for a particular platform. But it becomes difficult to develop separate applications for each platform. This problem can be overcome by developing cross-platform mobile applications. The main purpose of this research paper is to develop cross-platform mobile applications.

Blejer et al [4] show how entrepreneurs signal the quality of content they write to investors, and how signals are embedded in gender by investors. The findings indicate that gender influence how entrepreneurs signal venture quality and legitimacy, and how the receiver interprets these signals. The results show that gender is not only as a distinction between male and female entrepreneurs but more importantly, in the interaction between entrepreneurs and investors where the type of venture, human and social capital, investor and partner relationships, etc. are constructed as gender roles.

Pengnate et al [5] show that draws on both interview and survey data to analyze whether it is always "no" to investment opportunities. There is enough research on the investment criteria of business angels to pay relatively little attention because of rejection. This paper shows that the main reason for rejecting investment opportunities is the entrepreneur/team if they are not open and straightforward, trustworthy, credible and honest, if they are not knowledgeable and if they are considered unrealistic about valuation and equity shares.

Gry Agneta Alsos et al [6] shows an investigation of how local credibility influences the investment decisions of foreign high-tech companies. It shows that local credibility is an important factor in the investment position of foreign companies, the type of ownership and the choice of investment in research and development.

Blejer et al [7] show that private investment is very important for the development of a developing country. It plays a positive role in the external and internal sectors of a country. Government capital and private investment can have a negative or positive effect on each other. The use of private investment has been studied extensively in industrialized countries, however, no evidence was found in developing countries.

Ang et al [8] shows examine investment-based crowdfunding from a buy-side perspective and investor standpoint based on a new and rich database that includes investment- and investor-level information. The results provide evidence of the semiotic behavior of non-specialist individuals. Investments are chosen by investors, depending on their risk preferences.

Alschner et al [9] show the purpose of this research paper was to examine the behavior of website users when they generally acquire financial and investment knowledge. This research paper was divided into two parts. This research was for those users who were interested in finding more detailed information about credit refinancing. The expected results are designed to benefit the customer.

Pengnate et al,[10] show that trust plays an important role in online business. Establishing this is a big challenge for traders especially for those who are new. How online vendors affect consumers' confidence in them has been investigated. How unfamiliar websites gain

customer trust has been discussed. The ease of use is contributing to online confidence among both men and women.

### 2.2.1 Comparison between literature review and our project

| Author, Year                      | Contributions   | Difference Without Contribution   |
|-----------------------------------|---|---|
| Sudek et al, 2016. [1]            | The capital requirements and investor proper investment are discussed.  | We will implement how an investor can easily invest in an entrepreneur on our website.                      |
| Marija et al, 2015. [2]           | Determine the correct and acceptable criteria for a safe investment.    | Entrepreneurs create profiles with credible information so it is safe for investors to invest.              |
| Xanthopoulos et al, 2013. [3]     | Developing cross-platform mobile apps.                                  | Our topic is cross platform related we are developing websites in place of mobile apps.                     |
| Gry Agneta Alsos et al, 2017. [4] | Gender issues in investment and entrepreneur-investor relationships.    | We will guarantee that no gender discrimination will be available for access to the service on our website. |
| Mason et al, 2016 .[5]            | Reasons of rejecting investment opportunities.                          | Our website will provide information on various types of entrepreneurs and investors.                       |
| Ang et al, 2015. [6]              | Role of trustworthiness in corporate decisions.                         | Website authorities will ensure that every information is credible to entrepreneurs and investors.          |
| Blejer et al, 2016. [7]           | Impact of private investment in a developing country                    | If an individual wants to invest in an entrepreneur personally, he can give it through our website          |
| Fabrice et al, 2016.[8]           | Investment-based crowdfunding is influenced by gender differences.      | There will be no gender differences on our website.   |
| Ubonsan et al, 2019.[9]           | Determining the behavior of website users and provides expected results | Our website's features will be arranged according to the user's investment related exptation.               |
| Pengnate et al, 2017.[10]         | Establishing trust in online business                                   | We will reliably give every information and service on our website.   |

Table 2.1: Comparison between literature review and our project

## 2.3 Benchmark Analysis

We have also searched for some related websites for our project. There are some related works that we found -

Gust [11] is a website where different types of services are provided to new entrepreneurs. This website was established in 2004. This website can do everything from how a new entrepreneur can establish a company or how to get his startup successful and how he can get loan for his startup. At the beginning of the website, a user has to register through sign up and create his profile for investors by filing different information so that he can lend him based on his profile's information.

