**Project Design Phase-II**

**Data Flow Diagram & User Stories**

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| Date | 25 -05-2025 |
| Team ID | LTVIP2025TMID55946 |
| Project Name | Docspot |
| Maximum Marks | 4 Marks |

**Data Flow Diagrams:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

**DFD Level 1: Appointment Booking System**

External Entities

1. Patient
2. Doctor/Healthcare Provider
3. Insurance Provider
4. Admin Staff

**Processes**

1. 1.0 Register/Login – Authenticates users securely
2. 2.0 Search & Select Appointment – Search doctors, view available slots
3. 3.0 Book Appointment – Confirms and stores booking details
4. 4.0 Notifications & Reminders – Sends alerts and updates
5. 5.0 Payment & Insurance Verification – Validates coverage and processes fees

**Data Stores**

* D1: User Database – Patient and doctor profiles
* D2: Appointment Schedule – Slots, bookings, waitlists
* D3: EHR System – Medical history and notes
* D4: Notification Queue – SMS/email alert system
* D5: Payment Records – Billing and insurance details

**Textual Layout of DFD**

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| --- |
| [Patient] ──> (1.0 Register/Login) ──> [D1: User Database] |
| └─> (2.0 Search & Select Appointment) ──> [D2: Appointment Schedule] |
| └─> (3.0 Book Appointment) ──> [D2] |
| └─> (4.0 Notifications & Reminders) ──> [D4: Notification Queue] |
| └─> (5.0 Payment & Insurance Verification) <── [Insurance Provider] |
| └─> (6.0 EHR/EMR Sync) ──> [D3: EHR System] |
|  |
| [Doctor] <──> (2.0) / (6.0) ──> [D3] |
|  |
| [Admin Staff] <──> (3.0, 5.0) ──> [D2, D5] |

**User Stories**

|  |  |  |
| --- | --- | --- |
| |  |  | | --- | --- | | P1 | As a patient, I want to search for available doctors by specialty and location so that I can find the most convenient care. | |
| |  |  | | --- | --- | | P2 | As a patient, I want to see available appointment times in real-time so that I can book the earliest slot. | |
| |  |  | | --- | --- | | P3 | As a patient, I want to receive reminders via SMS or email so that I don’t miss my appointment. | |
| |  |  | | --- | --- | | P4 | As a patient, I want to cancel or reschedule my appointment easily so that I can manage my time better. | |
| |  |  | | --- | --- | | P5 | As a patient, I want to upload my insurance information so that my eligibility can be verified automatically. | |
| |  |  | | --- | --- | | P6 | As a patient, I want to join a telehealth video call directly from the app so that I can attend virtual appointments easily. | |
| |  |  | | --- | --- | | P7 | As a patient, I want to receive notifications for earlier available slots so that I can move up my appointment. | |
| |  |  | | --- | --- | | P8 | As a patient, I want to fill out pre-visit forms online so that I ca | |