



Module Title:

Second Year Project

Assessment Weightage & Type:

Second-Year Project Interim Report

Year and Semester:

2022 Autumn

Student Name:

Sarthak Bhattarai

London Met ID:

22072207

College ID:

NP05CP4A220112

Supervisor Name: Mr. Sagar Basnet

Title: Blog Management System

I confirm that I understand my coursework needs to be submitted online via MySecondTeacher under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.

Contents:

1 Introduction:	1
1.1 Blog Management System:	1
1.2 Current Scenario:	2
1.3 Project Scope:	3
1.4 End User:	4
1.5 Aims and Objectives:	5
2 Project Background:	6
2.1 Tools and Technology used:	6
2.2 Project Development Methology:	7
2.3 Review of similar project:	10
2.3.1 Blogger.com:	10
2.3.2 Comparison between systems:	11
3 Project Development:	12
3.1 Requirement Gathering:	12
3.2 Use Case:	13
3.3 SRS:	14
3.3.1 Introduction:	14
3.3.2 Functional Requirements:	14
3.3.3 Non-Functional Requirements:	14
3.3.4 System Architecture	15
3.4 Wireframes:	17
3.5 ERD:	23
4 Analysis of Project:	24
4.1 Gantt Chart:	25

5 Future Tasks:	26
6 References	27
7 Project as a solution:	28
7.1 User-Friendly Interface:	28
7.2 Content Management:	28
7.3 Analytics and Insights:	28
7.4 Search Engine Optimization (SEO):	28
7.5 Technology Stack:	28

Figures:

Figure 1: RUP methodology (infostride, 2023).	8
Figure 2: Blogger.....	10
Figure 3: Use case.	13
Figure 4: Login page wireframe.....	17
Figure 5: Register page wireframe.	18
Figure 6: Create blog wireframe.....	19
Figure 7: Read all blogs wireframe.....	20
Figure 8: Read individual blog wireframe.	21
Figure 9: Edit blog wireframe.	22
Figure 10: ERD.	23
Figure 11: Gantt Chart.....	25

Tables:

Table 1:Analysis of Project.....	24
----------------------------------	----

1 Introduction:

1.1 Blog Management System:

Blog Management System is an easy-to-use web application for blogging and content creation. It allows you to effectively manage and improve your online presence. The Blog Management System gives you a central and well-structured place to manage different aspects of blogging. It makes it easier for you to create, update, and improve your content.

With features specifically designed for bloggers, it makes content management easy, publishing, updating, and organizing your blog posts a breeze. It also provides tools to improve your blog's visibility and reach, so you can better engage with your audience. The Blog administration System promises to simplify the blogging experience by providing an accessible interface, allowing writers to focus on writing great content while the platform handles blog administration practicalities. This web application aims to provide a comprehensive solution for bloggers to prosper in the online world, whether it & tracking metrics, scheduling articles, or modifying the layout of the blog.

1.2 Current Scenario:

Imagine having a special website where you can write about anything you love and share it with the world. It's like your own online diary, but with superpowers. You can make your writing look cool with bold or fancy text, add pictures or videos to spice things up, and even include links to other cool stuff you've found online. What's more, this website helps more people find your posts by making them easier to find on Google and other search engines. So, whether you're writing about your favourite recipes, sharing fashion tips, or discussing the latest trends, more people can discover your awesome content!

But that's not all, you can also connect with other users on the website, making friends and supporting each other's creative endeavours. You can read their posts, leave comments, and cheer each other on. It's like joining a big, friendly community where everyone shares their thoughts and ideas. Whether you're a seasoned blogger or just starting out, this website makes it super easy to share your passions and connect with others who share your interests.

1.3 Project Scope:

Project scope is the component of project planning that involves identifying and documenting specified project goals, deliverables, tasks, expenses, and deadlines (Lutkevich, 2024).

Easy Writing and Organizing: The system help you write and organize your blog posts easily. It's like having a tidy desk where you can keep all your writing in one place.

Simple Interface: It's designed to be easy to use, so you can focus on writing without getting stuck on technical stuff. It's like writing in a notebook – simple and straightforward.

Handling Boring Stuff: The system takes care of boring tasks like scheduling when your posts go live and keeping track of how many people read them. It's like having a personal assistant for your blog.

Getting Noticed: It helps your blog get noticed by more people by making it easier for them to find it. It's like putting up signs so people know where to find your awesome writing.