Onevest [12] is a website where entrepreneurs receive loans from various types of investors to promote their business. This website company was founded in 2011 with its headquarters in New York City. Through this website, an entrepreneur can get a loan as well as get any co-founder needed for his business. An entrepreneur will be able to form a good team for his business, as well as consult with an advisor for various business issues.

AngelList [13] is a platform for investors and workers for new companies that looking for settlement and starting. It was founded in 2010. AngelList aims to democrat investment process and buildup support for new companies according to their ideas. It works as funding seeder for startup companies. It makes cost free for new investors.

Crunchbase [14] is a plan of action for obtaining figures of investments and capital information, members and leadership positions founded in 2007. To track startup and find out websites for Crunchbase policy that contains public and private companies information.

Prosper [15] is a website where one can invest as well as can get investment. This website company was founded in California in 2005. This website verifies each user's identity and personal data before making a loan. The website provides for all types of data analysis of the market. As a result, a user can easily be aware of different market conditions. Entrepreneurs can get low interest rates loan through this website.

Betterment [16] is a networked based investment company founded in 2008. It is registered with the Securities and Exchange Commission and FINRA. They have a domain name Betterment.com. It's mainly an automated platform named as Robo-advisor. Tax advantaged, Tax tracking, fixed index-tracking quality, and ETFs is the main goal of this platform.

### 2.3.1 Comparison of features

| Features                                      | Gust | Onevast | AngelList | Crunchbase | Prosper | Betterment | our website |
|---|------|---------|-----------|------------|---------|------------|-------------|
| Entrepreneur's and Investor's Company Profile | √    | √       | √         | √          | √       | √          | √           |
| Personal Investment                           | X    | √       | X         | X          | √       | √          | √           |
| Company Investment                            | √    | √       | √         | √          | √       | √          | √           |
| Personal Business                             | √    | X       | X         | X          | X       | √          | √           |
| Business under Company                        | √    | √       | √         | √          | √       | √          | √           |
| Innovative Idea Submission                    | X    | X       | X         | X          | X       | X          | √           |
| Counseling With Website Authority             | √    | √       | √         | √          | √       | √          | √           |
| Meeting Arrange                               | X    | X       | X         | X          | X       | X          | √           |
| Company's Progressiveness Verification        | √    | √       | √         | √          | √       | √          | √           |
| Payment                                       | √    | √       | √         | √          | √       | √          | √           |
| Find An Advisor                               | √    | √       | √         | √          | √       | √          | √           |
| Post Different Things In Profile              | X    | X       | X         | X          | X       | X          | √           |

Table 2.2: Benchmark Analysis

## 2.4 Summary

One of the steps in creating a full-fledged project is to review the literature and benchmark analysis of corresponding projects. In chapter-2 We first reviewed some of the literature on our project's ideas. Then analyzed some of the websites related to our project's ideas.

# Chapter 3

## Project Design

In this chapter, we are trying to give a brief description of our project design which is needed for the designing.

### 3.1 Project Methodology

The first step of any project is to find the goal and to find all the possible ways to achieve it. After choosing this topic we had a meeting with our mentor he suggested us to read some papers and benchmark analysis to gather information about this topic. So we read some papers, journals to collect the necessary information and also benchmark analysis of our project. Then from those pieces of information, we have selected some of our features. After that, we sorted some feature which can be useful for our project. Then we compared the feature. From that, we selected the feature we need to implement the features. After that, we started to implement our project.

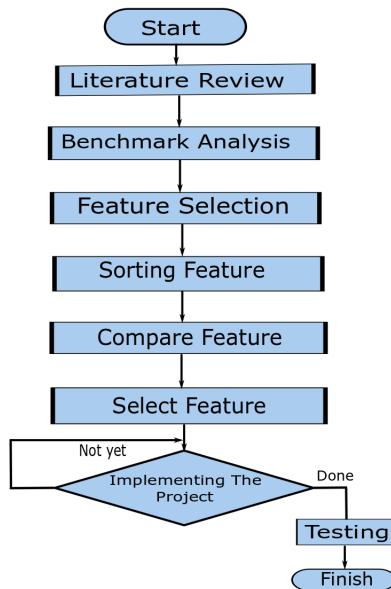


Figure 3.1: Methodology for the project.

