



An Undergraduate Internship Report

On

**Amari Blog**

This report is submitted By,

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January 27, 2021

Dissertation submitted in partial fulfillment for the degree of

**Bachelor of Science**

in

**Computer Science and Engineering**

Department of Computer Science & Engineering  
Independent University, Bangladesh

# Attestation

I affirm that this report is my own work, in view of my own work by me during my Internship. What's more, that I have recognized all material and sources utilized in this report.

I likewise confirm that this report has not recently been submitted for evaluation in any other unit and that I have not counterfeited the work of other students or people. However, following the universally acknowledged academic rule of utilizing other's composed work and additionally programming (as code) in my University project is appropriately cited to whenever utilized in any piece of this work.

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Signature

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Date

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Name

# Acknowledgement

My journey towards achieving my destination for the design and development of “Amari Blog” has finally come to a fruitful end. My efforts and wholehearted co-corporation of each and every one has ended on a successful note. During this journey, I faced numerous unforeseen problems and obscure difficulties. However, at these junctures, a few enterprising people stepped in and guide me in a right direction.

I express my sincere gratitude to my Internal Guide Mr. Bijoy Rahman Arif, who had been assisting me throughout this project. I thank him for providing me the reinforcement, confidence and most importantly the track for the project whenever I needed it.

I’ll also express my sincere gratitude to our Project Leader Mr. Sajjad and CEO Abdullah Al Nasir of Pioneer Alpha Ltd., for their constant encouragement and support at all stages of this project. I also thank them for inducing professional attitude in me.

At last but not the least, I pay my due regards to my parents and Friends, because every time they encourage, and support me when I need or require.

Faisal Siddiquee

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January 27, 2021

# Letter of Transmittal

January 27, 2021

Md. Bijoy Rahman Arif

Internship Supervisor and Lecturer,  
Department of Computer Science and Engineering,  
Independent University, Bangladesh.

Subject: Submission of Internship Report

Dear Sir,

This is a great pleasure for me to submit the Internship Report titled “AmariBlog” at Pioneer Alpha which is a requirement for my CSE499: Internship Program. While preparing this report, I tried my best to follow the instructions that you have given me. This report endeavors my best to present all my experiences, learning, and outcome of my six months internship period at Pioneer Alpha Ltd. I will be highly encouraged if you are kind enough to receive this report. I also want to thank you for your support and patience with me and I would be glad if you accept this report and provide your precious judgment.

Sincerely Yours,

Faisal Siddiquee

ID: 1620064

# Evaluation Committee

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Convener

# Abstract

I carried out my Internship at Pioneer Alpha Ltd. This Internship gave me a chance to work with a real-life software application. This report is about Amari-Blog.

Blogging has become such a mania that a new blog is being created every second of every minute of every hour of every day. Amari Blog contain the Information of various things related to Technology, Education, News, International, Business, Sports, Entertainment etc. The main aim of this project is to provide data to its users in only one site. Users can gather the information from one site as well as give their feedback and create their own blog. Users can post their views and thought and analyze themselves.

The Internship period was of six months and the report mainly have been documented based on my overall work in the company as an Intern.

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# Chapter 1

## Introduction

An **internship** is an opportunity offered by an employer to potential employees, called interns, to work at a firm for a fixed period of time. Interns are usually undergraduates or students, and most internships last between three and six months. Internships are usually part-time if offered during a university semester and full-time if offered during the vacation periods. This allows interns grasp real job framework and acquire knowledge in their particular field of work. The Internship works as final polish for graduating students and provides them with the experience of an office environment. This guides the graduating understudies to turn out to be more contended, and striking as representatives, permitting them better odds of future open positions.

### 1.1 Background of the Work

In ongoing past time Blogs had been stored in the paper documents and hard to look or alter any data. Blogs play vital role in awareness of natural issues or some other issues identified with education, wellbeing, advanced innovation, and quest for more noteworthy security provide for data to all people in all age groups and a new role in the education system. Because of these project initiatives extraordinary development has occurred in all activities of blogs and any user can share its information related to any topic to all users

### 1.2 Company Profile of Pioneer Alpha

Pioneer Alpha is a startup company and it has different departments for different kind of works. As a new business it has some essential departments for example, HR, Business Development, Engineering, Security, Marketing etc. Pioneer Alpha have a group of experts from different ends to make reliable products. Now to cope up with this rapid change, Pioneer Alpha Ltd. are developing their organization through IT solutions to ensure the best possible solution.

## 1.3 Overview of Pioneer Alpha Ltd

Pioneer Alpha Ltd. is an emerging R&D based Software Company that provides IT-enabled products and services. Pioneer Alpha Ltd. is providing premium software development solutions to different enterprise companies. Pioneer Alpha Ltd. is determined to build a company culture based on superior performance, success through teamwork, respect, and recognition for the individual, diverse and challenging work, and flexible and rewarding career opportunities for this company's employees.

## 1.4 Mission & Vision of Pioneer Alpha Ltd.

### **Mission**

Pioneer Alpha aiming customers to achieve operational efficiency and excellence. Our mission is to deliver optimal solutions with quality and services at reasonable prices. For us, customer satisfaction is given top place. We are very friendly in our dealings to the customers and it helps us retain existing clients and expand customer circle. We always try to improve the quality of our products by exploring innovative ideas.

### **Vision**

Our Vision is to be a leading IT Solution Company in the Technology sector and progress in our current position in the market. We are committed to adding value to our customer's business. We give the best service to our customer. Whatever the business domain is, we can simplify and streamline business workflows by saving customer's time and cost.

## 1.5 Objectives

Amari Blog enables the users to create innovative and attractive information with photos in just few simple steps. The user just needs to upload some images of his choice and can also upload the information or can select from the given category list. This website will provide a personalized environment that would contain the data in motion with images. It helps to build relationships with new online connections and strengthen relationships with existing connections. It offers informative, helpful, educational content to people who want to read what bloggers have to say. The ultimate goal, of course, is to become more and more successful through blogs and how effectively it touches other people. Besides all such core functionalities, the application also includes features like FAQ, request, feedback etc. so as to provide a satisfactory user experience.

## 1.6 Scopes

After developing this web application, the features available for user and blog are:

- **User** has one **Profile** (must)
- **User** has one **Role** (must)
- **Role** has many **User** (must)
- **User** has many **Blog**
- **Blog** has one **Category** (must)
- **Blog** has one **Status** (must)
- **Blog** has many **Tag**
- **Blog** has many **Like**
- **Blog** has many **Comment**
- **Blog** has many **Share**
- **Blog** has many **Asset**

Here,  
**Roles:**

1. **Admin** - Admin has access to dashboard.
2. **Moderator** - Moderator has access to posts/comments editing, deleting.
3. **Writer** - Writer can publish blog to the website.
4. **Reader** - Reader can read, like and comment to the posts.

**Status:**

1. active
2. approved
3. pending
4. verified
5. online
6. offline
7. block

# Chapter 2

## Literature Review

A literature review is comprehensive study and interpretation of literature that addresses a specific topic. It discusses published information in a particular subject area with substantive findings moreover as theoretical and method contributions to a specific topic.

### 2.1 Relationship with Undergraduate Studies

The advanced courses that I have enrolled at IUB over the past few years has played a tremendous role in building this project as an intern. This includes Database Management System, Web Application, System Analysis and design, Algorithms, Java etc. I have successfully implemented most of what I have learned during my 4-year undergraduate degree at IUB. The web development technologies used in the project are based on the programming languages that I have learned from CSE 309 and database used in the project is also taught at CSE 303. Our project also utilizes some object-oriented models that I have learned from CSE 213. I have learned the system designing techniques from CSE 307. To put things into perspective, I have been able to build this project as an intern because of what I have learned from the undergraduate courses at IUB

## 2.2 Related works

Most of the blog sites in Bangladesh use WordPress as the content management tool for building blog sites which does not require any level of hard coding. Obviously WordPress has its limitations. It is difficult to find related websites that have used similar advanced web developing technologies like us.

Some of the blog sites currently popular in the local industry are stated below.

