

FILE TRACKING SYSTEM

A. FUNCTIONAL REQUIREMENTS:

a) **INTERFACE FOR RECORDING .**

- i. Icon for send.
- ii. Notification to the sender and the file receiver.
- iii. Time In and Out.

b) **Interface for recording personal details.(sender and receiver db)**

- I. file id.
- II. User id
- III. Tracking points.
- IV. .notification on file movement.

SYSTEM DESIGN.

ARCHITECTURE:

a) **FRONT END:WEB BASED INTERFACE.**

UI FOR TRACKING.

b.**BACKEND:**

- i. LOGIC FOR HANDLING FILE TRANSFER.
- ii. DATABASE.STAFF DETAILS.
- iii. PK OFFICE OF THE DIRECTOR.

COMPONENTS.

- i. User authentication and authorization. user login
- ii. Data storage –Cloud.
- iii. Tracking and login.
- iv. Notifications emails.
- v. UI: Dashboard

Implementation :

- i. Technology stack
- ii. Front end: Html ,CSS, Javascript.
- iii. Backend: node JS, Python and Java.
- iv. Database: Mysql.
- v. File storage :Google cloud storage.

FUNCTIONS

a. Upload file :

- i. End point to upload a file:
- ii. Store the file and the meta data.
- iii. Log the upload event.

b. Move a file

- i. .Functionality to move file between different storage
- ii. Log in movement.

c. Track the file.

- i. Dashboard to view file movement history.
- ii. Query the logs to display the file status and movement history.

Testing

- i. Unit testing:
- ii. Integration testing.
- iii. User acceptance Testing.

Deployment

- i. Backend on the server: AWS EC2
- ii. Frontend on the webserver. (Netlify and Vercel)
- iii. Ensure db is secure and accessible to the back end .

Maintenance

- i. Regular Update Dependencies and security patch
- ii. Monitor system performance and logs for issues.
- iii. Provide user support and handle feedback for improvements .

Prototype:

