Project Requirement Document (PRD)

Prisma Blog Application

1. Introduction

1.1 Purpose

This document defines the functional and non-functional requirements for the **Prisma Blog Application**.
The goal is to build a secure, role-based blogging platform that supports modern authentication, content creation, and admin moderation using **Prisma ORM**.

1.2 Scope

The system will allow users to:

- Register and log in using Email/Password or Google OAuth
- Create, update, and delete their own blog posts
- Comment on blog posts

Admins will:

- Manage all blog posts
- Moderate comments by approving or rejecting them

2. User Roles & Permissions

Role	Description	Permissions
Visitor	Not logged in	View published posts
User	Registered user	Create/manage own posts, comment
Admin	Platform moderator	Manage all posts, approve/reject comments

3. Functional Requirements

3.1 Authentication & Authorization

FR-1: User Registration

- Users can register using email and password
- Email must be unique
- Password must be securely hashed

FR-2: User Login

- Users can log in using:
    - Email & password
    - Google OAuth

- If a Google user does not exist:
    - The system must automatically create an account

FR-3: Role-Based Access Control

- Authorization must be enforced at API level
- Users can access only their own resources
- Admins can access all resources

3.2 User Management

FR-4: User Profile

Each user account must store:

- Name
- Email
- Role (User / Admin)

3.3 Blog Post Management

FR-5: Create Post

- Authenticated users can create a blog post
- Required fields:
  - Title
  - Content

FR-6: Update Post

- Users can update **only their own posts**
- Admins can update any post if needed

FR-7: Delete Post

- Users can delete their own posts
- Admins can delete any post

FR-8: View Posts

- All users can view published posts
- Post metadata must be visible (author, date)

3.4 Comment Management

FR-9: Create Comment

- Authenticated users can comment on published posts
- New comments are created with status **APPROVED**

FR-10: Comment Moderation

- Admins can:
  - Approve comments
  - Reject comments

FR-11: Comment Visibility

* Only **Approved** comments are publicly visible

4. Non-Functional Requirements

4.1 Security

* Secure Authentication
* Prevent unauthorized access to APIs

4.2 Performance

* APIs must respond within acceptable time limits
* Pagination for posts

4.3 Scalability

* Database schema must support growth
* Clean Prisma relations and indexing

4.4 Maintainability

* Modular project structure
* Clear separation of concerns
* Prisma migrations for schema changes

5. Database Requirements

5.1 ORM

* Prisma ORM must be used

5.2 Database

* PostgreSQL (relational database)