1.4 End User:

The end users of the Blog Management System could include:

Individual Bloggers: People who run personal blogs about their hobbies, interests, or experiences.

Professional Bloggers: Individuals or businesses who rely on blogging as part of their marketing or content strategy.

Content Creators: Writers, photographers, or videographers who use blogs to showcase their work and engage with their audience.

Small Businesses: Companies using blogs to promote their products or services and connect with customers.

Marketing Teams: Professionals responsible for managing and promoting content online, including blog posts.

Freelancers: Independent contractors who offer blogging services to clients and need a platform to manage multiple blogs efficiently.

Educators: Teachers or trainers who use blogs as part of their curriculum to share resources and interact with students.

Community Groups: Organizations or clubs that maintain blogs to communicate with their members and the public.

1.5 Aims and Objectives:

The aims and objectives of the blog management system are given below:

Aims:

- To simplify the process of creating, managing, and promoting blog content.
- To provide a user-friendly interface for bloggers of all levels.
- To improve the visibility and reach of blogs through effective management tools.
- To streamline administrative tasks associated with blog maintenance.
- To foster engagement and interaction between bloggers and their audience.

Objectives:

- To develop a user-friendly platform with intuitive navigation and design.
- To enable easy creation, editing, and organization of blog posts.
- To implement tools for search engine optimization (SEO) to enhance blog visibility.
- To incorporate features for scheduling posts and tracking performance metrics.
- To facilitate communication and interaction among bloggers and readers through comments and social media integration.
- To provide comprehensive support and resources for bloggers to succeed in their online endeavours.

2 Project Background:

2.1 Tools and Technology used:

The tools and technology used in this project are given below:

Frontend:

HTML: It's like the skeleton of a webpage, providing the basic structure.

CSS: Think of it as the makeup for the webpage, making it look pretty with colours and styles.

Bootstrap: It's like using pre-made tools to make sure the webpage looks good on different devices, like phones and computers.

Backend:

Node.js: This is like the engine behind the scenes, handling all the requests and making things work smoothly.

Express.js: It is a framework of node.js which is like a helper that makes it easier to build the website, saving time and effort.

Database:

MySQL: Imagine a big filing cabinet where all the information for the website is stored, like user profiles and blog posts. MySQL helps keep everything organized and easy to find.

2.2 Project Development Methodology:

For the development of this project, I have decided to implement RUP (Rational Unified Process) methodology. Rational, a part of IBM, developed the RUP software development method. Business modelling, analysis and design, implementation, testing, and deployment are all included in the four main phases that make up the development process. (TechTerms, 2023) The four phases in RUP are:

- **Inception:**

The project's concept is articulated. The development team decides what resources will be required and if the project is worthwhile to pursue. (TechTerms, 2023)

- **Elaboration:**

The architecture of the project and the resources needed are assessed further. The expenses related to development as well as potential uses for the program are considered by developers. (TechTerms, 2023)

- **Construction:**

Construction is the phase where the development and implementation of code takes place, and the actual work starts. In this phase source code is written and testing is done also, the debugging of any errors is done. (Geeks for geeks, 2023)

- **Transition:**

It is the phase where the project is deployed for use. The final documentation of the project is written for future reference as well. The maintenance of the project is also carried out in this phase. (Geeks for geeks, 2023)