### 3.1.1 Overview

Our country is an under developing country. There are many new entrepreneurs in this country who are not able to implement their ideas due to lack of opportunities. There are also many private investors who are not able to invest their money well in those ideas. And all this is due to the lack of a proper medium that there is no platform in our country where an entrepreneur can find an investor or an investor can find an entrepreneur.

### 3.1.2 Purpose

Our goal is to create a website where an investor can find an entrepreneur and an entrepreneur can find an investor. By using this website, an investor and an entrepreneur will be able to exchange investments between them. In addition, users will always be aware of each other's investment information.

### 3.1.3 Scope Of Phase Released

#### 1. Scope :

- (a) Functionality Matrix Priorities.
- (b) Critical Success Factor.

#### 2. Phase :

- (a) Setting up a team.
- (b) Defining project goal.
- (c) Assessing the current situation.
- (d) Assessing risk.
- (e) Define project structure.
- (f) Developing the solution concept.
- (g) Testing.

### 3.1.4 Goals

Our main aim is to develop a website for our country that can help both entrepreneurs and investors to give money to a new business. Earlier we studied different e-commerce platforms such as AngelList, Onevast, CrunchBase. We found Gust very helpful because it has ready-made features and existing resources and tutorials. We have fulfilled the requirements, those we have stated in our project objectives. In our project, the user specially the entrepreneurs have to submit their necessary documents through our web application. From an admin perspective, the admin has to check the validity of those documents manually, which means our system is not connected or integrated with another system. It can be a lengthy process sometimes for the admin to check those documents

manually. On the other hand, server-based processing can limit the scope of interactive user experience.

### 3.1.5 Users

1. **Stakeholder** : Any person or company with a bet in a business.
2. **Entrepreneurs** : A person who plans a new idea for doing business or something valuable and take risk .
3. **Investors** : A person who allocates funds for gaining profit from a project or business.

### 3.1.6 Risks

1. **Cost Risk** : Due to poor cost estimation and unable to see the bigger picture.
2. **Schedule Risk** : Activities that takes long time as usual.
3. **Performance Risk** : If the specifications are not correct ,then performance risk will come into play.
4. **Operational Risk** : Results from poor implementation and process problems.
5. **Market Risk** : Extreme competition , foreign exchange.
6. **Legal Risk** : Arise from legal and regulatory obligations.

### 3.1.7 Assumptions

Developing a consultant and secure website for making handshakes and building trust between investors and startup companies. It gives services like finding funds and investors for startup companies and making a contract between them. Use facebook Digital marketing API's (marketing API) for promoting companies and investors. Secure Money exchange system like bKash, OFX, pioneer payment gateway for transferring money implemented on this website. Keep tracking of contracts between inventors and companies for building a secure and trustworthy platform for a better and oriented service. For example, Gust where they build a platform for making trust and handshake between investors and Companies.

## 3.2 System Architecture Design and Description

This part is describing the working process of the project. The diagram below shows the workflow of the project.

### 3.2.1 Website Home page

Initially, a user can see the web site home page where he/she can get started as an entrepreneur/businessman or get started as an investor. On the home page, there will be three key features he/she will find. They are -

- Sign up
- Log in
- About
- Services
- Investor
- Ideas
- Contact

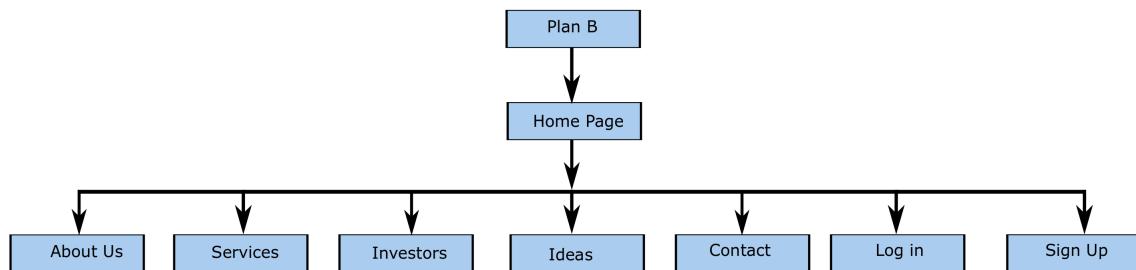


Figure 3.2: Website Home Page

Now we describe these features.

1. **Sign Up:** To do sign up, an user needs to submit following informations.

- (a) Name
- (b) Email
- (c) Password
- (d) User category
  - Entrepreneur
  - Investor
- (e) Introduce yourself
- (f) Invest sector

After giving this basic information, user will get access to using the features of the website.

