Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	26-05-2025
Team ID	LTVIP2025TMID53168
Project Name	House Hunt
Maximum Marks	4 Marks

Technical Architecture:

House Hunt is designed using a scalable **3-tier architecture**, ensuring a robust, maintainable, and scalable system:

1. **Presentation Layer (Frontend):**
   A responsive and user-friendly interface for tenants and landlords to browse listings, book visits, and manage profiles.

2. **Business Logic Layer (Backend):**
   Handles core functionalities such as user authentication, property listings, booking management, payments, and messaging.

3. **Data Storage Layer:**
   Stores all essential data including user profiles, property details, bookings, chat records, and payment transactions.

 Integration with third-party APIs is included for real-time notifications (SMS/email), map-based search, and digital payments.

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web/mobile-friendly interface for tenants & landlords	HTML, CSS, JavaScript / React Js etc.
2.	Application Logic-1	Booking, calendar, chat, and visit scheduling.	Node.js, Express.js
3.	Application Logic-2	Admin panel, user management, reporting	React js, Node js
4.	Database	User data, listings, visits, messages, payments	MongoDB

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
5.	Open-Source Frameworks	Frontend frameworks	React.js, Node.js, BootStrap, Tailwind CSS
6.	Scalable Architecture	3-tier architecture with RESTful APIs	Microservices

References:

React.js Documentation

Node js Best Practice

JSON Web Server Referance

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d