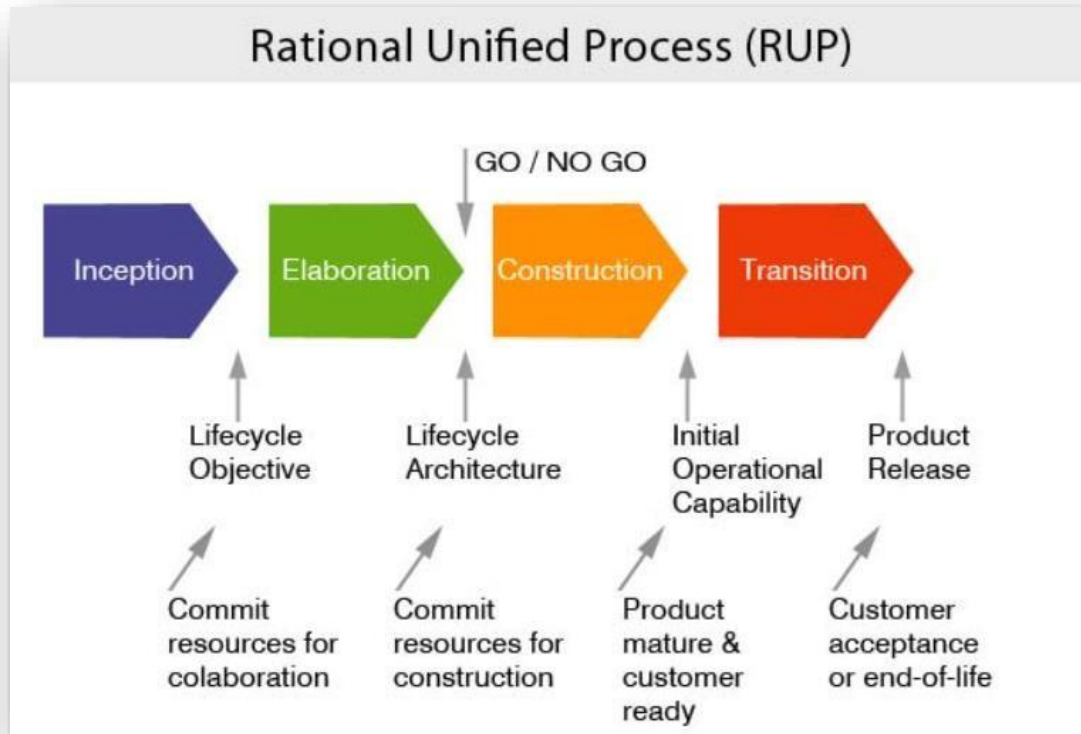


Figure 1: RUP methodology (infostride, 2023).

The reasons behind me choosing RUP Methodology are as follows:

- RUP provides a structured and disciplined approach to software development to help ensure that the project is completed on time, within budget, and with the expected quality.
- A crucial element of RUP is risk management, which helps identify and address potential project hazards early in the development process.
- Because RUP uses an architecture-centric methodology, you develop and refine the system's architecture before developing any specific features. By doing this, you can guarantee that the design of the system is strong and adaptable enough to accommodate changes in the future.

- RUP emphasizes incremental and iterative development heavily, allowing you to regularly provide your stakeholders with workable versions of your project.

2.3 Review of similar project:

2.3.1 Blogger.com:

Blogger.com is a blogging web-based application which helps the user to post the blogs, edit it and delete as per your wish.

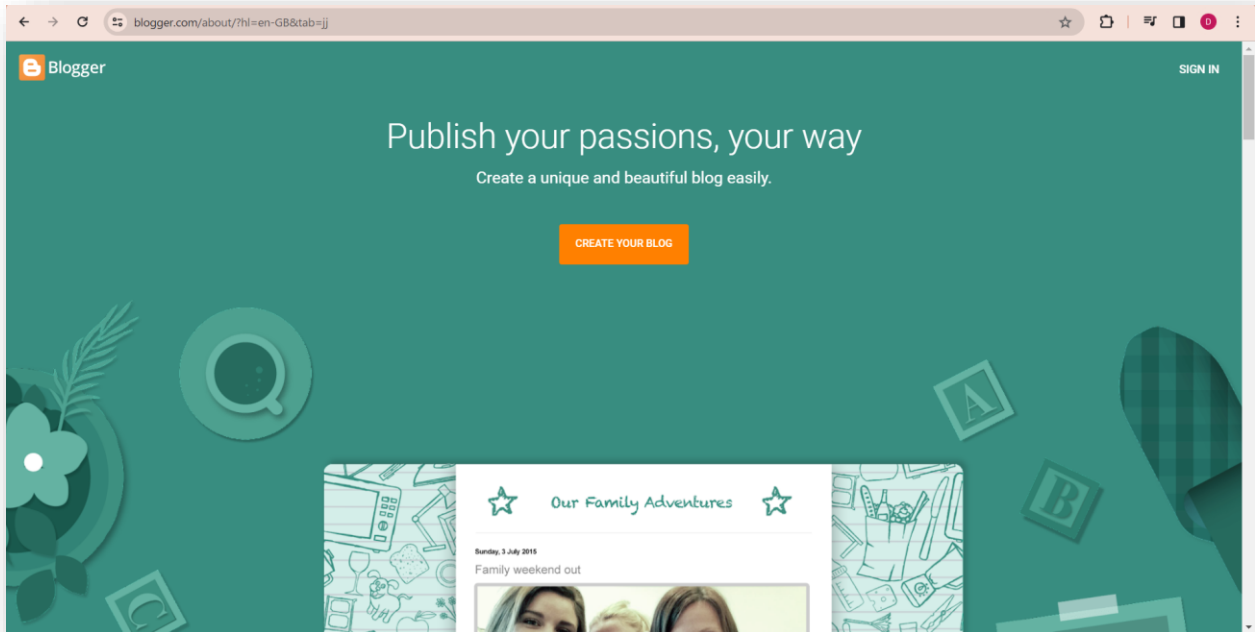


Figure 2: Blogger.