2. **Log In:** To log in, the user needs to give his email id and password. After doing login, he will find the home page.
3. **About:** This section gives a brief overview of our project. Here is a brief overview of who we are serving and what kind of problems we are trying to solve for them through the services. Overall user can get to know short details about the website.
4. **Services:** In this section we will be given services that we are going to provide through our website.
5. **Investors:** This section will show profiles of some investors. From there user will be able to access those profiles and check different types of informations.
6. **Ideas:** Here will be shown different types of project ideas which user can check.
7. **Contact:** If user think of “Plane B” as a company, the contact information of this company can be found in this section.

### 3.2.2 Entrepreneur

An entrepreneur's home page, there will be some sub features users will find. They are -

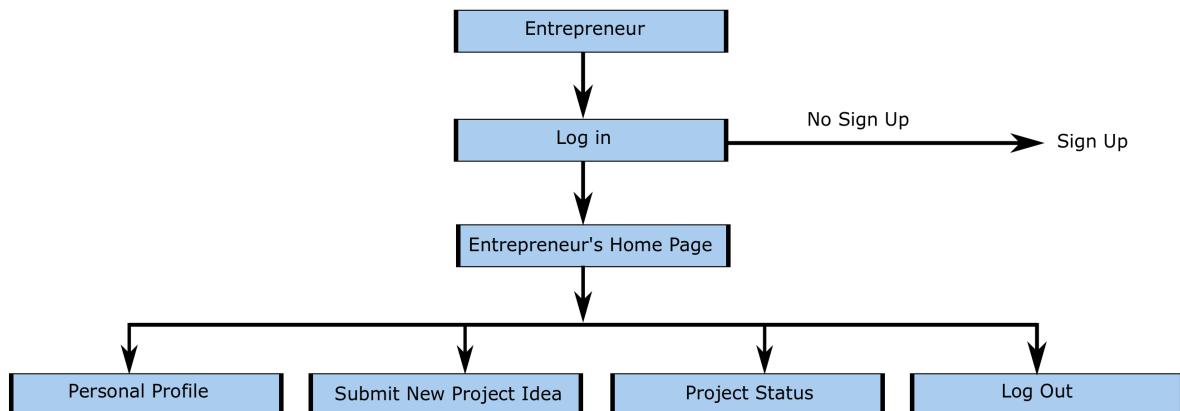


Figure 3.3: Entrepreneur's Home Page

- Personal Profile
  - (a) Profile
  - (b) News Feed
  - (c) Connected people
  - (d) Video Call
- Submit new project idea
- Project status
- Log out

Now we describe these features.

1. **Personal Profile:** The Personal Profile section is divided into four sections.
2. **Profile:** This section will provide different types of personal information about user and if he wants then he can update those later. This information is included with profile photo, short description of user which is called “BIOGRAPHY”, contact information and other things.
3. **News Feed:** In the News feed section, users can view other users profiles and can check their information by visiting their profile.
4. **Connected People:** Profiles of other users with whom user have interacted with can be seen in this section.
5. **Video Call:** IN this section, if the user wants, he can talk to the investors through video call.

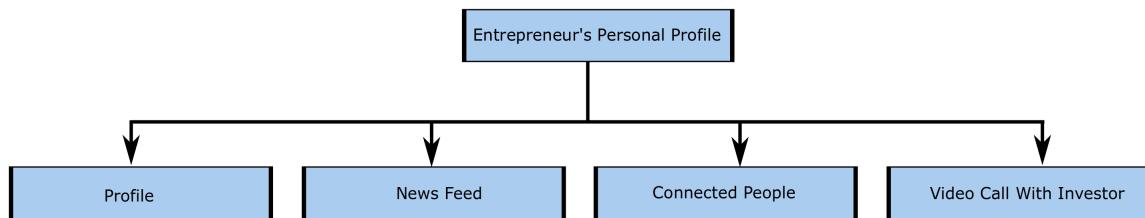


Figure 3.4: Entrepreneur’s Personal Profile

- (a) **Profile Photo:** User can upload his idea related company profile photo.
- (b) **Cover Photo:** User can upload his idea related company cover photo.
- (c) **Level:** Here it will be possible to see at what level the user’s idea or company is in the market.
- (d) **Location:** If there any location user has then he has to give it here.
- (e) **Currency:** In which currency user wants to get investment it has to be given here.
- (f) **Date of Foundation:** If there any date of foundation of the company then user needs to give it here.
- (g) **Employee:** If the user has a company, then the number of employees in that company should be given here. Or if the user is a new entrepreneur then he has to give an idea of how many employees with he will start his business.
- (h) **Website Address:** If the user has a website address, his link can be given here.
- (i) **Co-Founder:** If the user has a working partner or someone who wants to work with him, his or her name should be given here.

