

1.

Data Flow Diagram is a way of representing the movement of data through a process or a system. It's a versatile tool which uses only four symbols to represent both physical and logical information. DFD uses four symbols. They are: Data flows, Data stores, Processes, and sources/sinks. The two standards used for DFD are: Demarco and Yourdon symbol set and Gane and Sarson symbol set. The symbols are as follows:

1. Process:

It represents the work or actions performed on data so that they are transformed, stored, or distributed. It doesn't represent whether the process is manual or computerized.

2. Data Store:

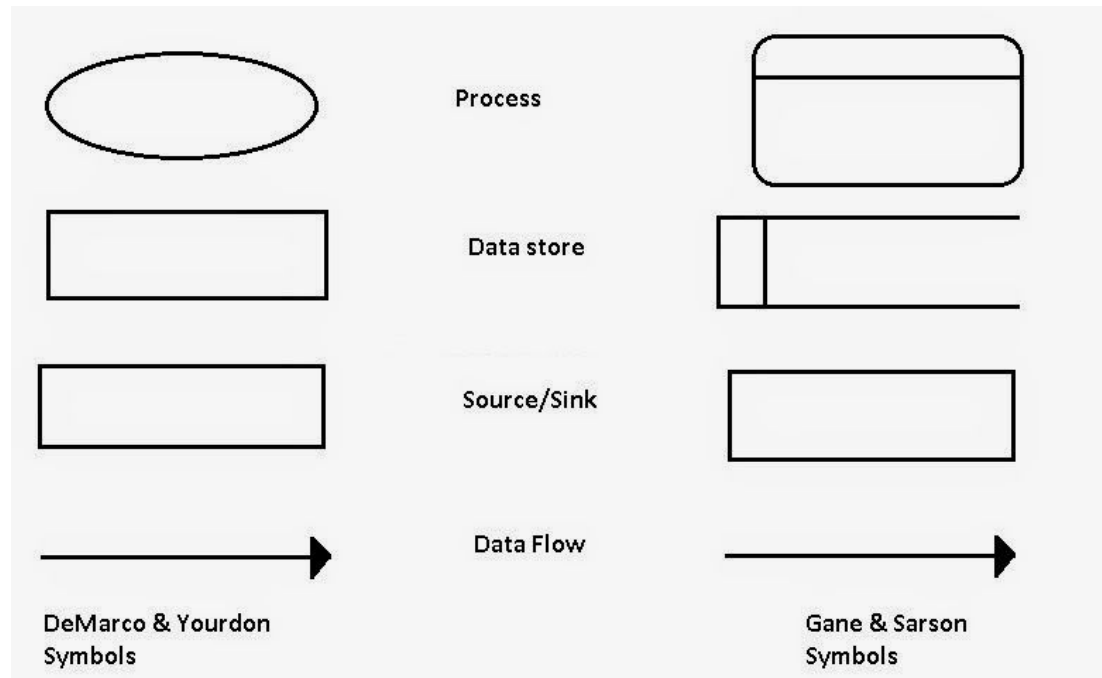
It represents the data's location in a system such as a file folder, computer-based file or a notebook. The actual system's physical configuration isn't represented as it's not needed to understand the data movement. It usually contains data about customers, students, customer orders, or supplier invoices.

3. Source/Sink:

It represents the origin and destination of the data. These are outside the system, so they are also called external entities. After data is processed, the data and information leave the system and go to the appropriate destination which is represented by this process.

4. Data Flow:

This symbol is used to show data flow from one place in a system to another. It shows the data that moves together, so it can be composed of many individual pieces of data generated at the same time and having the same destination.



2.

DFD	Flowchart
Diagrammatic representing the movement of data through a process or a system.	Diagrammatic representation of an algorithm, step-by-step approach to solving a given problem.
There are only four symbols used.	Many symbols are used.
Represents both physical and logical information systems. Can't to depict the details of physical systems.	Represents a purely physical system. Can't to depict a purely logical system.
Doesn't cause premature physical design as it doesn't use symbols to represent physical computing equipment.	Can cause premature physical design as it uses symbols to represent physical equipment.
It can be used for complex systems.	It's applicable for small to medium programs.
It helps to understand the overview of the system in a simple way.	It helps to analyze, design and manage an algorithm .

3.

Data flow diagram is used by organizations to understand and implement new processes or systems. It's a visual representation of a system that makes it easy to understand a system. It's importance in a Information System Development are:

- It's important for communication during Information System Development as it's simple.
- It shows the scope and boundaries of a system and the other systems that interact with it easily.
- It streamlines and transforms a system diagram and gives a clear understanding of what is going on with the system.
- It can be understood by wide audience such as stakeholders, business analyst, data analysts, developers
- So, it's easy to draw and correct the system as it only needs 4 symbols.
- It's easy to expand by adding different levels to the diagram.