2.3.2 Comparison between systems:

Features	Blog Management System	Blogger
Login	Yes	Yes
Registration	Yes	Yes
Customization	Yes	Yes
Interaction and Engagement	Yes	Yes
Support for multimedia	Yes	Yes
Social media integration	No	Yes
Content Creation and Management	Yes	Yes

3 Project Development:

Project development involves organizing and arranging all the elements that go into a project, such as selecting resources, generating a budget, and assigning duties to team members. It also includes the processes required to accomplish a project, such as revising plans as the project progresses and finding areas for improvement to ensure the project runs smoothly. Typically, project managers follow five processes in project development: initiation, planning, execution, controlling, and closing (indeed, 2023).

3.1 Requirement Gathering:

The Blog management system requirements were acquired through online surveys and direct encounters with users. The requirement gatherings for the project are given below:

Online surveys:

An online survey was conducted using Google Forms to gather input from the public regarding their blogging preferences and requirements. More than 30 responses were received from the online survey participants, providing valuable insights into user expectations and desired features for the Blog Vibes platform.

Direct Interactions:

Direct interactions were conducted with a sample group of potential users to better understand their individual needs and preferences in a blogging platform. These interactions yielded valuable feedback and suggestions, which helped refine the project requirements.

Summary of Findings:

The online surveys and direct interactions helped me to find out how many problems are there and how can the problems be solved and what kind of features should be used.

Conclusion:

The requirement collecting procedure for the Blog Management System revealed user preferences and expectations for the blogging platform. The findings will help build useful features and functionalities for the target audience.

3.2 Use Case:

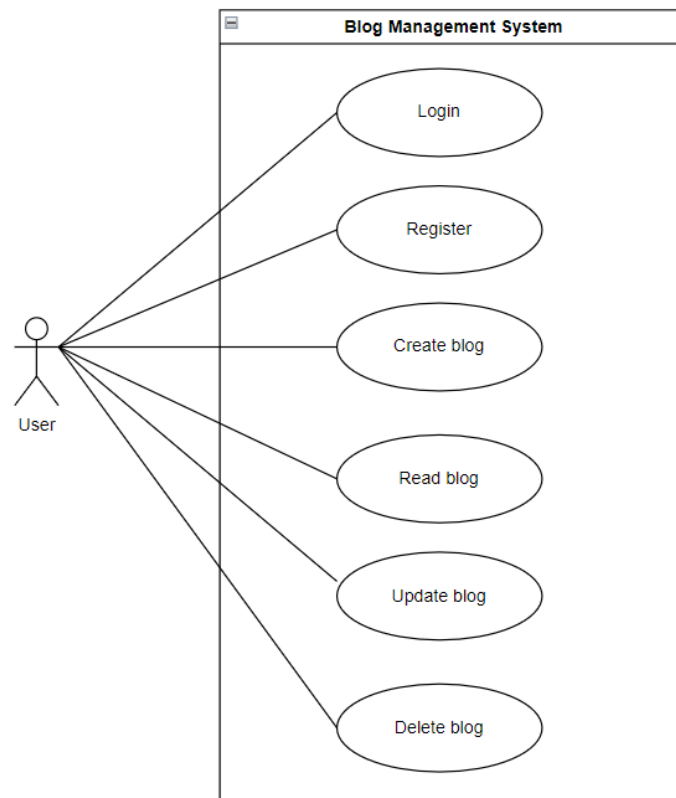


Figure 3:Use case.

3.3 SRS:

3.3.1 Introduction:

The Blog Management System is a web application designed to simplify the process of creating, managing, and promoting blog content. It provides an intuitive platform for bloggers to write, edit, and publish blog.

3.3.2 Functional Requirements:

- **User Management:**

- The system shall support user registration and authentication.
- Users shall be able to create, update, and delete their blogs.

- **Blog Post Management:**

- Users shall be able to create new blog posts with a title, content, and optional images.
- The system shall support rich text editing features for formatting content.
- Users shall have the ability to save drafts of posts and schedule posts for future publication.
- Blog posts shall be categorized and tagged for easy organization and navigation.