- (j) **Summary:** A brief description of the user's new idea or project should be given in this section.
- (k) **Presentation File:** If the user has created a presentation related to his idea or project, he can upload it here.
- (l) **IPR:** If there is any document related to intellectual property, the user can upload it here.
- (m) **Agreement:** If the user has documents related to any kind of agreement with another company or someone else, he can upload them here.
- (n) **Business Future Plan:** In this section the user can give a brief description of where he wants to take his current idea or project to the next level.

**6. Project Status:** After providing all the information in the "Submit New Project Ideas" section, all this information will go directly to the admin panel. The admin panel will check and sort all the information and see the informations are authentic or not. If all the informations are credible then admin panel will approved the project idea. Then in the "PROJECT STATUS" section will be updated. User can see in which level his project placed in like LOW ,MEDIUM or HIGH level.

### 3.2.3 Investor

In investor's home page, there will be four features he/she will find. They are

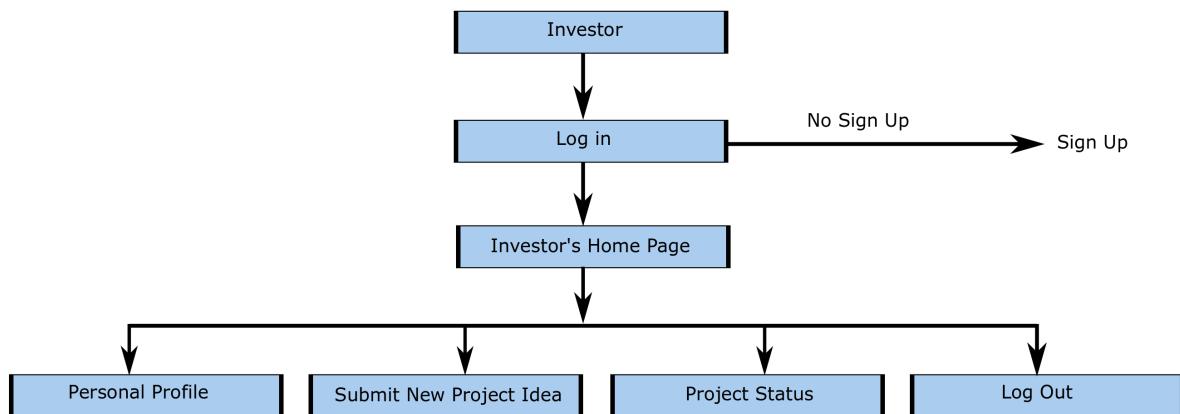


Figure 3.5: Investors's Home Page

- Personal Profile
  - (a) Profile
  - (b) News Feed
  - (c) Connected people
  - (d) Video Call

- Submit new project idea
- Project status
- Log out

Now we describe these features.

1. **Personal Profile:** The Personal Profile section is divided into four sections.
2. **Profile:** This section will provide different types of personal information about user and if he wants then he can update those later. This information is included with profile photo, short description of user which is called “BIOGRAPHY”, contact information and other things.
3. **News Feed:** In the News feed section, users can view other users profiles and can check their information by visiting their profile.
4. **Connected People:** Profiles of other users with whom user have interacted with can be seen in this section.
5. **Video Call:** In this section, if the user wants, he can talk to the entrepreneurs through video call.

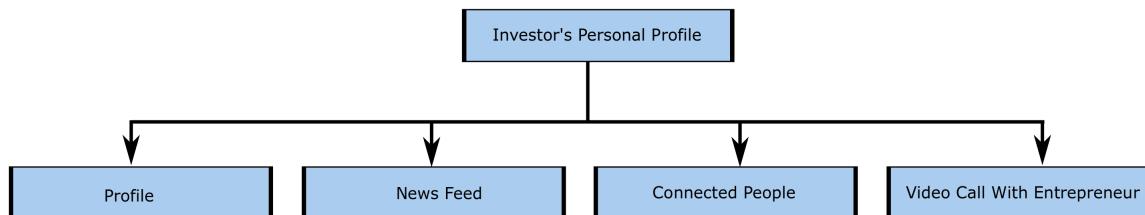


Figure 3.6: Investor's Personal Profile

- (a) **Profile Photo:** User can upload his idea related company profile photo.
- (b) **Cover Photo:** User can upload his idea related company cover photo.
- (c) **Level:** Here it will be possible to see at what level the user's idea or company is in the market.
- (d) **Location:** If there any location user has then he has to give it here.
- (e) **Currency:** In which currency user wants to give investment it has to be given here.
- (f) **Date of Foundation:** If there any date of foundation of the company then user needs to give it here.
- (g) **Employee:** If the user has a company, then the number of employees in that company should be given here. Or if the investor wants to mention number of employees on whom he will invest he can give it here.

