Phase 1 — Problem Understanding & Requirements

1. Problem Statement

In the digital era, individuals and organizations need a platform to share ideas, knowledge, and opinions. Existing blogging platforms may be complex or lack features for beginners. Therefore, the goal is to build a simple and user-friendly blog site with a comment section that allows users to publish blog posts, interact with readers, and encourage community engagement. This project aims to design a lightweight but effective blogging solution that balances usability, functionality, and scalability.

2. Users & Stakeholders

- Primary Users: • Bloggers/Authors – to create, edit, and publish blog posts. • Readers/Visitors – to view posts and add comments. - Secondary Users/Stakeholders: • Site Administrator – to manage users, posts, and moderate comments. • Developers/Designers – responsible for building and maintaining the platform. • Future Monetization Partners – advertisers or sponsors.

3. User Stories

- As a blogger, I want to create and publish blog posts so that I can share my ideas. - As a reader, I want to read blog posts and leave comments so that I can engage with the content. - As a blogger, I want to manage (edit/delete) my posts so that I can keep content relevant. - As a reader, I want to view posts with proper formatting (title, date, tags) so that I can easily understand the context. - As an admin, I want to moderate comments to prevent spam and inappropriate content.

4. MVP Features

- User-friendly blog post creation (title, content, tags, images). - Blog post listing with title, date, and author. - Comment section under each blog post. - Basic user authentication (sign up/login/logout). - Admin moderation of comments. - Responsive UI (desktop & mobile).

5. Wireframes / API Endpoint List

Wireframes (high-level idea): - Homepage: Displays list of blog posts. - Blog Post Page: Full content + comment section. - Login/Register Page: For authentication. - Admin Dashboard: Manage posts and comments. API Endpoint Examples: - POST /api/register → Create a new user. - POST /api/login → Authenticate user. - GET /api/posts → Fetch all blog posts. - POST /api/posts → Create a new blog post. - GET /api/posts/{id} → Fetch single post. - POST /api/posts/{id}/comments → Add a comment. - DELETE /api/comments/{id} → Delete comment (admin).

6. Acceptance Criteria

- Users should be able to sign up, log in, and log out successfully. - Bloggers should be able to create, edit, and delete posts. - Posts should display with title, author, date, and content. - Readers should be able to add and view comments under posts. - Admin should be able to approve or delete comments. - The system should be responsive and easy to navigate.

Detailed Elaboration

This section provides extended explanations, design considerations, and additional notes to ensure the blog site with comment section is well-defined. The focus is on scalability, user experience, and long-term maintainability. Further sections will cover design trade-offs, security aspects such as input validation and authentication, and future enhancements like rich text editors, media uploads, and advanced analytics.