- **Search Engine Optimization (SEO):**

- The system shall support metadata customization for optimizing posts for search engines.
- Users shall have access to tools for improving the visibility and ranking of their blog posts in search engine results.

3.3.3 Non-Functional Requirements

- **Usability:**

- The system shall have a user-friendly interface with intuitive navigation and clear instructions.
- Response times for user interactions shall be kept to a minimum to ensure a smooth user experience.
- **Performance:**
 - The system shall be able to handle many concurrent users without significant degradation in performance.
 - Page loading times shall be optimized to ensure fast access to content.
- **Security:**
 - User authentication and authorization shall be implemented to prevent unauthorized access to sensitive features and data.
 - Measures shall be in place to protect user data and prevent security breaches, such as encryption of passwords and secure transmission of data.
- **Scalability:**
 - The system architecture shall be designed to accommodate future growth in user base and content volume.
 - Scalability measures shall be implemented to ensure the system can handle increased traffic and data storage requirements.

3.3.4 System Architecture

- **Frontend:**

The frontend shall be developed using HTML, CSS, and Bootstrap for responsive design. JavaScript shall be used for client-side interactions and dynamic content rendering.

- **Backend:**

The backend shall be built using Node.js and Express.js for server-side logic and routing. MySQL shall be used as the database management system for storing user data, blog content, and metadata.