- (h) **Website Address:** If the user has a website address, that link can be given here.
- (i) **Co-Founder:** If the user has a working partner or someone who wants to work with him, his or her name should be given here.
- (j) **Summary:** A brief description of the user's new idea or project should be given in this section.
- (k) **Presentation File:** If the user has created a presentation related to his idea or project, he can upload it here.
- (l) **IPR:** If there is any document related to intellectual property, the user can upload it here.
- (m) **Agreement:** If the user has documents related to any kind of agreement with another company or someone else, he can upload them here.
- (n) **Business Future Plan:** In this section the user can give a brief description of where he wants to take his current idea or project to the next level.

6. **Project Status:** After providing all the information in the "Submit New Project Ideas" section, all this information will go directly to the admin panel. The admin panel will check and sort all the information and see the informations are authentic or not. If all the informations are credible then admin panel will approved the project idea. Then in the "PROJECT STATUS" section will be updated. User can see in which level his project placed in like LOW ,MEDIUM or HIGH level.

### 3.3 Summary

System Architecture Design is one of the most important parts of a project that provides a special idea about the project's features. In this section, we have highlighted the various features and sub-features of our website through system architecture design.

## Chapter 4

# Implementation and Results

In this chapter, we have provided short description of “Environment setup”, “Evaluation” and “Result and Discussion”

### 4.1 Environment Setup

1. **XAMPP:** XAMPP is one bundle of a web server application, database and scripting language. XAMPP is an abbreviation where X stands for Cross Platform, A stands for Apache, M stands for MariaDB PHP Perl. XAMPP is a software distribution which provides the Apache web server, MySQL database (actually MariaDB), Php and Perl all in one package .Since Word-Press is not a stand-alone application, XAMPP provides two essential components for its installation – Apache, which is used to create the local server, and MySQL which we can use as a database for our website.
2. **Installation of XAMPP:** Steps to download and installation of xampp are given below
  - (a) Opening of Apache Friends website.
  - (b) we choose XAMPP for Windows for our desktop.
  - (c) After download we clicked the downloaded file to launch installer
  - (d) Then we clicked ok and next option.
  - (e) We installed MySQL, phpMyAdmin, PHP, Apache and more.
  - (f) Then we save it in our desktop folder
  - (g) After that we cleared bitnami option for xampp.
  - (h) Then we clicked access option for allowing the app through the firewall
  - (i) After we clicked finish option.
  - (j) Then we chosen our language and clicked FINISH option.

3. **Running of XAMPP :** To run XAMPP go to the location where we installed XAMPP (usually C:) or search and type XAMPP control panel and double click on XAMPP Control Panel. Then click on Start buttons next to Apache and MySQL for starting them on XAMPP control panel. Sometimes a user may experience that even after clicking Start button several times, Apache is not starting. This is because some other service like Skype is running on port 80 where the required port for Apache is 80 by default. To solve this issue exit those application and restart XAMPP.
4. **MySQL :** My SQL is a open- database management system which uses Structured Query Language. MySQL is for the purpose of a web database. SQL is for adding, accessing and managing written content in a database. MySQL is the MySQL specialized host.
5. **APACHE :** Apache official name Apache HTTP Server is an open source, free and most widely used web server software that powers about 40
6. **Composer:** Composer is a tool which is manages dependency in PHP. It helps to write the libraries of a project and manages them. It management system is like packages which help a user in his PHP projects. The project pretty much depend on these packages. We use Composer for the declaration of our packages and package versions. It has auto-load capabilities for libraries which helped to specify auto-load information for easing usage of third-party code.
7. **NGNIX :** NGNIX was originally created by Igor Sysoev, it was first published in October 2004. NGNIX is an open-source web server that, after its initial success as a web server designed for maximum performance and stability, is now also used for web servicing, as a reverse proxy, HTTP cache, and load balancer.  
NGNIX is built to use less memory and give higher concurrency. Instead of creating a new process for each web request, NGNIX uses an asynchronous, event-driven approach where requests are handled in a single thread.