Techtunes.com.bd has created an intuitive blog site with modern designs to serve their viewers. This site is mainly based on technology available locally. This site uses Pin WP

krishiblog.com has created a blogging platform to provide local and international farming news to its viewers. They also provide educative farming posts. This site uses New Theme BD demo 1 WP

outsourcinghelp.net is a local blog site that provides outsourcing educative posts to its viewers. This site uses Appointment WP

cadetcollegeblog.com posts literary blogs by present and ex cadet students. This site uses Reverie WP



# Chapter 3

## Project Management & Financing

### 3.1 Work Breakdown Structure

A Work Breakdown Structure (WBS) could be a various leveled structure of things that the project will make or results that it'll convey. We utilize the top-down approach to appear Work Breakdown Structure (WBS). We made a WBS for this extend. This will be strong for us to protect work quality and easy to synchronize the entire project.

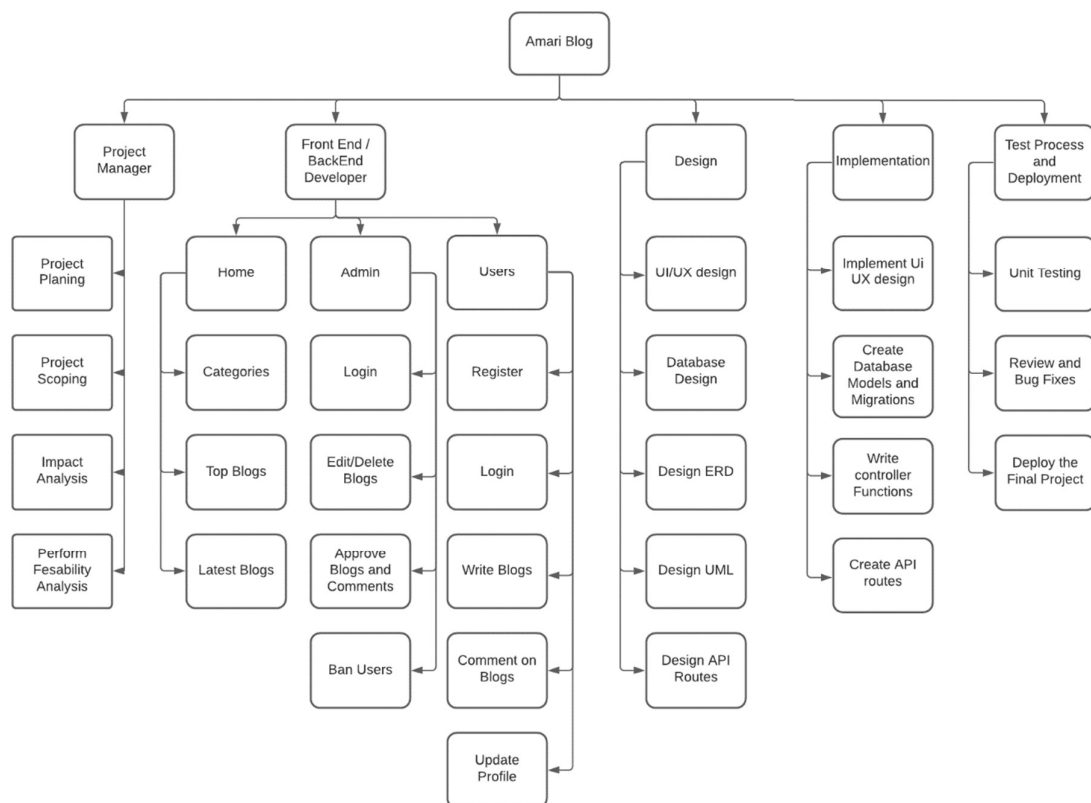


Fig 3.1: Work Breakdown structure for Amari Blog

### 3.2 Process/Activity wise Time Distribution

The critical path method is the sequence of scheduled activities that determines the duration of the project. Along working with several groups, regulating the time and working close by with bunch people required time distribution. This whole work is segregated among the several groups. To safeguard this work on designated time is evaluated is almost 120 days for the project.

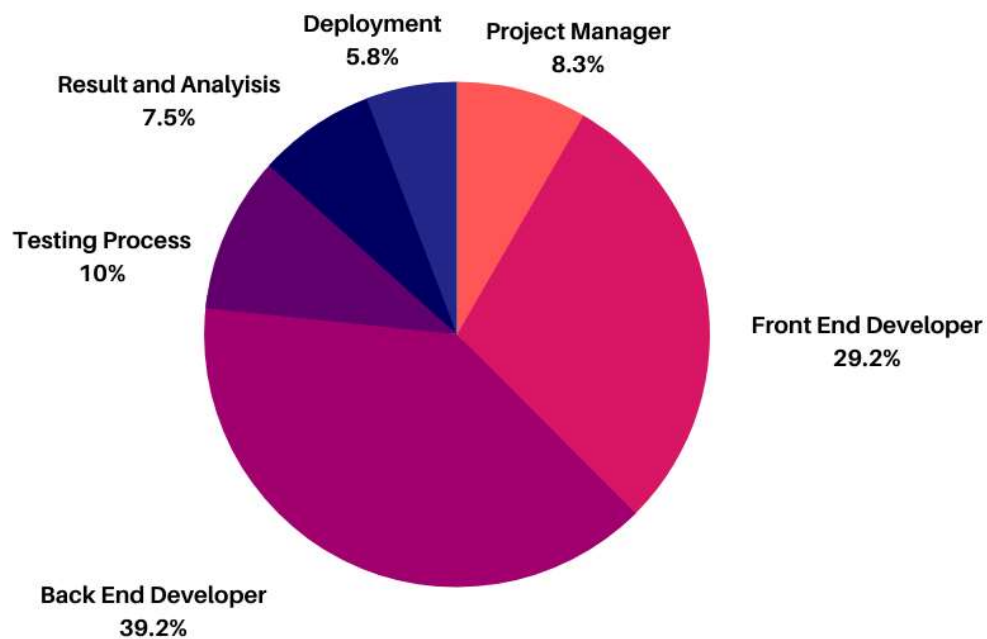


Fig 3.2: Time Distribution Pie Chart

### 3.3 Gantt Chart

A Gantt chart, commonly used in project management, is one of the most popular and useful ways of showing activities (tasks or events) displayed against time. In the Gantt Chart below, I have created a visual representation of the timeline in creating the project against the tasks. Here the most time was spent in developing the backend which plays the most important part in the project.

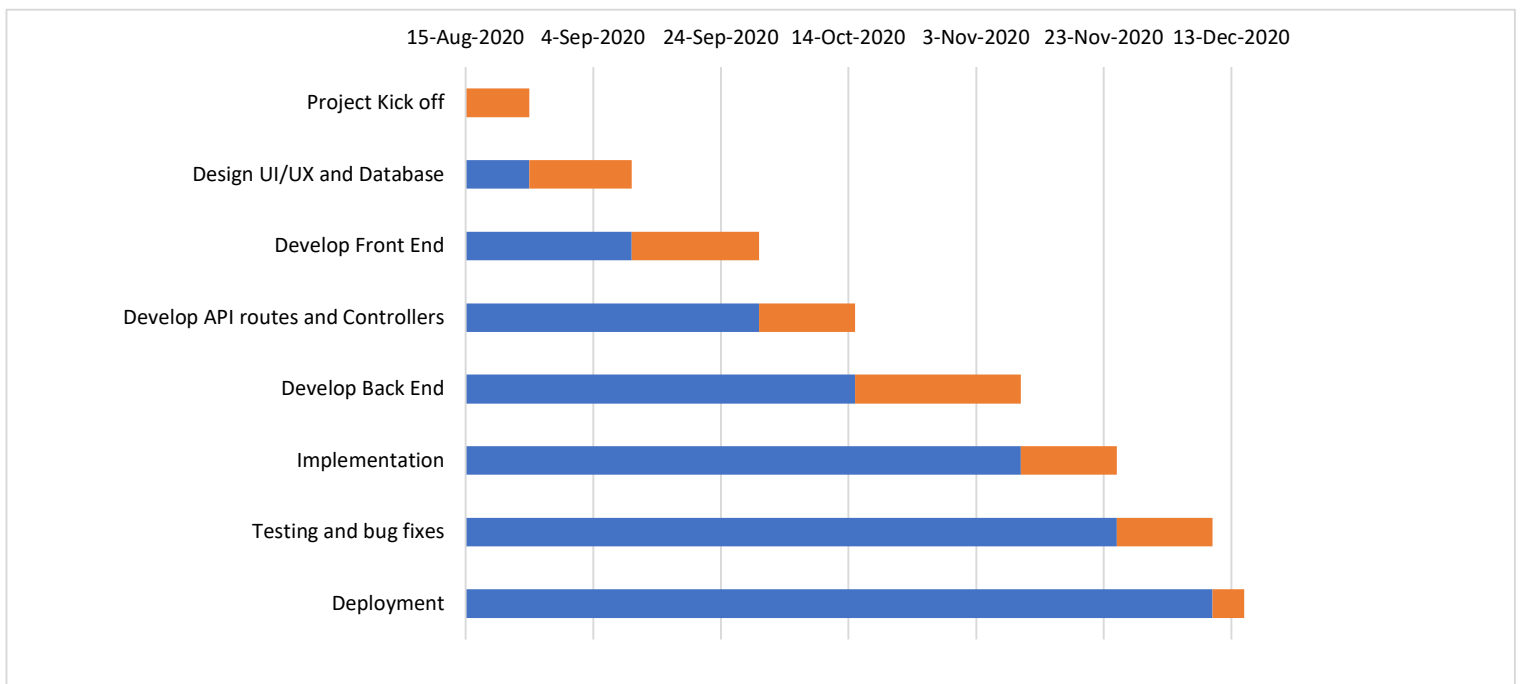


Fig 3.3: Gantt Chart of Amari Blog

### 3.4 Estimated Costing

As an intern we did not have did not get any allowances for working with Pioneer Alpha Ltd. The project Amari Blog had several development groups that comprised of company employees and interns. An estimated cost of making this project up to deployment is 30000tk

