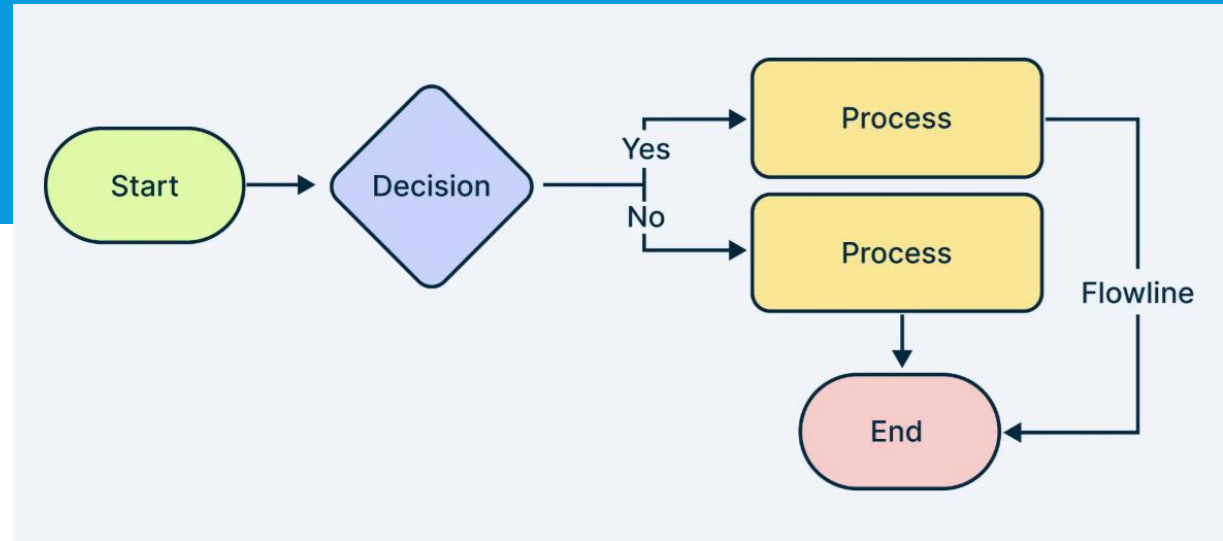


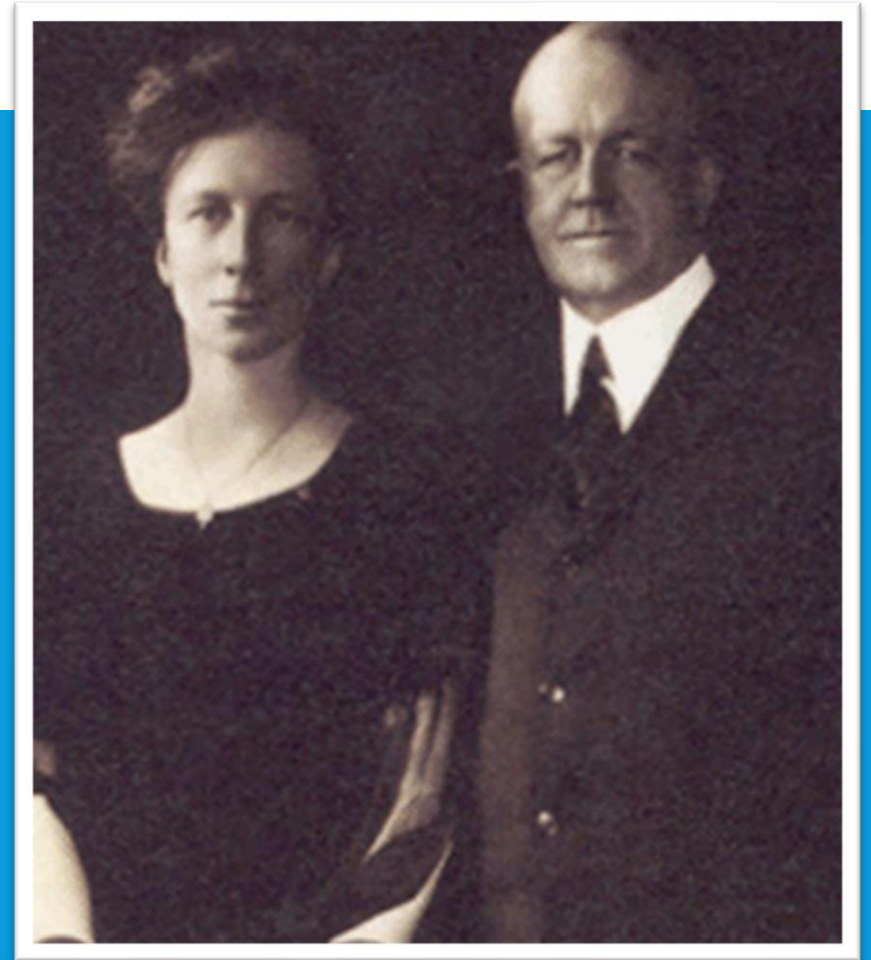
FLOW CHART



PREPARED BY: ENGR. CHRISTEL NUNEZ YGOT

HISTORY

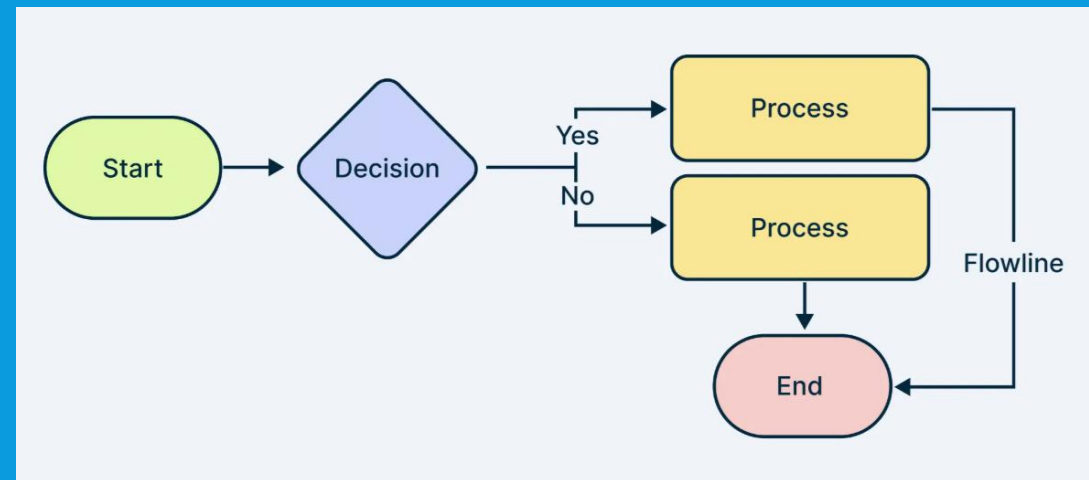
- ✓ Frank and Lillian Gilbreth, the first to introduce flowcharts in their work.
- ✓ It was called "Process Chart" in 1921.
- ✓ Increasingly popular in the 1940's & 1950's with the advent of computers.



FRANK & LILIAN GILBRETH

FLOW CHART

- ✓ A flowchart is a schematic diagram of the sequence of steps involved in an operation or process.
- ✓ It provides a visual tool that is easy to use and understand.
- ✓ By seeing the steps involved in an operation or process, everyone develops a clear picture of how the operation works and where problems could arise



FLOW CHART SYMBOLS

- ✓ The current symbols follow the ISO 5870, the international standard for process mapping and documentation.
- ✓ This allows clear communication, minimizing misunderstandings, and inconsistent or unclear visual representations.
- ✓ flowchart symbols enable teams to collaborate effectively, especially in fields like software development, engineering, and business process management.
- ✓ An effective flowchart helps teams identify bottlenecks, optimize workflows, and guide others by providing a visual breakdown of each step in a process.

FLOW CHART SYMBOLS



Start/End

Represents the start or end of a process



Process

Indicates an action or operation.
Example: Calculate Total Price



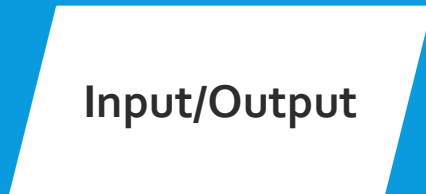
Decision

Represents a decision point, leading to different outcomes (Yes/No, True/False).
Example: Is the payment successful?