## 4.2 Evaluation

A variety of unique features have been worshiped in our project for the convenience of the entrepreneurs and investors. A user can create an account by going to the sign up option and submitting various types of information on this website. After signing up, the user will be able to access his profile by clicking on the sign in option and entering his email and password. Once the user goes to his profile, he will be able to see some of the options like “News Feed”, “Connected People” and “Video Call”. He will be able to submit various types of information inside his personal profile and update it later. In the News Feed option, he can check the profiles of other users, and in the “Connected People” option, user can see the profiles of the people he has already interacted with. Also in our project we have a feature called “Submit New Project Idea” where if the user has any new idea he

can fill in the relevant information about the idea and submit that which will go directly to the admin panel. The admin panel will verify the authenticity of the project idea and prioritize it if authenticated, so that the project idea is updated in a feature called Project Status, and user can see in which level his the project is. We also have a message option on our project's home page where users can inquire anything related to the website.



Figure 4.1: Web Site Home Page

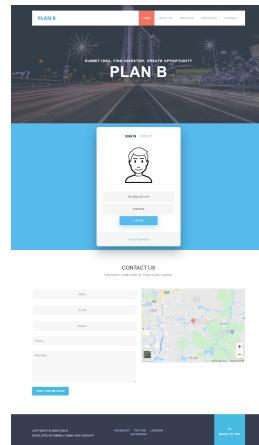


Figure 4.2: Sign up Page

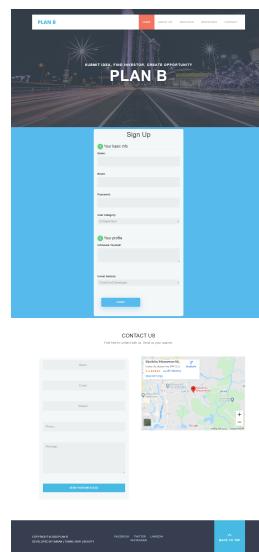


Figure 4.3: Sign in Page

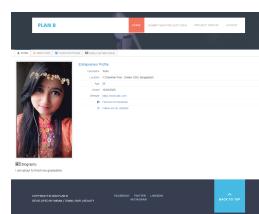


Figure 4.4: Personal profile



Figure 4.5: News feed



Figure 4.6: Submit project idea



Figure 4.7: Admin Panel

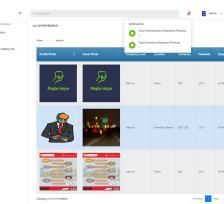


Figure 4.8: Admin View Entrepreneurs

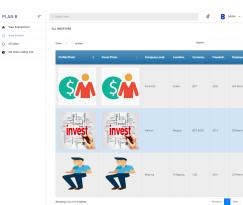


Figure 4.9: Admin View Investors



Figure 4.10: Admin View All Users



Figure 4.11: Set video call

## 4.3 Results and Discussion

Systems evaluation is a bigger part. It identifies the performance of a system. Before integration of the system, we tested the APIs, by using postman. Each and every APIs were tested according to the API documentation. Then we tested the server by using HTTP test, Simple HTTP, Simple HTTPS, DNS, IMAP etc. We tested the MySQL database by putting data from local machine. The application that we built tested in different devices. It ran successfully. In the admin panel we tested investor and entrepreneurs information. Manually tested the input output pattern, it worked. We followed six basic steps they are

Step 1: Exposing the local environment to the internet.

Step 2: Creating and conjuring application.

Step 3: Creating a Composer project.

Step 4: Building the Application.

Step 5: Creating specific routing.

Step 6: Run the application.

All of those steps worked correctly.

## 4.4 Summary

In this chapter we discussed the implementation process. Which described what we have done, how we have done. The methods implementation is challenging. It has so many dependencies in the back-end. Besides framework based system has large scale up factors, which was handled by NGINX technique. Building an functional, marketable social platform application was the perquisite of this chapter.

# Chapter 5

# Standards and Design Impacts

Finding out the quality and limitation and putting them in tabular format is the main target of this chapter.

## 5.1 Compliance with the Standards

In short, we have to keep up certain laws, policies, terms, and regulations. In this modern world of available information fetching legally and permitted code, function, data transparency is highly followed. It is also a part and parcel of engineering ethics.

