

TechBuddy Project Documentation

1. Project Plan

Project Name

- TechBuddy

Project Methodology

- Agile Methodology

Project Goal

The goal of TechBuddy is to provide users with a centralized platform to manage their image files efficiently. Leveraging the Cloudinary platform, users can securely store and manage their image assets. The project follows the Agile methodology to ensure flexibility and adaptability throughout the development process.

2. Project Requirements

Functional Requirements

1. **Authentication and Security:**

- APIs should be authenticated and secured using Spring Security 6.

2. **User Management:**

- Users should be able to create accounts.
- Users should be able to log in.

3. **File Management:**

- Users should be able to upload images to the Cloudinary platform.
- Users should be able to view images uploaded to the Cloudinary platform.
- Users should be able to update the description of image assets.

Non-Functional Requirements

1. User Interface:

- The system should have a user-friendly interface to enhance user experience.

2. Performance:

- The system should load images quickly to provide a seamless user experience.

3. User Documentation

Getting Started

To get started with TechBuddy, follow these steps:

1. Create an account or log in if you already have one.
2. Navigate to the file management section to upload and manage your images.
3. Enjoy the centralized access to all your image files.

Account Management

- Creating an Account:

1. Click on the "**Register**" link.
2. Provide the required information.
3. Submit the registration form.

- Logging In:

1. Click on the "**Login here**" link.
2. Enter your credentials.
3. Click the "**Login**" button.

File Management

- Uploading Images:

1. Navigate to the "**Upload Asset**" section.
2. Select the images you want to upload.
3. Add descriptions if needed.
4. Click the "**Upload**" button.

- Viewing Images:

1. Go to the "**View Assets**" section.
2. Browse through your uploaded images.

- **Updating Image Descriptions:**

1. Hover over the image you want to edit.
2. Click on the description that will be displayed.
3. Modify the description.
4. Click the "*Update*" button.

4. Technical Documentation

Technologies Used

- **Backend:** Spring Boot 3
- **Frontend:** Thymeleaf template engine
- **Database:** MySQL
- **Testing:** JUnit
- **API Documentation:** Swagger
- **Security:** Spring Security 6, Basic Auth

Project Structure

- **Backend Structure:**

- The backend is developed using the Spring Boot framework.
- Spring Security is used for authentication and securing APIs.
- Cloudinary API is integrated for image file management.

- **Frontend Structure:**

- Thymeleaf is used as the template engine for the frontend.
- User interfaces are designed to be intuitive and user-friendly.

Testing

- JUnit is used for testing the backend functionalities.
- Automated tests ensure the reliability of critical components.

This documentation provides a comprehensive overview of the TechBuddy project, including its goals, requirements, user documentation, and technical details. Use this as a guide for development, testing, and user engagement.