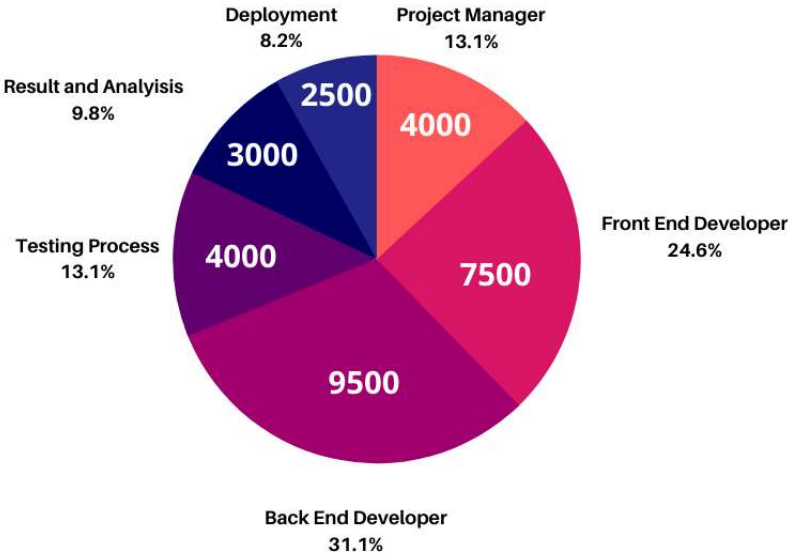


Figure 3.4: Estimated Costing Pie Chart

# Chapter 4

## Methodology

Methodology is a system of methods that we use in a specific area of study or activity. Methodology is the detailed procedures or system used to identify, select, process, and analyze information about a subject. The website I have been assigned to work on is a blog system, which is one of the most complete and fully multi-functional websites. I have been assigned to work on to develop a fully functional blog sites with all the modern features using modern web developing technologies.

### 4.1 Language Selection

1. HTML is the skeleton of any website. Without HTML, a browser would not know how to exhibit text as elements or load images and files or other features. The frameworks that I have used, supports HTML codes which plays a vital part in building the skeleton of the project.
2. Sass (which stands for 'Syntactically awesome style sheets') is an extension of CSS that enables you to use things like variables, nested rules, inline imports and more. It also helps to keep things organized and allows you to create style sheets faster. Sass is compatible with all versions of CSS.
3. Here I used bootstrap version 4.0 to make this page responsive so that the User Interface and User experience gets better. In bootstrap there are different components which helps me to add some dynamic functionalities. Here I took help from bootstrap documentation.
4. The framework of choice for the front-end is React. React is a declarative, efficient, and flexible JavaScript library for building user interfaces. It lets me compose complex UIs from small and isolated pieces of code called "components". React codes are written in JSX files (short for JavaScript extension) which is a React extension that makes it easy for us to modify browser DOM (Document Object Model) by using simple, HTML-style code. React JS uses something called Virtual DOM to see what parts of the actual DOM need to change when an event happens

5. The framework of choice for the backend is Laravel. Laravel is an open-source PHP framework, which is robust and easy to understand. It follows a model-view-controller design pattern. Laravel reuses the existing components of different frameworks which helps in creating a web application. The web application thus designed is more structured and pragmatic.

6. The database of choice is MySQL. MySQL is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language

## 4.2 Implementation

Implementation is a coding part of the project. Initially we have used react.js to create most of the initially designed static web pages. This includes writing HTML and ES6 codes in JSX files. These were later decorated and made responsive using sass and bootstrap 4.0. After the completion of the static web pages, we have created REST API using Laravel API routes. Consecutively we have created Laravel controllers for all the API routes which act as functions called upon API calls. Laravel uses eloquent models to manipulate the database related functionalities instead of traditional SQL queries. These models were created for every database table and are manipulated in the controllers. In order to create database tables and columns, Laravel uses migration system. The primary keys and foreign keys are defined in these migration files. All the website functionalities are integrated with the front end via API calls using AXIOS.

I used XAMPP, which is a free, and open-source cross-platform web server key stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MySQL database, and interpreters for scripts written in Laravel. I worked through Localhost, which is a local server that allowed me to host my website online on a local IP that is visible only in my system, by connecting to a web server like Apache Web Server.

# Chapter 5

## Body of the Project

### 5.1 System Analysis

#### 5.1.1 Six Element Analysis

Process	Human	Non Computing Hardware	Computing Hardware	Software	Database	Connectivity
Registration	User	Monitor , KeyBoard, Mouse etc	PC, Laptop, ,Mobile	Laravel,NodeJS ReactJS,Redux,	MySQL	Internet
Login	User, Admin	Monitor , KeyBoard, Mouse etc	PC, Laptop, ,Mobile	Laravel,NodeJS ReactJS,Redux,	MySQL	Internet
Profile, followers	User	Monitor , KeyBoard, Mouse etc	PC, Laptop, ,Mobile	Laravel,NodeJS ReactJS,Redux,	MySQL	Internet
View User, blog, comments	User, Admin	Monitor , KeyBoard, Mouse etc	PC, Laptop, ,Mobile	Laravel,NodeJS ReactJS,Redux,	MySQL	Internet
Edit/Delete User, blog, comments, status	Admin	Monitor , KeyBoard, Mouse etc	PC, Laptop, ,Mobile	Laravel,NodeJS ReactJS,Redux,	MySQL	Internet
Request blog, comment Approval	User	Monitor , KeyBoard, Mouse etc	PC, Laptop, ,Mobile	Laravel,NodeJS ReactJS,Redux,	MySQL	Internet

Table 5.1: Six Element Analysis Table

#### 5.1.2 Feasibility Analysis

Feasibility is the measure of how beneficial or practical the development of the system will be to the organization. It is a preliminary survey for the systems investigation. It aims to provide information to facilitate a later in-depth investigation.

The report produced at the end of the feasibility study contains suggestions and reasoned arguments to help management decide whether to commit further resources to the proposed project.

Within the scheduled duration we were assigned to study both the positive and negative aspects of the current manual system, in which we have come up with a number of drawbacks that prevent the progress of the clinic if it is continued to function manually. Having gone through all measures of feasibility we report to the management to figure out if the objectives of the new system are met.

### **TYPES OF FEASIBILITY:**

There are various measures of feasibility that helps to decide whether a particular project

is feasible or not. These measures include:

- Technical Feasibility
- Operational Feasibility
- Economic Feasibility

Each of these types will be explained in detail throughout the project report.

### **TECHNICAL FEASIBILITY**

Pioneer Alpha Ltd is one of the reputed company in spite of being a start-up. They have skilled technical experts to complete and maintain this project. Pioneer Alpha has trained and guided us, interns, to complete this project with accuracy.

### **OPERATIONAL FEASIBILITY: -**

We have tried building the project with content management systems like wordpress but it did have limitations at a certain point of time. Our system is build from scratch using modern web development technologies and frameworks which allows us to provide full customization to our sight.

### **ECONOMIC FEASIBILITY:-**

The proposed system is justifiable in terms of cost and benefit and it ensure that the investment in this system provides a reasonable return.

Building a full custom blog site using modern web development technologies can be expensive but we have build it in comparatively low cost and it provides modern features.