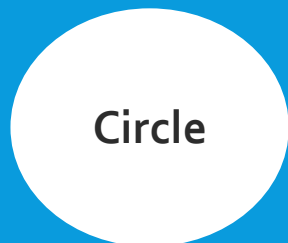
FLOW CHART SYMBOLS



Shows the direction or flow from one step to another.



Used for input and output operations.
Example: Username, Customer Order,
Confirmation Email

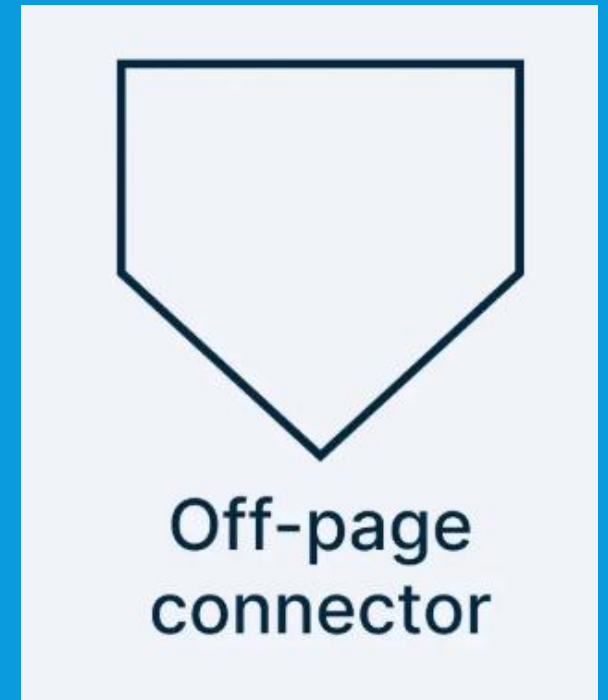


Used to connect different sections of a flowchart,
especially in large diagrams or across multiple
pages

OTHER FLOW CHART SYMBOLS

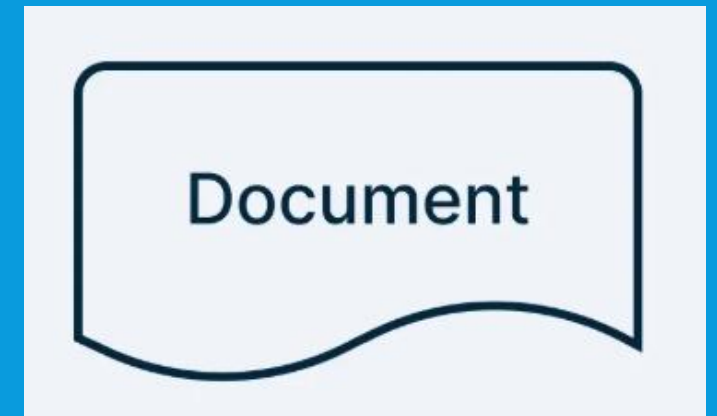
OFF-PAGE CONNECTOR/REFERENCE SYMBOL

- ✓ Off-page connector, often represented by a pentagon, is used when a complex process is spread over several pages.
- ✓ It allows the flow to continue on a different page, with the page number or reference clearly indicated within the symbol.



DOCUMENT SYMBOLS

- ✓ The document symbol looks like a piece of paper with a wavy base and represents any document involved in the process.
- ✓ This could be a physical paper document or a digital file.
- ✓ For example, in a flowchart for processing a loan application, a document symbol might represent the “Loan Agreement” that needs to be reviewed and signed.