3.4 Wireframes:

3.4.1 Login:

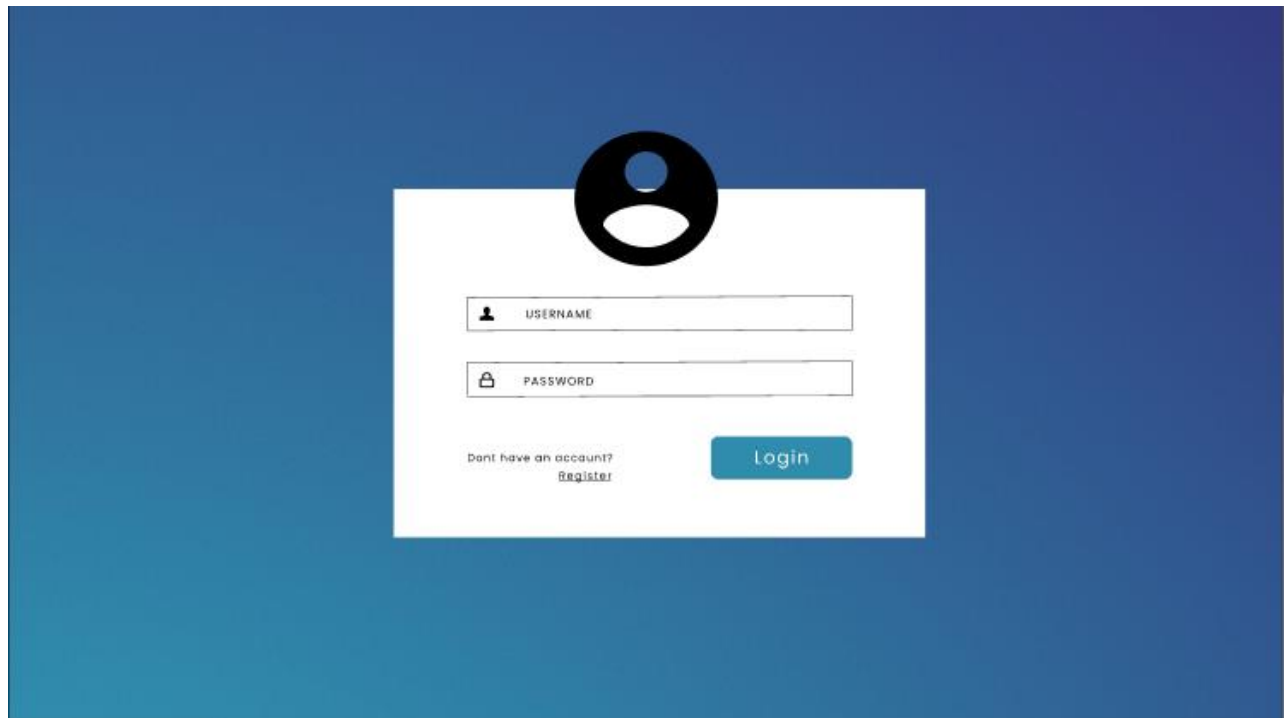
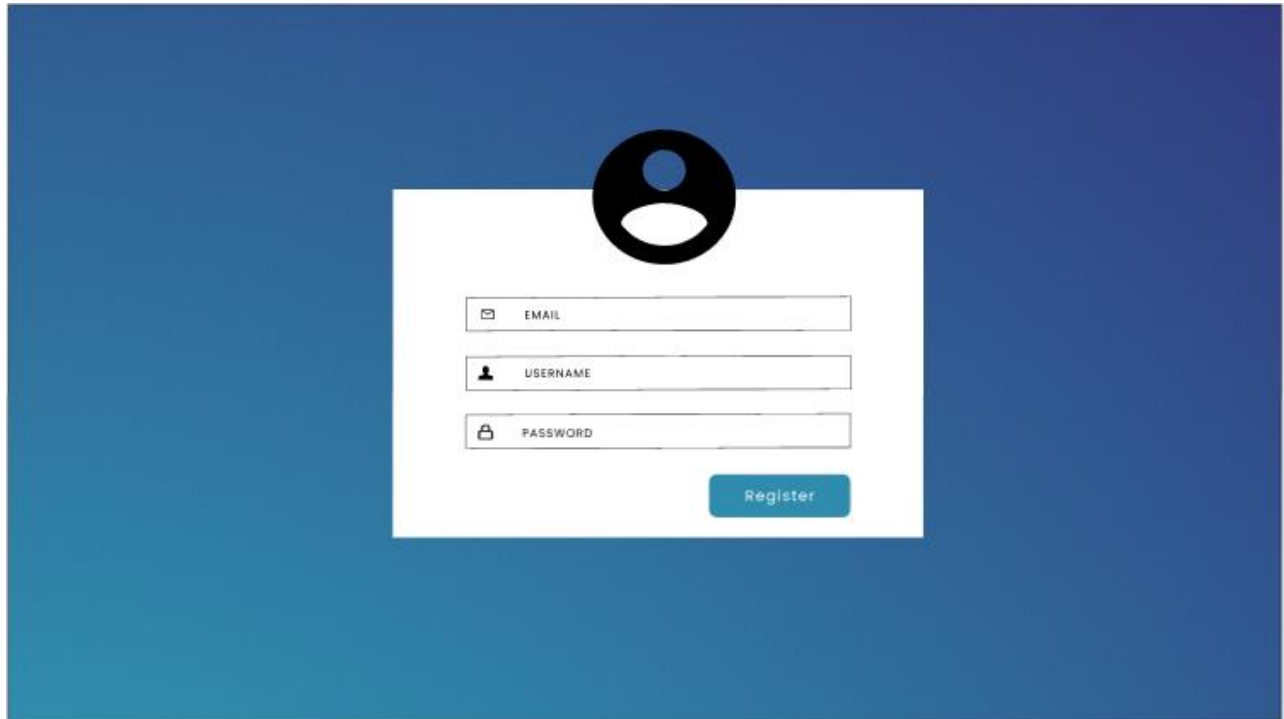


Figure 4:Login page wireframe.

3.4.2 Register page:



A wireframe of a registration page. The background is a blue gradient. In the center is a white rectangular box. At the top of this box is a black circular icon representing a user profile. Below the icon are three input fields, each with a small icon on the left and a label on the right: an envelope icon for 'EMAIL', a person icon for 'USERNAME', and a lock icon for 'PASSWORD'. To the right of these fields, within the same white box, is a blue button with the word 'Register' in white text.

Figure 5: Register page wireframe.

3.4.3 Create Blog:

[Create Blog](#) [All Blogs](#) [User Blogs](#) 

Blog Title

Blog Subject

Blog Date

Blog Image

Blog Description



Create

Figure 6:Create blog wireframe.