### 5.1.3 Problem Solution and Constraints Analysis

Problem	Analysis	Solution	Constraints
Data loss	Anytime data can be lost for various reason (Virus attack, Hacker and Unfortunately system crash )	Database system is more secure also deleted and lost data easily restore any time.	Internet connectivity
Time Complexity	To excess to a specific information it requires a lot of time to compute, where time complexity takes place.	Database system is easily accessible and need less time.	Internet connectivity
Human error	User inputs invalid Username or Address	Everything is done automatically and stored in the database.	
Analysis the data	Some problem occurs due to fetching manually different information	Database system can collect all the data and it is very easy to analyses the data.	Internet connectivity
Steal Data	Anyone can steal the data or data can be stolen.	Database system is secured and no need to steal the data.	Hackers

Table 5.2: Problem Solution and Constraints Analysis Table

## 5.3 System Design

Software design is responsible for the code level design such as, what each module is doing, the classes scope, and the functions purposes, etc. When used strategically, they can make a programmer significantly more efficient by allowing them to avoid reinventing the wheel, instead using methods refined by others already.

### 5.3.1 ERD

The Entity Relationship Diagram of this project.

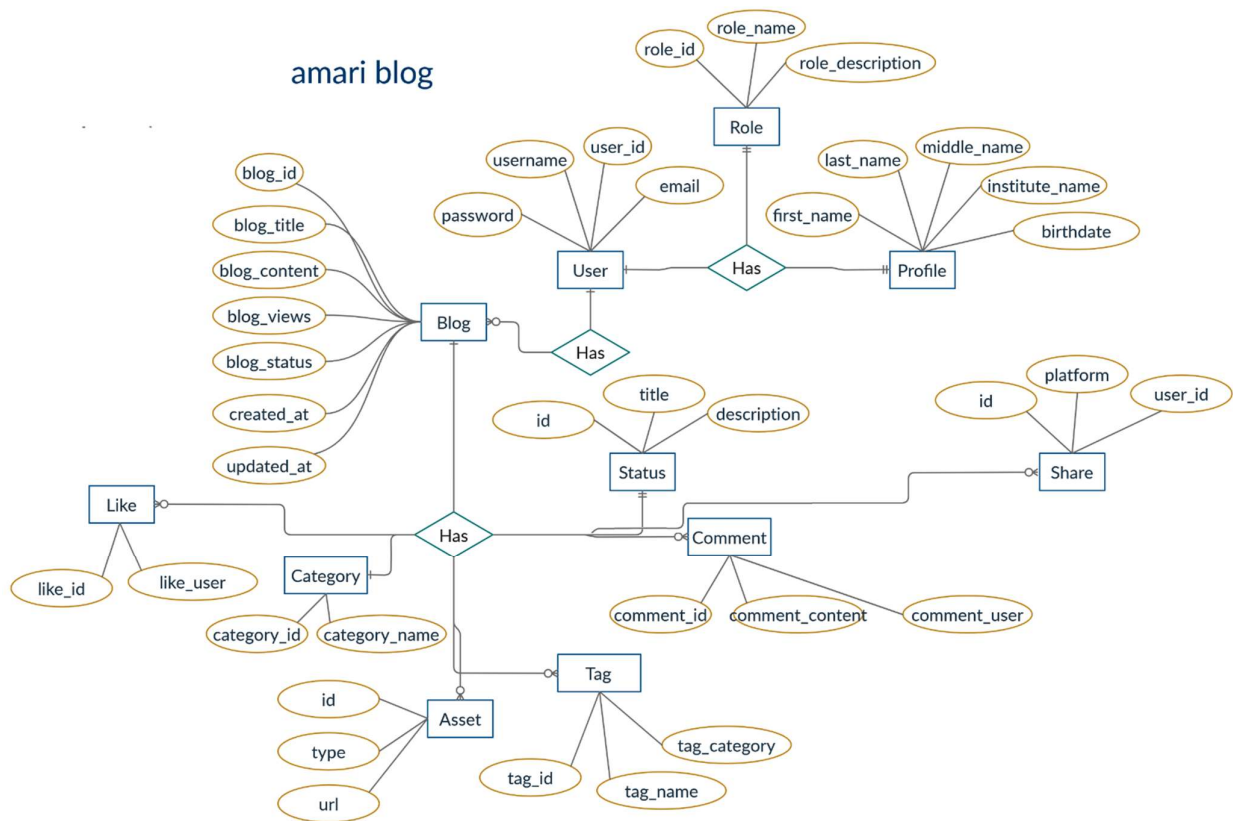


Fig: 5.1 : Entity Relationship Diagram

### 5.3.2 UML Diagrams

A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system.

In the UML diagram demonstrated below, User must have one Profile. User must have one Role but Role might have many User. User can have many Blog. Blog must have one Category. Blog must have one Status. Blog has many Tag and Blog has many Like. Blog has many Comment and Blog has many Share. Blog has many Asset

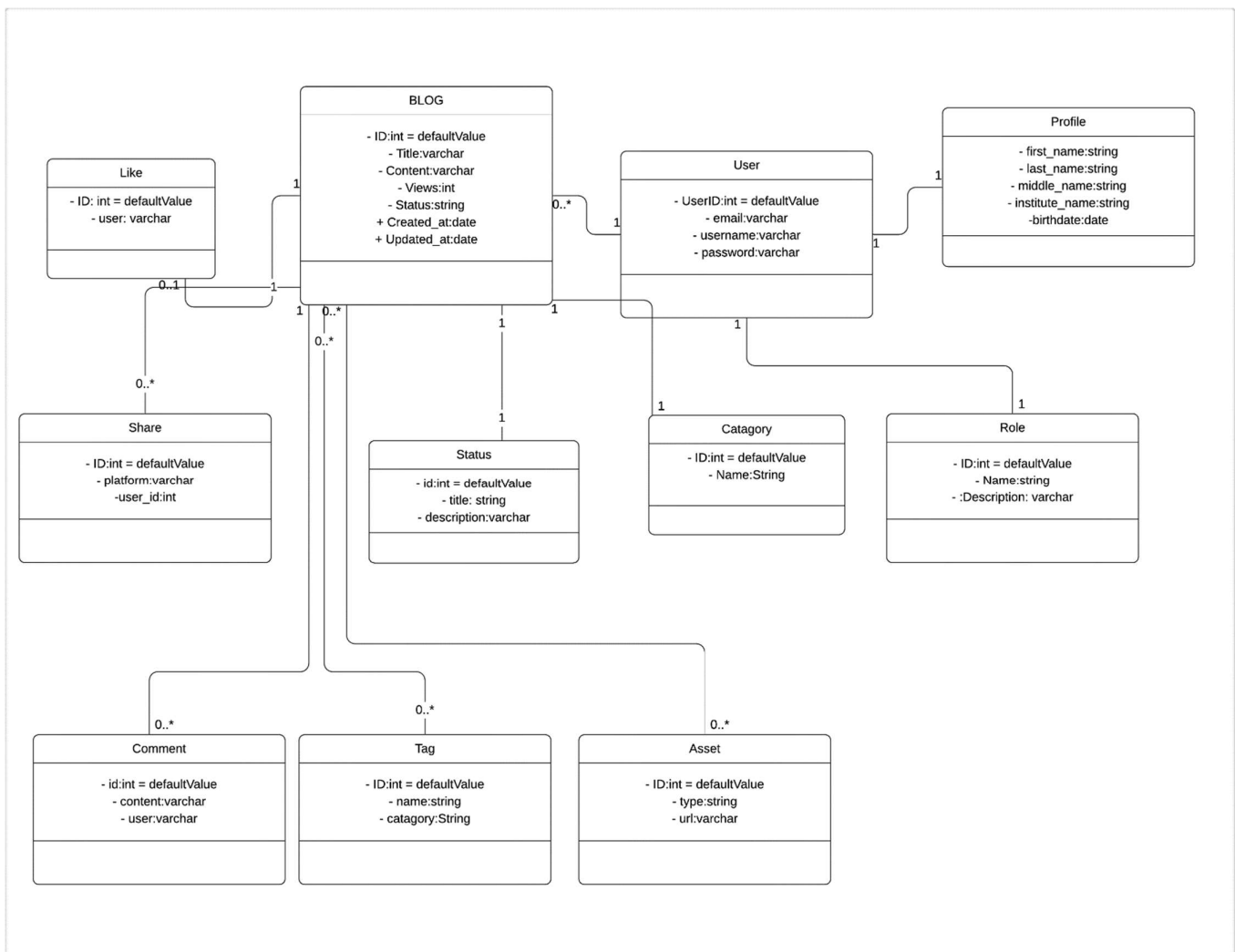


Fig 5.2: UML diagram

### 5.3.3 Rich Picture

A Rich Picture is a way to explore, acknowledge and define a situation and express it through diagrams to create a preliminary mental model. A rich picture helps to open discussion and come to a broad, shared understanding of a situation. This option was originally developed as part of Peter Checkland's Soft Systems Methodology (SSM).

