Majuli River Island VR Tour - Code Design

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DFD (Data flow Diagram) Overview

A data flow diagram (DFD) is a graphical representation of how data flows within a system or process. It is used to visualize the movement of data between various components or processes in a system. DFDs are commonly used in software development, systems analysis, and business process management to understand and communicate the flow of information.
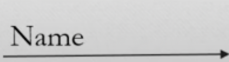
Here are the main components and symbols used in a typical data flow diagram:

1. Processes: Represent activities or tasks performed on the data. They are usually depicted as circles or rectangles with a brief description of the process inside.

2. Data Flows: Represent the movement of data between processes, data stores, or external entities. They are shown as arrows or lines connecting the different components. The arrows indicate the direction of data flow.

3. Data Stores: Represent the storage or repositories of data. They can be databases, files, or other data storage mechanisms. Data stores are usually depicted as rectangles with the data store name inside.

4. External Entities: Represent external sources or destinations of data. They can be users, other systems, or organizations interacting with the system under analysis. External entities are typically shown as squares with a brief description of their role.

5. Data Flow Labels: Describe the data being passed between processes, data stores, and external entities. These labels provide additional information about the nature or content of the data.

6. Context Diagram: The highest-level DFD that represents the entire system as a single process, along with external entities. It provides an overview of the system boundaries and the interactions with external entities.

7. Level-0 Diagram: A more detailed DFD that breaks down the context diagram's main process into sub-processes, showing the major data flows between them.

8. Level-N Diagrams: Further breakdown of the processes into more detailed sub-processes, creating a hierarchy of DFDs. Each level provides more granularity and detail.
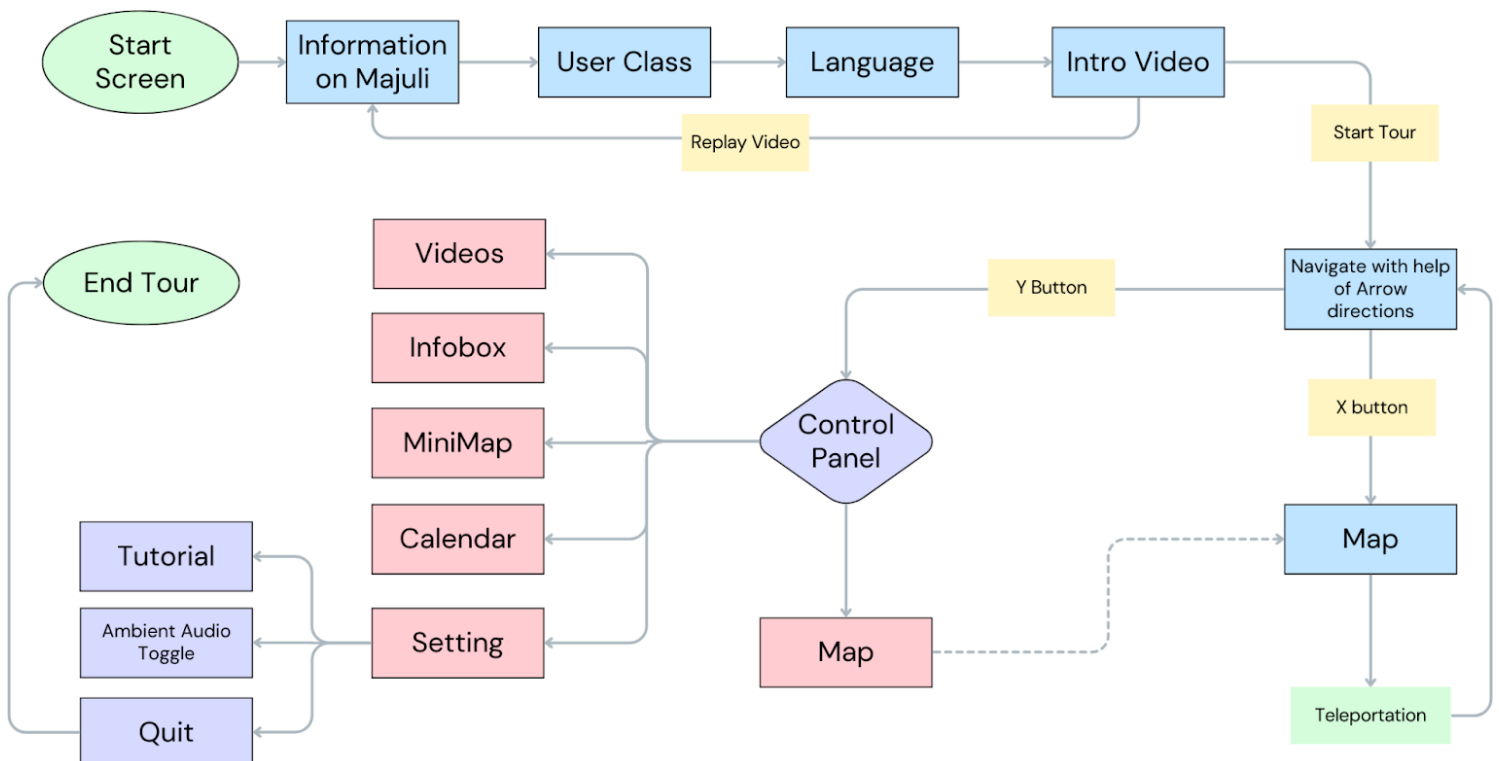
DFDs are useful for understanding system requirements, identifying data dependencies, documenting processes, and communicating system design. They help stakeholders visualize and analyze the flow of data, identify potential bottlenecks or inefficiencies, and ensure that all necessary data is accounted for in the system.

DFD Flowcharts and ER Diagram

Followed convention

Symbol	Symbol 1 (Gane & Sarson)
External entity	NAME
Process	NAME
Data store	D1 NAME
Data flow	Name →

Overall Flow and ER Diagram

Data Flow Diagram (Level 0 + 1 + 2)