3.4.4 Read Blog:

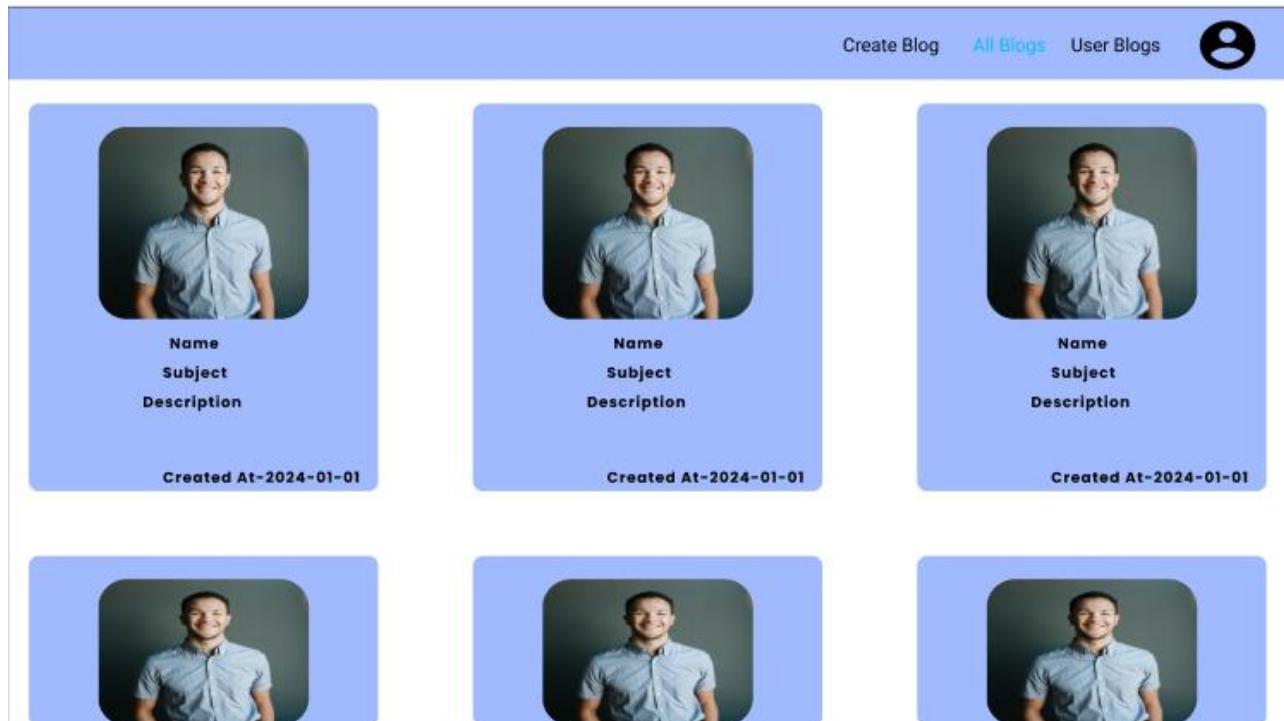



Figure 7:Read all blogs wireframe.

SECOND YEAR PROJECT



Figure 8: Read individual blog wireframe.

3.4.5 Update Blog:

[Create Blog](#) [All Blogs](#) [User Blogs](#) 


Blog Title

Blog Subject

Blog Date

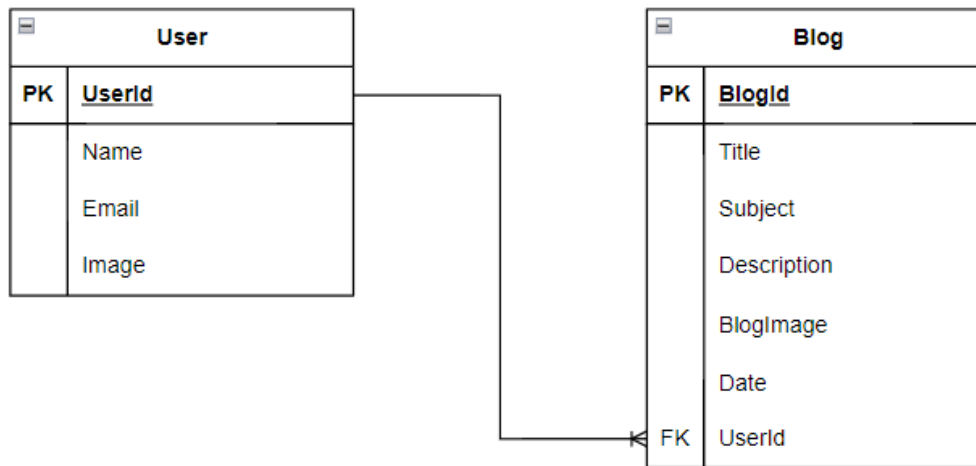
Blog Image

Blog Description



Update

Figure 9:Edit blog wireframe.

