

# 6 Lecture - CS403

## Important Subjective

### 1. **What is a detailed data flow diagram, and what is its purpose?**

Answer: A detailed data flow diagram is a visual representation of the flow of data through a system or process. Its purpose is to help understand and document complex systems and processes, identify inefficiencies or bottlenecks in a system, and identify areas where improvements or optimizations can be made.

### **What are the different levels of diagrams typically included in a detailed data flow diagram?**

Answer: A detailed data flow diagram typically includes multiple levels of diagrams that break down the system into smaller, more manageable components. Typically, these include a context diagram, a level 0 diagram, and one or more level 1 diagrams.

### **What is an input on a detailed data flow diagram, and how is it represented?**

Answer: An input is data that enters a system. It is typically represented by an arrow pointing into a process or a data store.

### **What is an output on a detailed data flow diagram, and how is it represented?**

Answer: An output is data that exits a system. It is typically represented by an arrow pointing out of a process or a data store.

### **What is an intermediate data flow on a detailed data flow diagram, and how is it represented?**

Answer: An intermediate data flow is data that is processed within a system. It is typically represented by an arrow connecting two processes or a process and a data store.

### **How can a detailed data flow diagram help identify inefficiencies or bottlenecks in a system?**

Answer: By showing the flow of data through a system, a detailed data flow diagram can help identify areas where data may be getting delayed, duplicated, or lost. This can help pinpoint inefficiencies or bottlenecks that need to be addressed.

### **What are some limitations of using a detailed data flow diagram?**

Answer: A detailed data flow diagram can become complex and difficult to understand if there are too many levels or too many data flows. Additionally, it may not show the physical components of a system, which can limit its usefulness in certain contexts.

### **What is the difference between a high-level data flow diagram and a detailed data flow diagram?**

Answer: A high-level data flow diagram shows a broad overview of the system and its inputs and outputs, while a detailed data flow diagram shows the flow of data through the system in greater detail, including intermediate data flows and multiple levels of diagrams.

### **How can a detailed data flow diagram be used in system design and maintenance?**

Answer: A detailed data flow diagram can be used to help design a new system by identifying

the inputs, outputs, and intermediate data flows needed. It can also be used in maintenance by helping to identify inefficiencies or areas where improvements can be made.

**How can a detailed data flow diagram be used to communicate with stakeholders?**

Answer: A detailed data flow diagram can be used to help communicate the flow of data through a system to stakeholders, including end-users, developers, and managers. It can help ensure that everyone involved in the system understands how it works and where improvements can be made.