### 5.1.1 Technological Standard

|                       |                               |
|-----------------------|-------------------------------|
| Programming Languages | Laravel, Php                  |
| MarkUp Languages      | Latex, HTML                   |
| Package Manager       | composer require patinthe-hat |
| Software              | xampp,visual studio code      |
| Server                | Hosting Server                |

### 5.1.2 Ethical Standard

1. **PCI Compliance:** PCI Compliance is mandatory for all businesses and organizations that accept collect or process credit cards, including the University of Waterloo.
2. **IEEE/ACM code of ethics:** It is maintained for professional purposes. Following coding standard to set a benchmark.
3. **Trademarks Act:** In the competitive and constantly changing digital marketplace, a trademark is a very valuable asset. It differentiates your business and the quality of your service from those of your competitors. Your trademark carries your reputation with it and reinforces long-term relationships with your users.

### 5.1.3 Safety Standard

We would work with accidental inputs. We have to ensure the security of the software so that there would be no data leak. If needed we will ensure encryption of data.

- a. IEEE STD-1228
- b. Software assurance (SwA).

## 5.2 Compliance with the Impacts

### 5.2.1 Economic Impacts

The economic impact of a work is to highlight the impact of that work on a particular region. We are working to create a website for investment funding where an entrepreneur and an investor will benefit from the benefits of investment. In our country, many people are now trying to make themselves as entrepreneurs for self-sufficiency. Such new entrepreneurs can get funding from various investors by using our website to expand their business. As a result, they are benefiting economically as well as contributing to domestic and international economic sectors. On the other hand, private investors and various types of investment companies are becoming self-reliant by donating money to these new entrepreneurs, while at the same time promoting different types of businesses for these new entrepreneurs. By using our website, an entrepreneur and an investor are making great progress financially, so the government is benefiting from the tax paid by them.

### 5.2.2 Ethical Impacts

We are looking to create an investment funding website. Where different users will benefit from exchanging financial support. As a website authority, we have to keep in mind the advantages and disadvantages of all our users, as well as our website. In that case, as a website authority, we have to adhere to some of the Ethical Condition like

- i. We must have be honest and straightforward with all users and other business authorities.
- ii. Documents of others cannot be used knowingly or illegally.
- iii. Keeping all users' personal information confidential and secure.
- iv. In any case, there should be no discrimination between men and women in order to work.
- v. Providing proper reference to any other document used.
- vi. Maintaining good professional behavior with each of the website authority's clients and employers.
- vii. Do not promote any domestic or international negatives through the Website.

### 5.2.3 Social Impacts

An entrepreneur and investor provide financial assistance by using our website for their personal gain. As a result, an entrepreneur has established his own business organization and established himself as a business entrepreneur. He is gaining social status by returning financial transparency. Apart from this, those who could not do any work due to lack of money, have established themselves as self-sufficient by using our website to get financial support easily. As a result, the unemployment rate is decreasing in addition to increasing employment in society. On the other hand, investor companies have simply increased the reputation of their company by providing financial support to good entrepreneurs.

## 5.3 Summary

The standard of a project is the credibility of documents or methods used in that project. In this section, we have discussed the various parts of the standard, which include technological standard, ethical Standard, safety Standard, and trademark standard. Also, we have discussed what kind of impact a project can have.

# **Chapter 6**

## **Conclusion**

This chapter concludes the project in a nutshell. Summary part describes the brief history in short. Limitations showed the bounds of the project. Future work focuses further improvement of the project.

### **6.1 Summary**

This chapter summarizes the whole part of our capstone project, the procedures, and experiences. Our main aim is to develop a website for our country that can help both entrepreneurs and investors to give money to a new business. Earlier we studied different e-commerce platforms such as AngelList, Onevast, CrunchBase. We found Gust very helpful because it has ready made features and existing resources and tutorials. We have fulfilled the requirements, those we have stated in our project objectives.

### **6.2 Limitation**

In our project, the user specially the entrepreneurs have to submit their necessary documents through our web application. From an admin perspective, the admin has to check the validity of those documents manually, which means our system is not connected or integrated with another system. It can be a lengthy process sometimes for the admin to check those documents manually. On the other hand, server-based processing can limit the scope of interactive user experience.

### 6.3 Future Work

In the future, we would like to integrate our application with different services like tax number checking by using the tax authority's valid API. Moreover, we want to develop our API, so that another application can interact with our application. Besides, we want to use payment service, so that the user can pay their subscriptions online. In this modern world, everybody using smartphones, so in the future, we want to build a mobile-friendly application to provide our services more effectively and precisely.

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