3.5 ERD:*Figure 10:ERD.*

4 Analysis of Project:

This section includes the development of the projects as well as progress made In it which are given below:

SN	Tasks	Status	Progress
1	Project Initiation	Completed	100%
2	Requirement Gathering	Completed	100%
3	User Authentication and Registration	Completed	100%
4	CRUD Operations for Blog Posts	Completed	100%
5	User Profile Management	Completed	100%
6	Basic User Interface Design	Completed	100%
7	Backend Development	In process	60%
8	Frontend Development	In process	60%
9	Testing and Quality Assurance	Not Completed	0%
10	Deployment and Hosting	Not Completed	0%
11	Finalizing Documentation	Not Completed	0%

Table 1:Analysis of Project.

SECOND YEAR PROJECT

4.1 Gantt Chart:

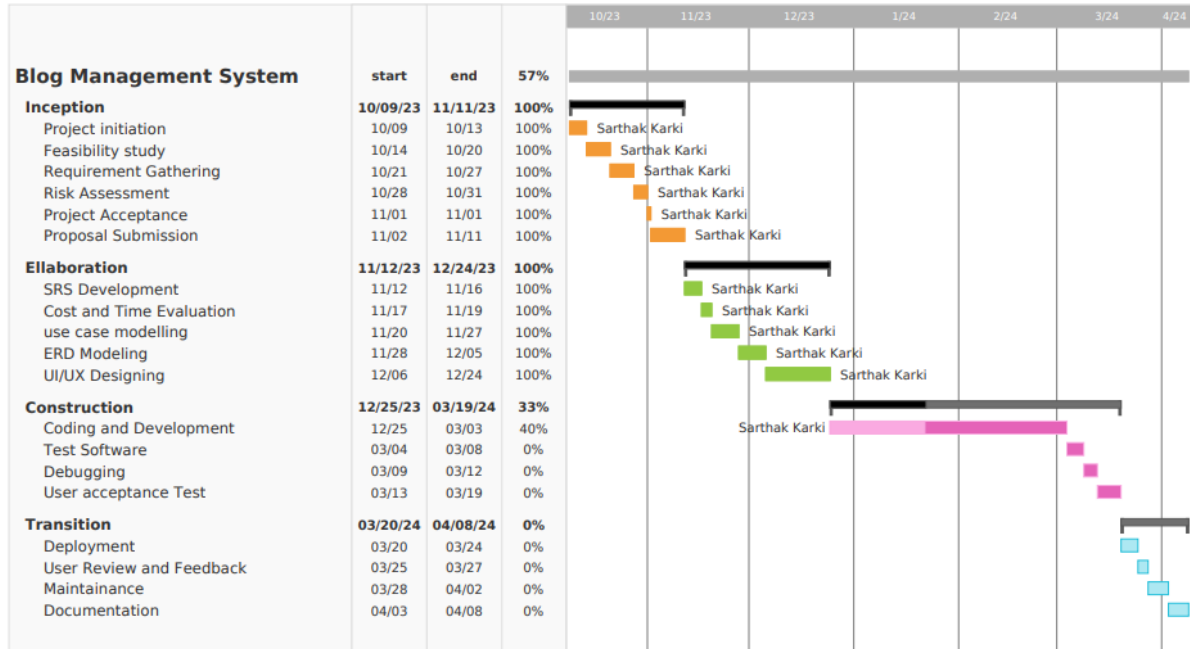


Figure 11:Gantt Chart.

5 Future Tasks:

- Frontend development and backend development need to be completed.
- Testing and quality assurance.
- Deployment and hosting.
- Finalizing documentation.

6 References

indeed, 2023. *indeed*. [Online]

Available at: <https://www.indeed.com/career-advice/career-development/project-development>

[Accessed 02 02 2024].

Lutkevich, B., 2024. *techtarget*. [Online]

Available at: <https://www.techtarget.com/searchcio/definition/project-scope>

[Accessed 29 01 2024].

7 Project as a solution:

7.1 User-Friendly Interface:

- Intuitive and easy-to-use interface for bloggers of all levels.
- Simple menus and navigation for effortless access to features.

7.2 Content Management:

- Robust system for creating, editing, and organizing blog posts.
- Rich text editor with formatting options for enhanced content presentation.

7.3 Analytics and Insights:

- Comprehensive analytics dashboard for tracking post-performance.

7.4 Search Engine Optimization (SEO):

- Built-in tools for optimizing blog content for search engines.

7.5 Technology Stack:

- Frontend: HTML, CSS, JavaScript, Bootstrap.
- Backend: Node.js, Express

