



Types and Components of Data Flow Diagram (DFD)

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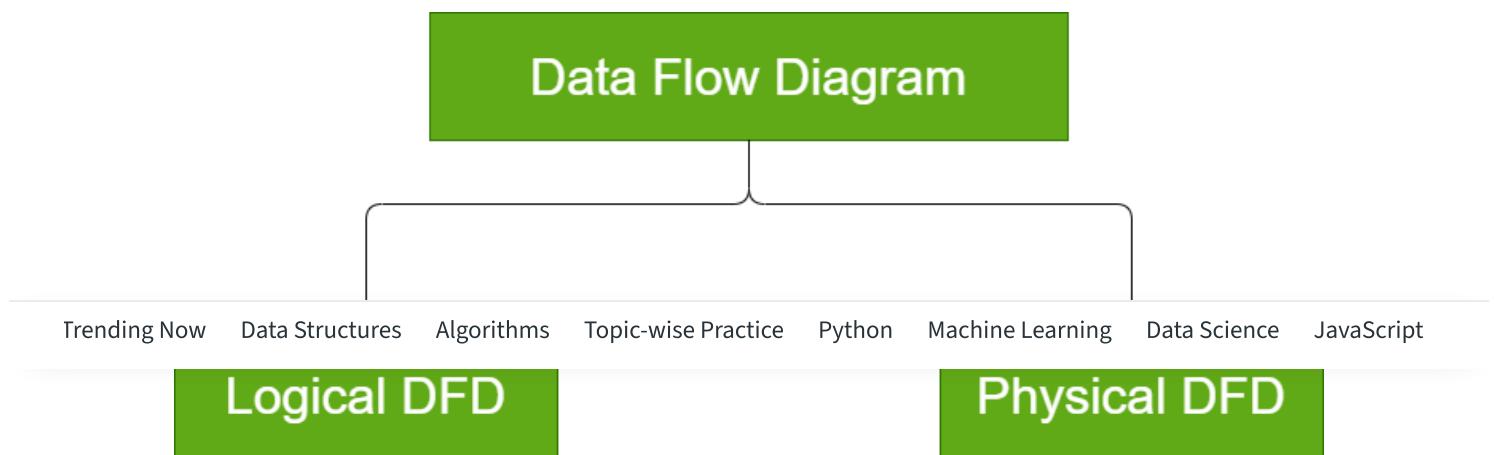
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Data Flow Diagram (DFD) is a graphical representation of data flow in any system. It is capable of illustrating incoming data flow, outgoing data flow and store data. Data flow diagram describes anything about how data flows through the system.

Sometimes people get confused between data flow diagram and flowchart. There is a major difference between data flow diagram and flowchart. The flowchart illustrates flow of control in program modules. Data flow diagrams illustrate flow of data in the system at various levels. Data flow diagram does not have any control or branch elements.

Types of DFD :

DFD is of two types:



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Logical DFD

Physical DFD

1. Logical DFD:

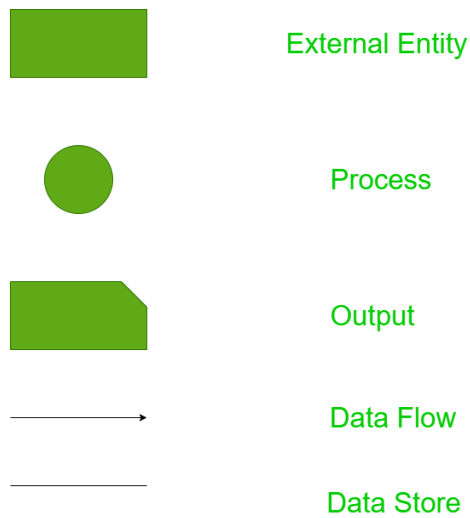
Logical data flow diagram mainly focuses on the system process. It illustrates how data flows in the system. Logical DFD is used in various organizations for the smooth running of system. Like in a Banking software system, it is used to describe how data is moved from one entity to another.

2. Physical DFD:

Physical data flow diagram shows how the data flow is actually implemented in the system. Physical DFD is more specific and close to implementation.

Components of Data Flow Diagram:

Following are the components of the data flow diagram that are used to represent source, destination, storage and flow of data.



- **Entities:**

Entities include source and destination of the data. Entities are represented by rectangle with their corresponding names.

- **Process:**

The tasks performed on the data is known as process. Process is represented by circle. Somewhere round edge rectangles are also used to represent process.

- **Data Storage:**

Data storage includes the database of the system. It is represented by rectangle with both smaller sides missing or in other words within two parallel lines.

- **Data Flow:**

The movement of data in the system is known as data flow. It is represented with the











Importance of Data Flow Diagram:

Data flow diagram is a simple formalism to represent the flow of data in the system. It allows a simple set of intuitive concepts and rules. It is an elegant technique that is useful to represent the results of structured analysis of software problem as well as to represent the flow of documents in an organization.

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