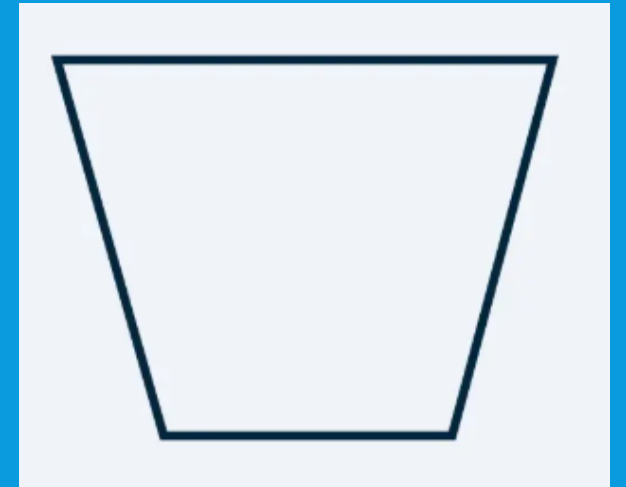
MANUAL INPUT SYMBOL

- ✓ This symbol represents a non-automated process requiring manual input in a flowchart.
- ✓ For example, this could be a step that requires a user to input data manually, like filling out a form or entering the email address.



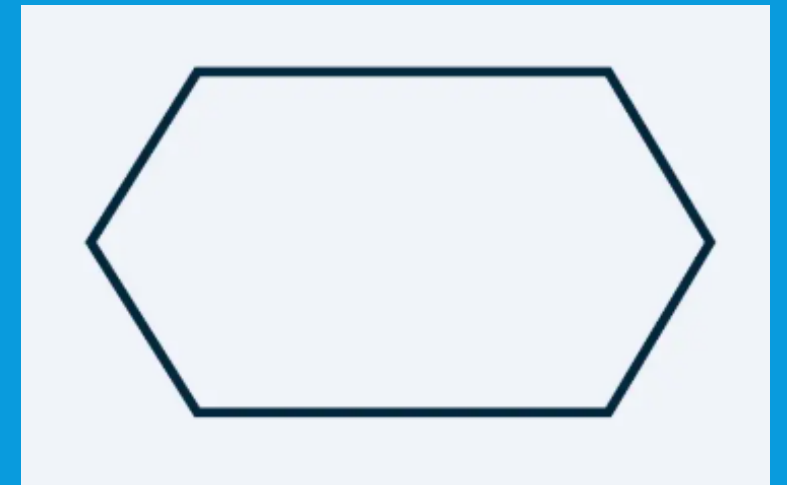
MANUAL OPERATION SYMBOL

- ✓ The manual operation symbol represents a process step that is performed manually rather than automatically.
- ✓ It's used when a task requires human intervention or physical effort.



PREPARATION SYMBOL

- ✓ The preparation symbol, represented by a hexagon, indicates a setup process that prepares for the next step.
- ✓ It's often used for initialization tasks or setting up parameters for the following action.



DELAY SYMBOL

- ✓ The delay symbol, depicted as a sideways “D,” indicates a waiting period or delay in the process.
- ✓ It's useful for showing where a process needs to pause before the next step can occur.



DATA STORAGE SYMBOLS



DATABASE SYMBOL

- ✓ The database symbol, often represented as a cylinder, indicates that a process involves storing or retrieving data from a database.
- ✓ In a customer service process, for example, you might use the database symbol to represent where customer information is stored or retrieved for processing inquiries.



STORED DATA/STORAGE SYMBOL

- ✓ The stored data symbol is mainly used in programming flowcharts.
- ✓ It denotes a general data storage.



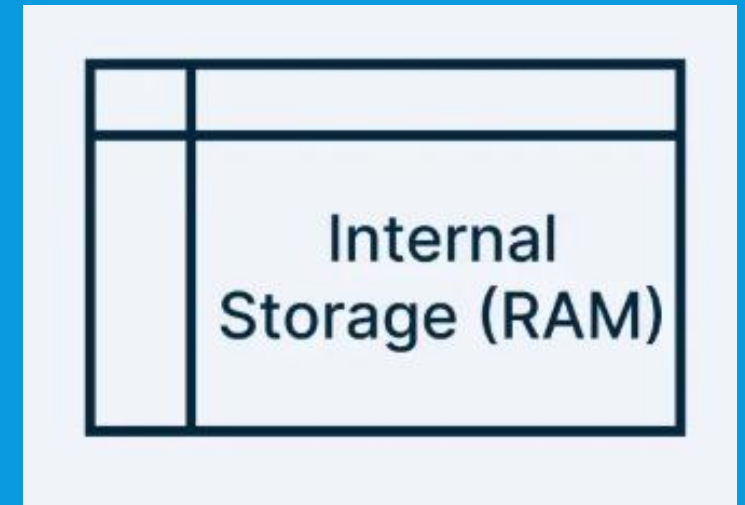
DIRECT DATA SYMBOL

- ✓ Direct Data symbol indicates data stored on a hard drive that can be directly accessed.