Developing a rich picture covers Steps 1 & 2 of the SSM which describe the real world:

1. Identify the issue you wish to address, and
2. Develop an unstructured description of the situation where the issues lie

Rich Picture of Post:

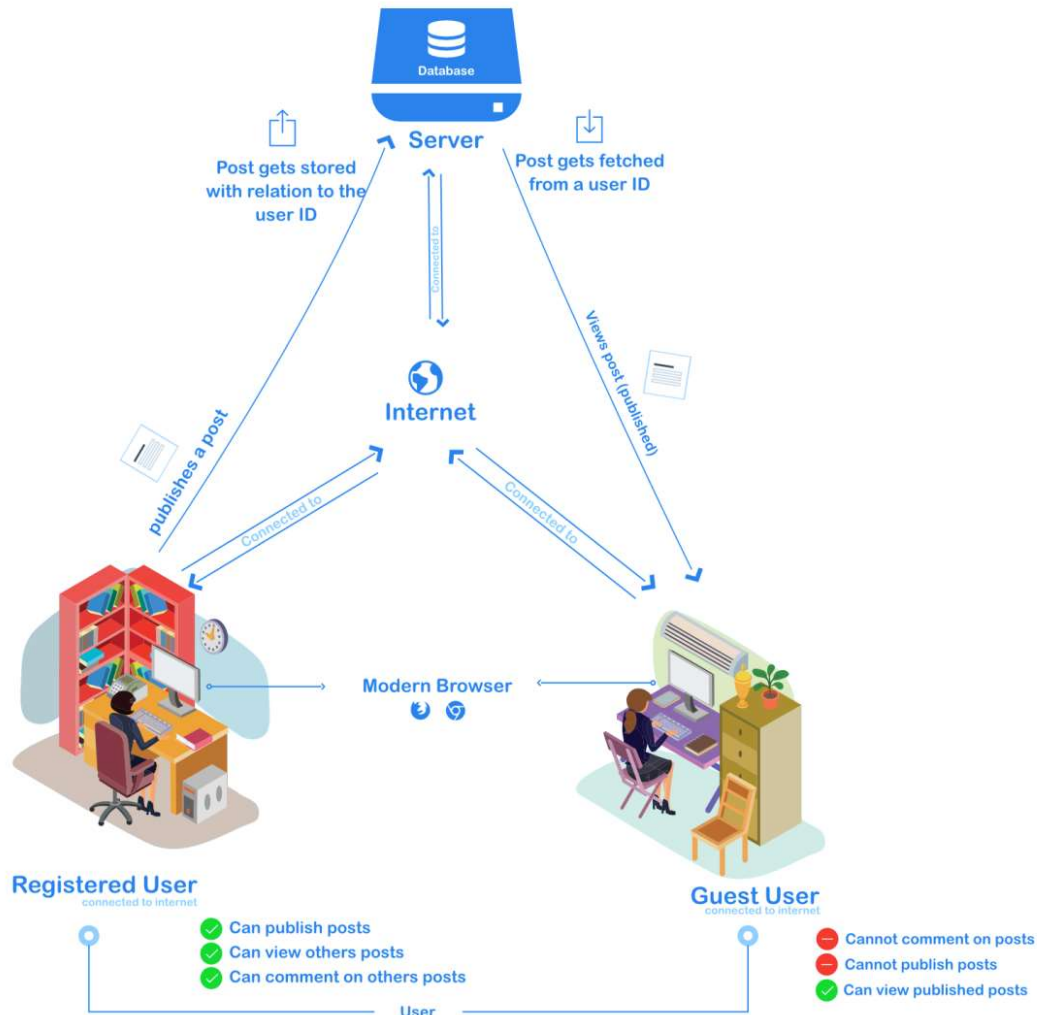


Fig 5.3: Rich Picture

### 5.3.4 Data Dictionary

Data dictionary, as defined in the IBM Dictionary of Computing, is a “centralized repository of information about data such as meaning, relationships to other data, origin, usage, and format”. It provides information about each attribute of the data model to the programmer, or whoever uses it. It can be used to understand where and how an attribute fits in the database structure, what values it contains, and the size-- basically what the attribute means in terms of the real world. The main elements included in a data dictionary are:

1. Attribute name- unique identifier
2. Data type
3. Size
4. Remark

Name	Data Type	Size	Remark
ID	bigINT	20	This is the primary key of this relation. It contains the ID of user. Example: '1234'
username	Varchar	255	This contains the name of the user. This is a unique key Example: 'John'
email	Varchar	255	This contains the email of the user. It is a unique key Example: abc@c.com
password	Varchar	255	This contains the email of the user. Example: 'pass'
Role_id	bigINT	20	The role of the user This is a foreign key

Table 5.3: User Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this relation. It contains the ID of the user. Example: '355'
First_name	varchar	255	This contains the first name of the user
Last_name	Varchar	255	This contains the last name of the user
bio	Text		This contains the bio of the user
gender	varchar	255	This contains the gender of the user
birthday	Timestamp		This contains the birthday of the user
Blood_group	Varchar	255	This contains the blood group of the user
Institution_name	Varchar	255	This contains the institute name of the user
Phone number	Varchar	255	This contains the phone number of the user
profession	Varchar	255	This contains the profession of the user
Profile_image_url	Varchar	255	This contains the profile image URL of the user
Facebook_url	Varchar	255	This contains the Facebook URL of the user
Twiter_url	Varchar	255	This contains the twitter url of the user
Instagram_url	Varchar	255	This contains the Instagram url of the user
User_id	Varchar	255	This contains the user_id of the user. It is a foreign key

Table 5.4: Profile Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table.
name	varchar	255	This contains the name of the role.
description	Text		This contains the description of the role

Table 5.5: Role Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this relation. It contains the ID of the category. Example: '425'
slug	varchar	255	This contains the url slug of the unique category
title	Varchar		This is the title of the blog
cover_image_url	Varchar	255	url of the image of category
content	text		
View_count	Int	11	This is the total view count of the blog
Like_count	int	11	This is the total like count of the blog
special	int	11	This denotes if the blog is special
Category_id	bigINT	20	This contains the category_id of the blog.It is a foreign key
User_id	bigINT	20	This contains the user_id of the blog.It is a foreign key
Status_id	bigINT	20	This contains the status_id of the blog .It is a foreign key

Table 5.6: Blog Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this relation. It contains the ID of the category. Example: '425'
name	varchar	255	This contains the name of the category. Example: 'Technology'
slug	varchar	255	This contains the url slug of the unique category
description	text		
Category_image_url	Varchar	255	url of the image of category

Table 5.7: Category Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table. It contains the ID of the tag. Example: '425'
name	varchar	255	This contains the name of the tag.
description	Text		This contains the description of the tag

Table 5.8: Tag Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table.
User_id	bigINT	20	This contains the user_id of the like.It is a foreign key
Blog_id	bigINT	20	This contains the blog_id of the like.It is a foreign key

Table 5.9: Like Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table.
content	text		The content of the comments
User_id	bigINT	20	This contains the user_id of the comment .It is a foreign key
Blog_id	bigINT	20	This contains the blog_id of the comment .It is a foreign key

Table 5.10: Comment Table



Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table.
Type	varchar	255	This type of asset
url	varchar	255	
Blog_id	bigINT	20	This contains the blog_id of the assets .It is a foreign key

Table 5.11: Asset Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table. It contains the ID of the tag. Example: '425'
name	varchar	255	This contains the name of the status.
description	Text		This contains the description of the status

Table 5.12: Status Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table.
platform	varchar	255	The platform where the blog is shared
User_id	bigINT	20	This contains the user_id of the user who shares it .It is a foreign key
Blog_id	bigINT	20	This contains the blog_id of the blog to be shared .It is a foreign key

Table 5.13: Share Table

Name	Data Type	Size	Remark
id	bigINT	20	This is the primary key of this table.
status	varchar	255	This is the status of the user
time	timestamp		This is the time when the user was blocked
message	text		This is the message given to the user when the user was block
user_id	bigINT	20	This contains the user_id of the user .It is a foreign key

