BANGLADESH UNIVERSITY OF PROFESSIONALS

FACULTY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (CSE)

Data Flow Diagram (DFD)

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Signature of Teacher

Data Dlow Diagram (DFD)

A Data Flow Diagram (DFD) is a tool used in system design to represent the flow of information within a system. It helps break down a system into smaller components, allowing both technical and non-technical stakeholders to understand how data moves, is processed, and is stored. In this project, we use DFDs to visualize the operations of a Hospital Management System.

Levels of DFD

A Data Flow Diagram (DFD) is typically developed in multiple levels to represent a system in increasing detail. The three common levels of DFD are Level 0, Level 1, and Level 2.

The Level 0 DFD, also known as the context diagram, provides the most abstract view of the system. It represents the entire system as a single process and shows its interaction with external entities such as users, administrators, or other systems. This level focuses only on the input and output data flows between the system and its environment, without revealing internal processes or data stores.

Level 1 DFD expands this single process into a set of sub-processes, each representing a major function within the system. It introduces internal data flows and data stores to show how data moves and is transformed within the system. This level provides a clearer understanding of the system's functional components and how they interact with each other and with external entities.

Level 2 DFD takes this a step further by zooming into a specific process from Level 1 to provide more detailed insights. It breaks down a particular process into smaller, logical sub-processes, often with their own data flows and supporting data stores. This level is especially useful for understanding the step-by-step operation of complex features within the system. Together, these three levels of DFD offer a structured and layered approach to system analysis and design, moving from a general overview to detailed functionality.
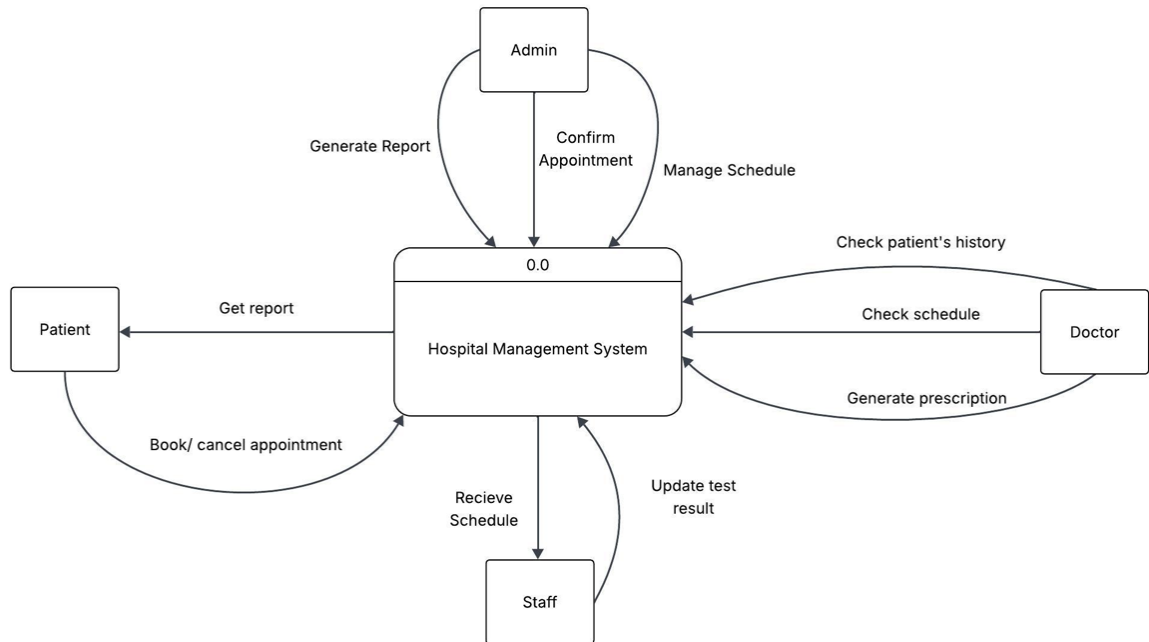
Level 0 DFD

