

Requirement Gathering and Analysis Phase

Solution Architecture

Date	29-June-24
Team ID	SWTID1720075141
Project Name	House Hunt
Maximum Marks	4 Marks

SOLUTION ARCHITECTURE FOR HOUSE HUNT :

Components:

- **Clients (Users):** These represent the individuals or applications that interact with the file storage system to upload, download, manage, and access their files.
- **API Gateway:** Acts as a single entry point for API requests from clients or the web application.
- **Authentication Service:** Handles user login/registration and provides tokens for secure access to storage functionalities.
- **Authorization Service:** Determines user permissions for accessing or managing files and folders within the storage system.
- **Metadata Store:** Stores information about uploaded files, such as file names, sizes, timestamps, and potentially user-defined tags or descriptions.
- **Cloud Storage:** The central storage system where actual file data is persisted. This could be a distributed file system, cloud storage service (e.g., Amazon S3, Azure Blob Storage), or a combination of both.

Interactions:

- Clients interact with the web application or directly with the API Gateway using API requests.
- The API Gateway routes requests to the appropriate backend services (Authentication, Authorization).
- The Authentication Service verifies user credentials and provides tokens for authorized access.
- The Authorization Service determines if a user has the necessary permissions to perform the requested file operation (e.g., upload, download, delete).
- The File Transfer Service handles file uploads and downloads between clients and the object storage system.
- The Metadata Store stores and retrieves metadata associated with uploaded files.

SOLUTION ARCHITECTURE DIAGRAM FOR HOUSE HUNT :