Table 5.14: Block Table

### 5.3.5 API Routes

Method	URL	Input	Output
GET	api/blogs		{ "success" = true "message" = "All blog posts fetched." "data" = blogs }
GET	api/blogs?special=true		{ "success" = true "message" = "Special blog posts fetched." "data" = blogs }
GET	api/blogs?new=true		{ "success" = true "message" = "New blog posts fetched." "data" = blogs }
GET	api/blogs?popular=true		{ "success" = true "message" = "Popular blog posts fetched." "data" = blogs }
GET	api/blogs/{id}		{ "success" = true "message" = "Single blog post fetched." "data" = blog }

GET	api/categories		{ "success" = true "message" = "Category list fetched." "data" = category list }
GET	api/categories/{id}		{ "success" = true "message" = "Category blog posts fetched." "data" = category data with blogs }
GET	api/categories/{id}?first_blog=true		{ "success" = true "message" = "first blog of category fetched." "data" = first blog of category }
POST	api/blogs	Title Category Tag Content	If successful: { "success" = true "message" = "blog posted" "data" = user..blog } Unsuccessful: { "success" = false "errors" = "errors" }
PUT	api/blogs/{id}	Title Category Tag Content	If successful: { "success" = true "message" = "blog posted" "data" = user..blog } Unsuccessful: { "success" = false "errors" = "errors" }
DELETE	api/blogs/{id}		If successful: { "success" = true "message" = "blog posted" "data" = user } Unsuccessful: { "success" = false "errors" = "errors" }

Authentication Required Routes			
POST	api/login	Email/Username Password	<p>If user found:</p> <pre>{   "success" = true   "message" = "Successfully   Logged In"   "data" = user }</pre> <p>If user not found:</p> <pre>{   "success" = false   "errors" = "errors" }</pre>
POST	api/register	Username Email Password Password Confirm	<p>If successful:</p> <pre>{   "success" = true   "message" = "Successfully   Registered"   "data" = user }</pre> <p>Unsuccessful:</p> <pre>{   "success" = false   "errors" = "errors" }</pre>

Fig 5.15: API Routes

### 5.3.6 Functional and Non-Functional Requirements

Requirements analysis involves all the tasks that are conducted to identify the needs of different stakeholders. Therefore, requirements analysis means analyzing, document, validate and manage software or system requirements. Great quality requirements are documented, actionable, measurable, testable, traceable, helps to identify business opportunities, and to facilitate system design as well.

#### **Functional and Data Requirements**

The requirements gathering process is intensified and focused specifically on software. To understand the nature of the programs to be built, the software engineer must understand the information domain for the software, as well as required function, behavior, performance, and interfacing. Requirements for the both the system and the software are documented and reviewed with the customer.

#### **Non-Functional Requirements**

The software developed here assumes the use of Laravel for connection between the Front End and the database. The speed of the User's connection will depend on how fast they approach the site. The Admin will receive approval requests for blog publish database.

- **Reliability**- The system is reliable i.e. it's well trusted.
- **Security**- The system is well secured, i.e. admin and user both have their unique ID and password to login into the system.
- **Maintainability**- Our project is well maintained with all required features involved.
- **Portability**- The system is portable i.e. it can work on any other system of the admin.

The only requirement is the Internet connection.

## 5.4 Product Features

### 5.4.1 Home Page

This is the Landing page of this Project.

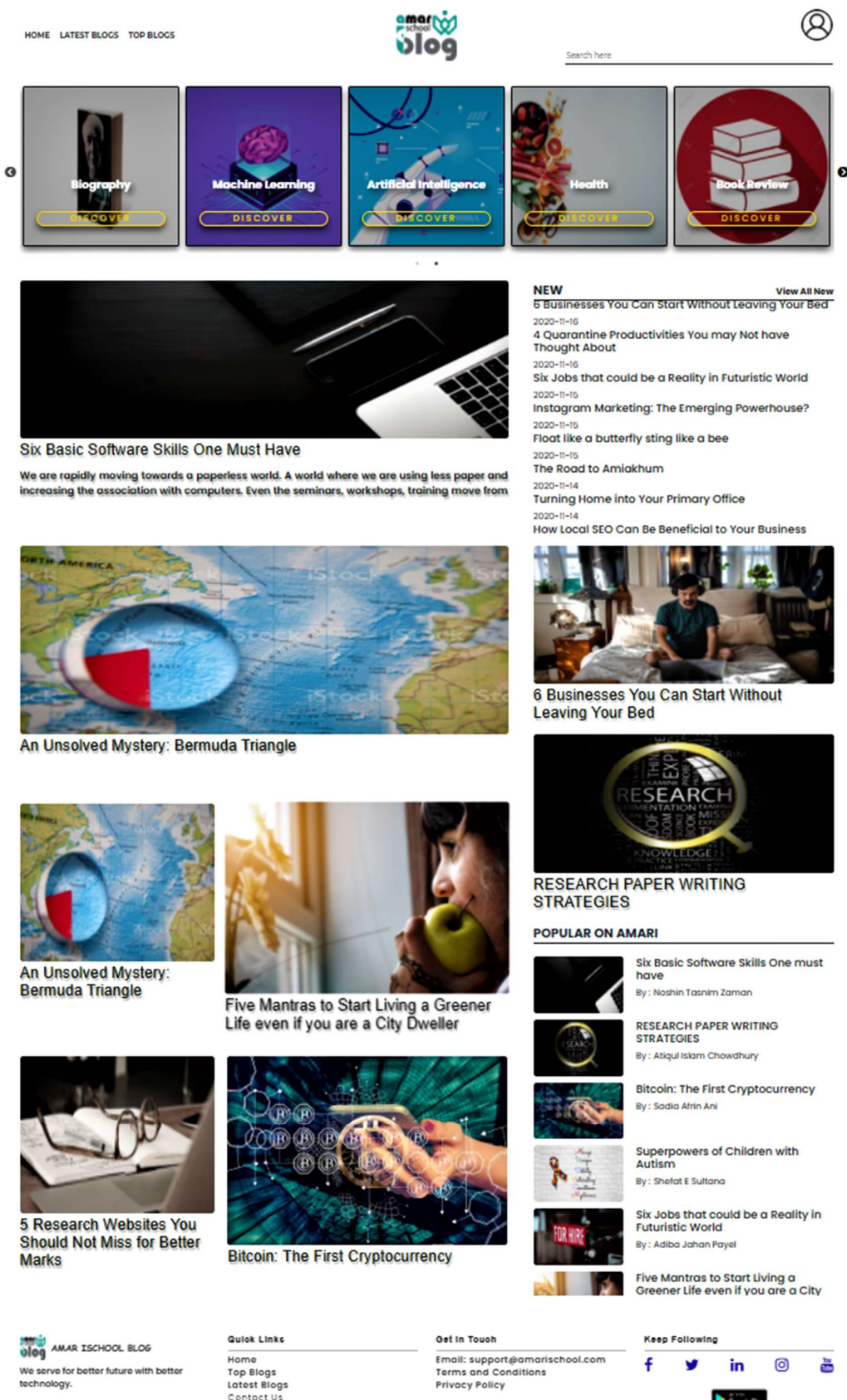





Figure 5.4: Home Page

## 5.4.2 Blog Show

[HOME](#) [LATEST BLOGS](#) [TOP BLOGS](#)








*autism as a blessing, superpowers of children with autism, autism, superpower* Others

### Superpowers of Children with Autism

Published : 2020-11-11 | 49 views

 **Shifat E Sultana**

Autism is considered a curse in our society but very few people know it's a blessing at times. We must believe that every child is a unique being, even the differences between similar types of food. He or she is a supertaster. Any food industry would love to have this kid help them flavor medicine, vitamins, or other foods. This kid can smell smoke before anyone else & thus save property and lives from the smoke.

**Super Senses:**

One of the Superpowers of a child with autism is super senses. He or she smells better than we do, hears things like an eagle, and can taste the differences between similar types of food. He or she is a supertaster. Any food industry would love to have this kid help them flavor medicine, vitamins, or other foods. This kid can smell smoke before anyone else & thus save property and lives from the smoke.

**Computers and Mathematics:**

A child with autism is also a whiz with computers. In the present era that's a huge gift. Children with autism excel at computer coding because they are logical thinkers, enjoy predictability & are visual learners. He or she is great at computer games. This kid can type, read, spell, and code on the PC, so he/she sees no problem playing with the older kids. It's amazing.

Superior math skills sometimes accompany autism. They seem to use more sophisticated mental strategies to solve mathematical problems than others.

**Memory:**

A child with autism has an amazing memory. This kid can remember everything he/she studies. His/her special interests are especially easy for him to remember. But this child will even remember experiences from when he was very small, things we would never have remembered when we were that age. This superpower is a blessing. We know that advanced memory is the key "superpower" in savant abilities where approximately half of the savants are autistic. It is estimated that 10% of those with autism have some form of savant abilities. Dustin Hoffman who played the character of Raymond in the movie Rain Man was an autistic savant who displayed remarkable memory, calendar, and mathematical calculation skills.

**Art & Music:**


For a child with autism, music often becomes a voice, an outlet, and a way to relate to the whole world. Many adults and children with autism usually take to music because it allows them to explore their creativity and better navigate the world around them. Some of the famous musician with autism are Travis Meeks (Guitarist, singer, and songwriter of Days of the New), Marty Balin (Songwriter, singer of Jefferson Airplane), James Durbin (Guitarist, singer, American Idol finalist, lead singer of Quiet Riot from 2017 to 2019), Amadeus Mozart (Composer, pianist).


Each child with autism has their style of art which presents the inner world of an autistic person. Many famous artists have autism. One of them is Stephen Wiltshire who is a British architectural artist & autistic savant. He is famous for his ability to draw a landscape from memory after seeing it just once. His work has gained worldwide popularity. In 2006, Wiltshire was made a Member of the Order of the British Empire for services to art.


These are just some of the areas where children with autism show superpowers, but there are many more. So let's start to think of autism as a blessing focusing on the superpowers of it.

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<https://www.patheos.com/blogs/scatteringsunshine/2017/11/autism-brings-you-superpowers/>







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Fig 5.5: Blog Show Page

### 5.4.3 Sign-in and Sign-up Page

#### Sign-in Page

Users and Admin can sign in using this page. Login Via Facebook and Google is also available so that users don't need to register manually



Sign In

Sign In with your social media account or email address

[f Sign In With Facebook](#) [G Sign In With Google](#)

Or

Email


Password

[Sign In](#)

[Forget email or password?](#)


[create an account](#)

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Figure 5.6: Login Page

#### Sign-up Page

Users can register using this page. Register Via Facebook and Google is also available so that users don't need to register manually



Register

Register with your social media account or email address

[f Register With Facebook](#) [G Register With Google](#)

Or

Username

Email


Password

Confirm Password

[Sign up](#)


[Already have a account? Login Here](#)

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Figure 5.7: Sign-up Page



## 5.4.4 Category Page

Users can register using this page. Register Via Facebook and Google is also available so that users don't need to register manually

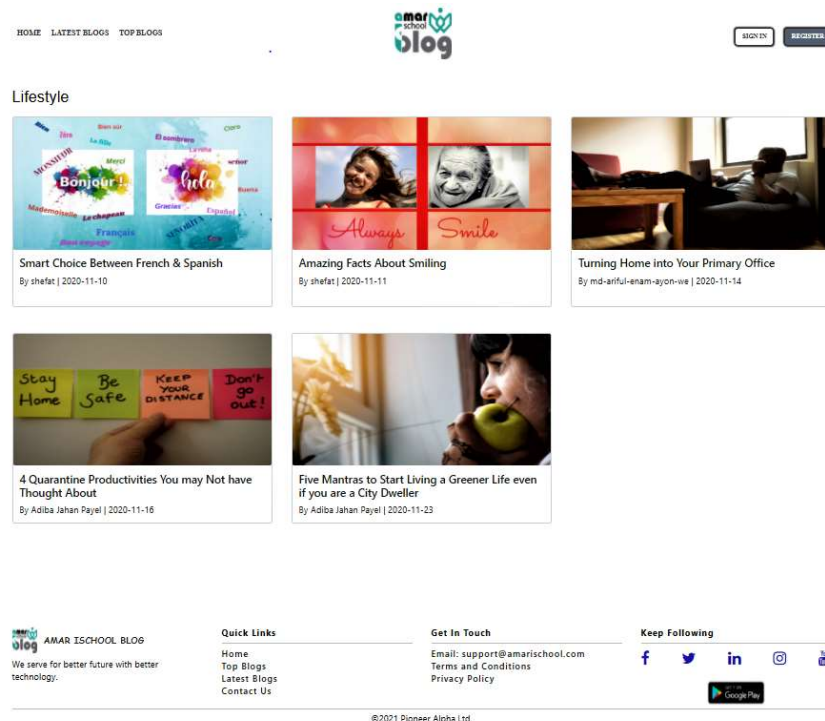


Figure 5.8: Category Page-Lifestyles

## 5.4.5 Top Blog Page

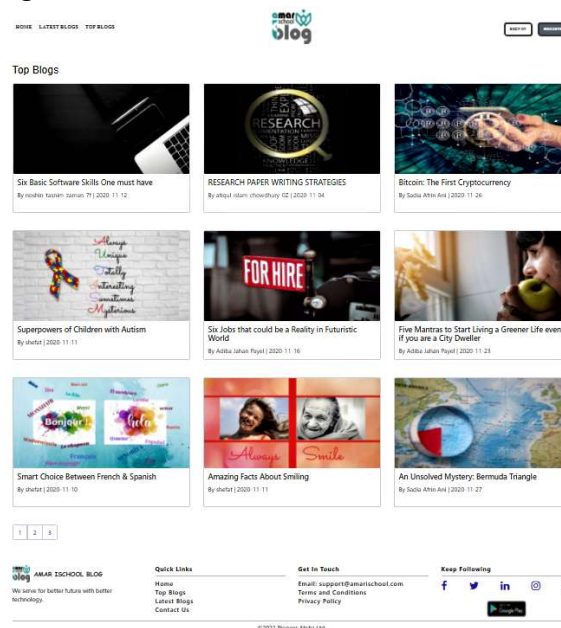




Fig 5.9: Top Blog Page

# 5.4.6 User Dashboard

[HOME](#) [LATEST BLOGS](#) [TOP BLOGS](#)





**Faisal Siddiquee** Not Verified

Bio : Thankful

Status : User

[Write A Blog](#) [Edit Profile](#)

SOCIAL LINK:  
[f](#) [t](#) [i](#)

About


All Blogs

Published

Pending


Rejected

User Name	Faisal Siddiquee
Name	Faisal Siddiquee
Email	
Phone	01718373438
Gender	Male
Birthdate	1995-09-04
Blood Group	A+
Profession	Student
Institute Name	Independent University , Bangladesh

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Fig: 5.10: User Dash Board

# 5.4.7 Edit Profile


## Edit Your Profile



First Name:

Last Name:

Gender:

Select your gender 

Phone Number:

Date Of Birth:

01/10/2021 

Institute Name:

Profession:

Facebook URL:


Twitter URL:

Instagram URL:

Blood Group:

Choose A Blood group 

Bio:

Write something about yourself here... 


Submit


Cancel

Fig 5.11: Edit Profile Page


## 5.4.8 Write Blog Page

[HOME](#) [LATEST BLOGS](#) [TOP BLOGS](#)
















UPLOAD BLOG COVER PHOTO




File Edit View Insert Format Tools Table Help

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P 0 WORDS. POWERED BY TINY







Choose a category:

Tags :