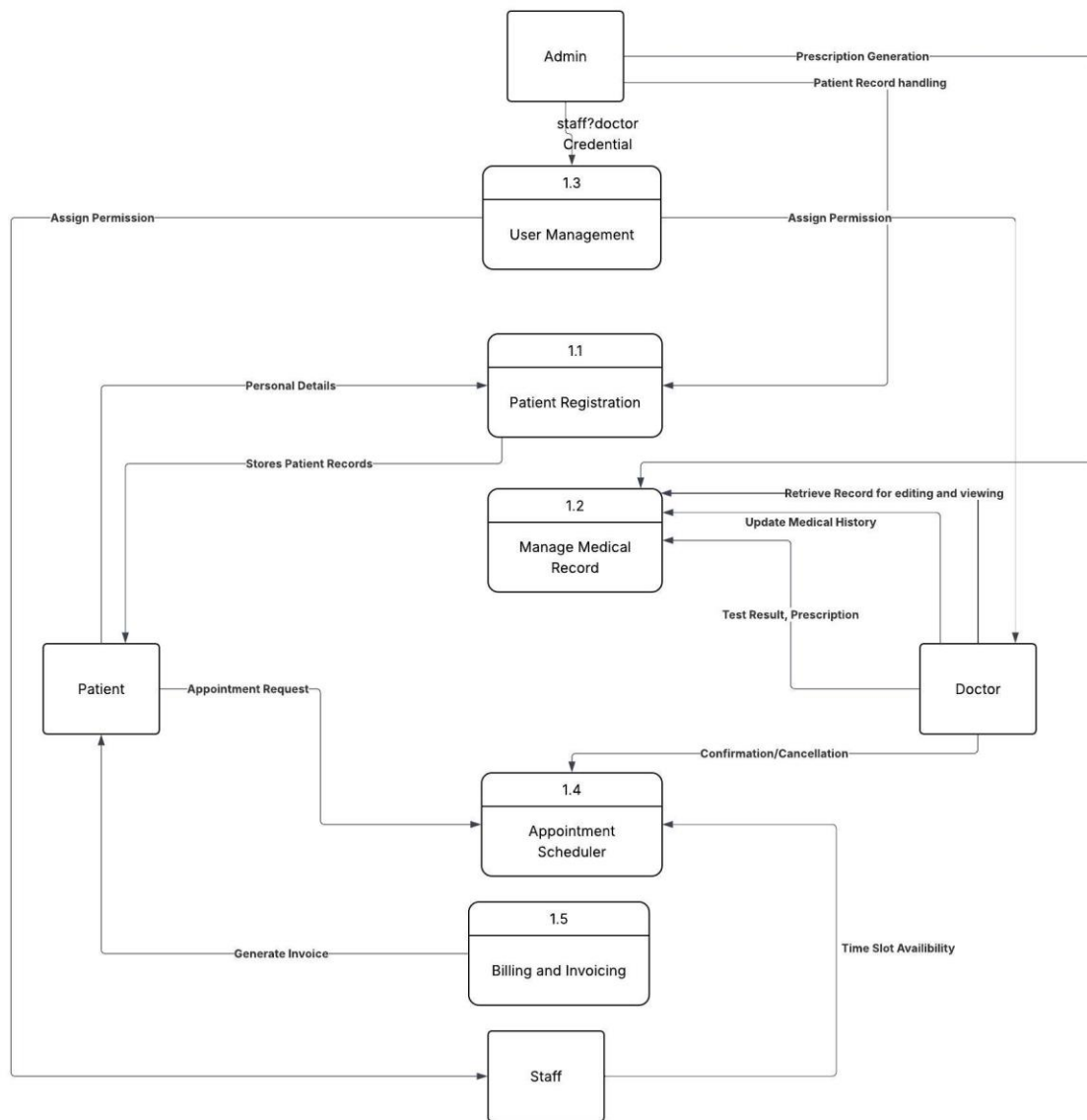Fig: Level-0 DFD of "Hospital Management System"

