

SUBJECT: BTEC Tech Award Digital IT

UNIT: Component 3: Forms of Notation



Data Flow Diagrams (DFDs)

DFDs show how data moves through a system. They focus on the flow of data, where it comes from, where it goes, and how it is changed.

Purpose: To map out the inputs, processing, and outputs of an information system.

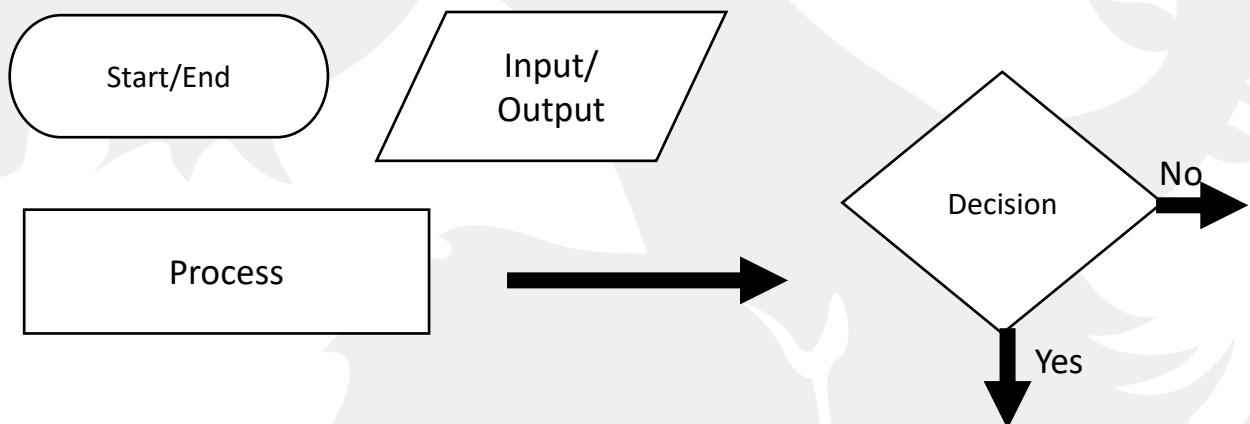
Key Rules: Data cannot flow directly from one external entity to another without going through a process. Data cannot flow directly between two data stores. All flows must be labelled with the data being moved (e.g., "Payment Details").



Flowcharts

Flowcharts show the step-by-step logic and sequence of a process or algorithm. Unlike DFDs, they show control (what happens next) rather than just data movement.

Purpose: To design or document a clear, linear workflow or decision-making process.



Other forms:

- **Tables (Decision Tables):** Decision tables are a structured, tabular way to show complex business rules based on different combinations of conditions. Purpose: To map out what actions a system should take based on multiple "Yes/No" inputs. Structure: Conditions: The triggers or questions (e.g., Is user logged in? Is item in stock?). Actions: The outcomes (e.g., Allow purchase, Display error).
- **Written Information:** Structured English uses narrative text but formats it like code to describe a process clearly without using actual programming syntax. Purpose: To explain algorithm logic in a way that non-technical users and programmers can both understand.
- **System Diagrams:** System diagrams give a "big picture" overview of how hardware components and physical systems connect and interact with each other. Purpose: To show the physical architecture of a network or IT system.