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Fig 5.12: Write Blog Page

# 5.4.9 Admin Page

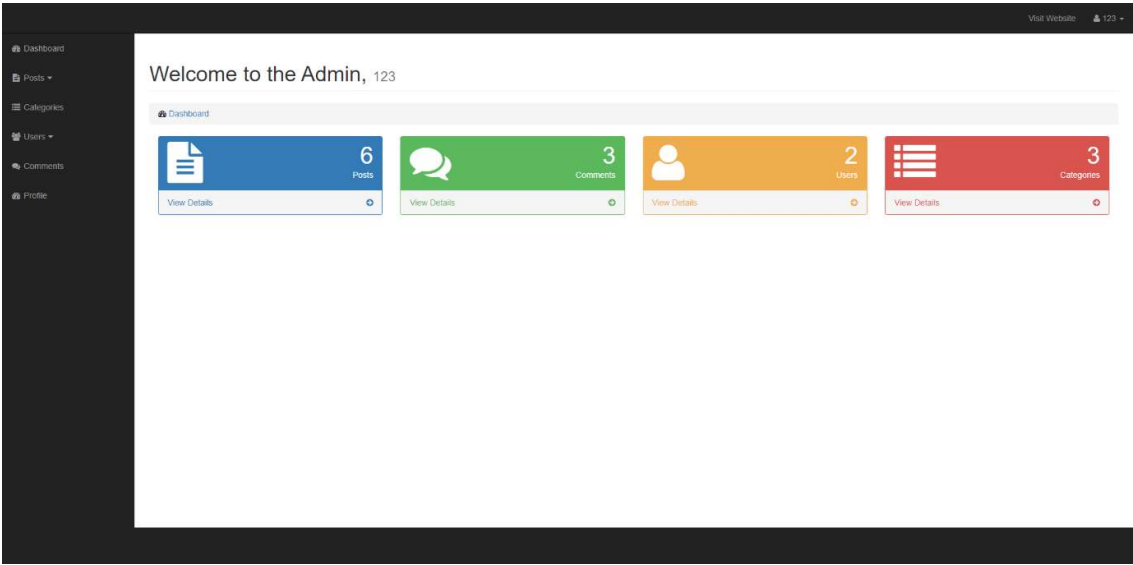


Fig 5.13: Admin Dashboard

# Chapter 6

## Results & Test Analysis

Testing is a procedure to check whether the actual software product matches probable requirements and to make sure that the software product is seamless. The purpose of software testing is to detect errors, breaks or missing requirements in comparison to actual requirements.

### 6.1 Test Case

Test task name	Purpose	Precondition	Test Steps	Expected result	Actual Result	Status	Remarks
Admin Login	Check if the login is successfully done.	Admin must have a device like desktop, laptop, smartphone with net connection.	1) Validate the admin input email address & password. 2) Click to submit button	If Admin input correctly website will logged into the admin panel Otherwise show error message	Software will logged in successfully	Pass	No Remarks

Table 6.1: Test Table for Admin login

Test task name	Purpose	Precondition	Test Steps	Expected result	Actual Result	Status	Remarks
User Registr ation	Check if the user registration is successfully.	User must have a device like desktop, laptop, smartphone with net connection.	1) Validate the user input email address & password.  2)Click to Registration button	If User input correctly the user will redirect into the admin panel Otherwise show error message	Software will logged in successfully	Pass	No Remarks

Table 6.2: Test Table for User registration

Test task name	Purpose	Precondition	Test Steps	Expected result	Actual Result	Status	Remarks
User Login	Check if the login is successfully done.	User must have a device like desktop, laptop, smartphone with net connection.	1) Validate the user input email address & password.  2)Click to submit button	If User input correctly user will redirect into the user panel Otherwise show error message	Software will logged in successfully	Pass	No Remarks

Table 6.3: Test Table for User login

Test task name	Purpose	Precondition	Test Steps	Expected result	Actual Result	Status	Remarks
Edit/ Delete User Profile	Check if the admin login is successfully done.	1) Admin must login into the website.  2) Visit the admin panel there will be an option	1) Click "edit" or "delete" button a form will appear. 2) The old data will be shown on the input field 3) Need to click edit button to change	Can check the change in the information  The page will redirect into the main page or list view.	Website will show "updated is successfully done" message and go to the admin dashboard	Pass	No Remarks

Table 6.4: Test Table for Edit/ Delete User

Test task name	Purpose	Precondition	Test Steps	Expected result	Actual Result	Status	Remarks
Approve pending blog posts	Check if admin can approve pending blogs	Admin must login into the website  Visit the admin panel, there will be an approve option	1) Admin have to select user's blog  2) Click to approve the blog	If admin approve the blog, Blog will be approved	Software will approve successfully	Pass	No Remarks

Table 6.5: Test Table for Approve pending blogs



Test task name	Purpose	Precondition	Test Steps	Expected result	Actual Result	Status	Remarks
Approve pending blog comments	Check if admin can approve pending comments	Admin must login into the website  Visit the admin panel, there will be an approve option	1)Admin have to select user's comment  2) Click to approve the comment	If admin approve the comment, comment will be approved	Software will approve successfully	Pass	No Remarks

Table 6.6: Test Table for Approve pending comments

## 6.2 Results

For justifying test cases there were few bugs found while running the software. Retrieving the data from the database, some issues came up. But most of the cases the procedure runs smoothly. There was some issue with responsiveness but after a few tests, the issue got resolved. The main task of this project is to write blogs post comments by the user and the admin can approve them Fortunately, this task runs without any flaw. After getting the issues and bugs, I tried to go over through all the problems and fix the code.

# Chapter 7

## Project as Engineering Problem Analysis

### 7.1 Sustainability of the Project/Work

The use of mobile smartphones and the internet, among all classes of people, have increased drastically in Bangladesh over the last decade. The growth suggests that the use would increase even further in the future. People post their thoughts online using blogs. A blog is an individual's digital portal to share current passion online. It's text and multimedia without ink stains or social media distractions. From a company's perspectives, Blogging is also the perfect way to establish a brand voice, becoming recognizable to customers and growing loyalty. A great blog shows that a brand has its own unique personality, has tons of interesting information to knowledge-drop, and is worth spending time with. Amari Blog advocates for such a significance, securing its sustainability.

### 7.2 Social and Environmental Effects and Analysis

The most important Effect of Amari Blog on a social level is the ability to create individual and business network. One of the mistakes young entrepreneurs and the unemployed make; they're not networking enough, so building a blog could be a ticket to finding unique opportunities and even landing a job. Field specific blogs help individuals attract potential employers or even sponsors. Collaboratively, it is sensational. Blogging has both Social and Environmental Effects. An individual doesn't need to wait for someone to write an article, column or journal about the topic that interests that particular individual, it can be self-done. Blogging is a great way to not only build on writing skills, but also a way of getting feedback. Blogging can help individuals to become influencers which ultimately leads to create an impact on social and environmental levels.

### 7.3 Addressing Ethics and Ethical Issues

Since Amari Blog is a blog site, it has very limited ethical issue. People might portray a lot of their inner thoughts through this blog. Some of these thoughts might be sensitive and inappropriate. In order to handle this kind of situation, Pioneer Alpha Ltd has a dedicated team of admins to review blog posts and comments on these posts. A blog post and comment post is reviewed by the admin in the admin panel before it gets published. There is also system for blocking a user for a particular time. The user also gets notified about the reason for which he /she was banned in the first place. Amari Blog is a full-fledged system that has almost none ethical issue.

# Chapter 8

## Future Work & Conclusion

### 8.1 Future Works

For the future update, I have some recommendations to improve the project. The system can be more user friendly and more dynamic. For the better user experience and faster response in the system, they can change the UI and UX design and maintain it. The user experience will get faster.

The privacy related concerns that we also conceived of also entailed the addition of implementing an end-to-end encryption in the future. These two additions are organic ones, a smooth transition from the current working prototype, which will be the first to be addressed for the next working prototype and eventual build of our application. Only after an encryption system has been added however, do we also plan on adding a friend chat update.

Besides, more features can be added to the existing model. Currently, there is no video upload feature in the blogs which is an important feature and can be added in the future.

### 8.2 Conclusion

While developing the system a conscious effort has been made to create and develop a software package, making use of available tools, techniques and resources – that would generate a proper system for cases.

While making the system, an eye has been kept on making it as user-friendly.

As such one may hope that the system will be acceptable to any user and will adequately meet his/her needs. As in case of any system development process where there are a number of shortcomings, there have been some shortcomings in the development of this system also.

## 8.2.1 Achievements

The fruitfulness of this project was not just in the deployment of Amari-Blog, but also in seeing the final prototype function and operate as it was meant to. To highlight and as a reminder, the original objectives of Amari Blog was to provide the following features:

- Writing a blog
  - Publish
- Update blog
- Delete blog
- See blogs of other users
- Comment on blogs (must be logged in)
- passport Oauth2 for login/signup

Users now had the following features:

- Publish
- Pending
- Rejected

The significance of the addition of the features is to demonstrate the flexible scalability and versatile nature of the codebase. As many features may be added or removed as required/necessary as the app grows.

## 8.2.2 Limitations

While the project has been successfully launched, and its status is fully operational, there have been some last-minute tweaks which were missed. In particular, the following were planned which were not added:

- A more descriptive homepage
- The comment section could be more intuitive.
- A chat feature between users is an important feature what could have been added.

With the exception of the last feature of chatting however, the additions are minor compared to the entire functioning system, and therefore will be added in the near future.

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