Level 1 DFD
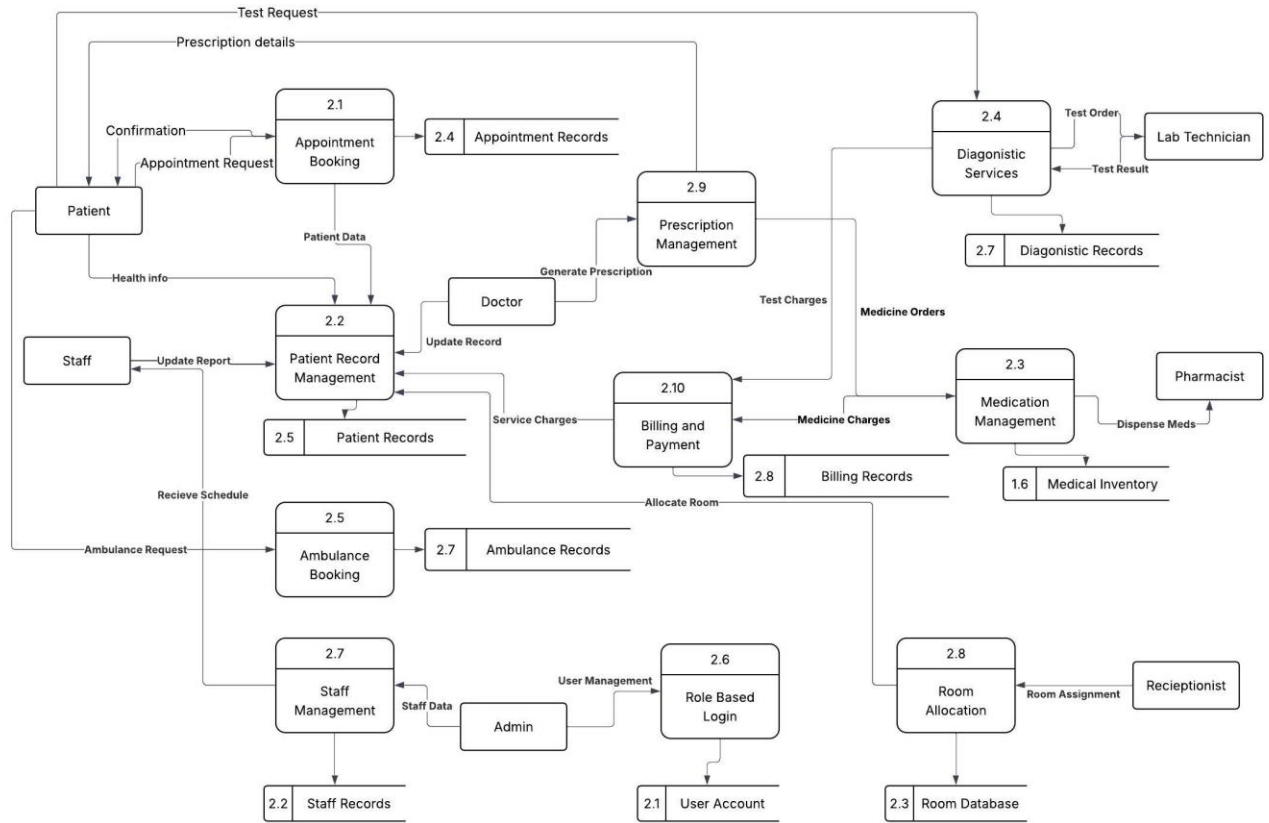

Fig: Level-1 DFD "Hospital Management System"

Level 2 DFD

Fig: Level-2 DFD "Hospital Management System"