

Blog Project - Documentation

Project Structure

```
BlogProject/
├── public/                # Public static files
│   ├── css/
│   │   └── style.css      # Custom styling
│   ├── images/           # UI icons
│   │   ├── comment.jpg
│   │   ├── edit.jpg
│   │   └── logo.jpg
│   └── uploads/          # Uploaded files/images
├── views/                # EJS template files
│   ├── pages/
│   │   ├── index.ejs     # Homepage
│   │   ├── articles.ejs  # Blog article listing
│   │   ├── details.ejs   # Single article page with comments/edit
│   │   └── newpost.ejs    # Form to add a new blog post
│   └── partials/
│       ├── header.ejs    # Reusable header
│       ├── footer.ejs    # Reusable footer
│       └── menu.ejs      # Sidebar/menu
├── app.js                # Main server-side app (Node.js + Express)
└── README.md             # Project info and setup instructions
```

Core Functionalities

View Blog Articles

- Lists all published blog posts.
- Each article links to a detailed view page.

Add New Blog

- Accessible via a form (newpost.ejs)
- Uses Quill editor to enter rich HTML content.
- Tags are added as comma-separated values.

Edit Blog

- Opens a modal with pre-filled data.
- Uses Quill editor again for in-place rich editing.
- Submits changes back to the server.

Post Comments

- Each article has a modal to submit comments.
- Comments are displayed below the blog content.
- Uses HTMX to update the comment list dynamically without refreshing the whole page.

Uploads and Images

- uploads/ folder stores any attached content.
- Static assets like icons are inside public/images.

Technologies Used

| Technology | Purpose |
|----------------------------------|--|
| Node.js | JavaScript runtime for server-side logic |
| Express.js | Web framework to handle routing and middleware |
| MongoDB | NoSQL database to store blog posts, comments, and tags |
| Mongoose | ODM (Object Data Modeling) tool to interact with MongoDB using schemas |
| EJS (Embedded JavaScript) | Templating engine for rendering dynamic HTML pages |
| Bootstrap 5 | Responsive CSS framework for layout and design |
| HTMX | JavaScript library to enable AJAX-like behavior via HTML attributes |
| Quill.js | Rich text editor for creating and editing blog content |
| Express-fileupload | Middleware to handle file uploads (images/documents) |
| CSS | Custom styles for UI customization |