INTERNAL STORAGE SYMBOL

- ✓ This is another type of data storage symbol commonly used in programming flowcharts to show a specific type of internal data storage.

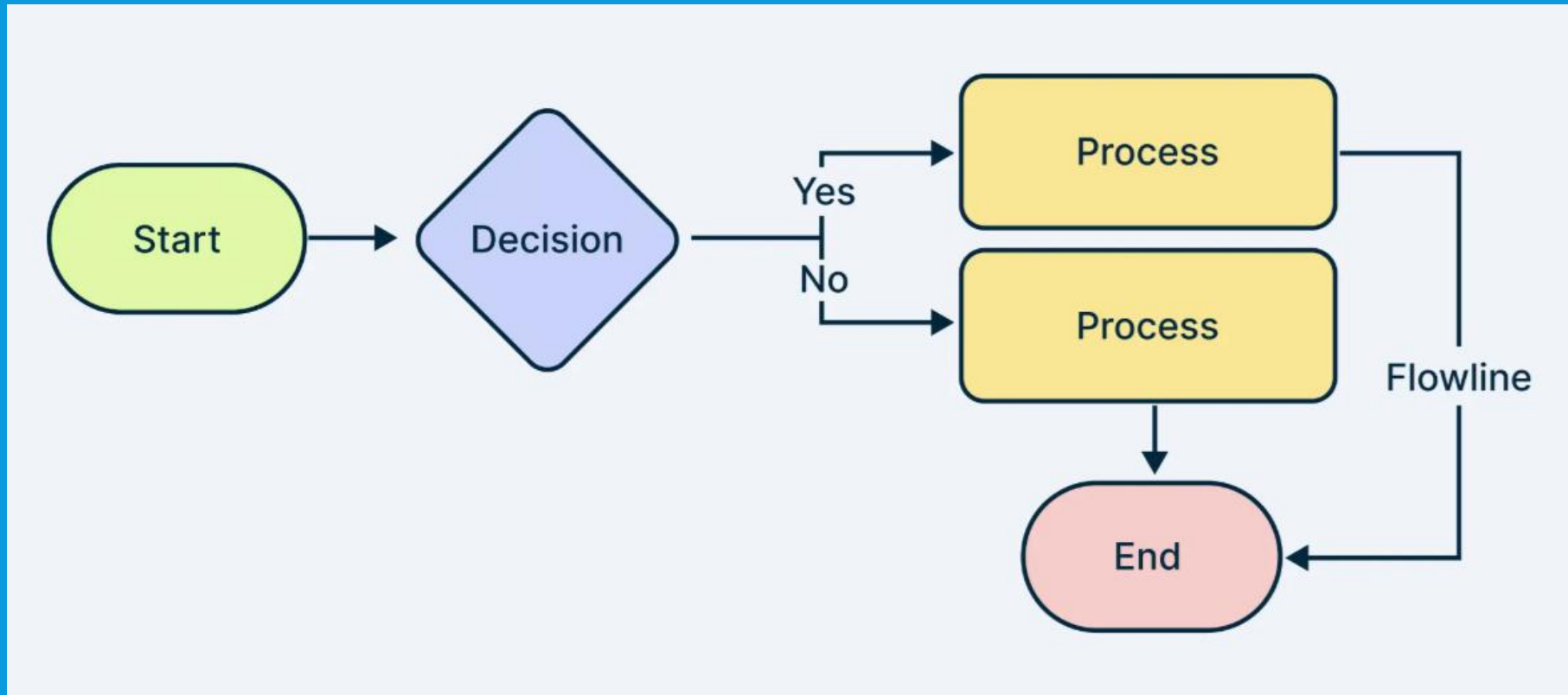


SEQUENTIAL ACCESS STORAGE SYMBOL

- ✓ This indicates data stored in a sequence that requires sequential access such as a magnetic tape.



FLOW CHART EXAMPLE



OTHER REFERENCES

<https://creately.com/guides/flowchart-symbols/>

THANK YOU!!!