

Flowchart Creation Steps in Software Development

1. Define the Purpose

- Identify the process: Determine the specific process or algorithm you want to illustrate.
- Clarify the objectives: Understand the goals of creating the flowchart, such as simplifying complex processes or identifying potential bottlenecks.

2. Gather Information

- Collect relevant data: Gather all necessary information about the process, including inputs, outputs, key steps, and decision points.
- Consult stakeholders: Involve team members or stakeholders to ensure comprehensive coverage of the process.

3. Identify Key Steps and Decisions

- List major steps: Break down the process into major steps, actions, and decision points.
- Sequence the steps: Arrange these steps in a logical order from start to finish.

4. Choose Flowchart Symbols

- Standard symbols: Use standard flowchart symbols like ovals for start/end, rectangles for processes, diamonds for decisions, parallelograms for inputs/outputs, and arrows for flow direction.
- Custom symbols: If needed, create custom symbols that are easily understood by your team.

5. Sketch the Flowchart

- Draft on paper: Start with a rough sketch on paper or a whiteboard to visualize the process.
- Arrange symbols: Place the symbols in the sequence defined, ensuring a clear and logical flow.
- Connect with arrows: Use arrows to connect the symbols, showing the flow of the process.

6. Refine and Review

- Review the draft: Check the flowchart for completeness, accuracy, and clarity.
- Seek feedback: Get feedback from team members or stakeholders to identify any missing steps or ambiguities.
- Make necessary adjustments: Revise the flowchart based on feedback to ensure it accurately represents the process.

7. Create the Final Flowchart

- Use flowchart software: Utilize flowchart creation tools like Microsoft Visio, Lucidchart, or draw.io to create a polished version.
- Ensure readability: Make sure the flowchart is easy to read, with clear labels, symbols, and flow lines.
- Include a legend: Provide a legend or key if your flowchart includes custom symbols or complex notations.

8. Validate the Flowchart

- Walkthrough the process: Simulate the process using the flowchart to ensure it accurately represents the actual workflow.
- Identify discrepancies: Look for any steps or decision points that might have been missed or incorrectly represented.
- Update as needed: Make final adjustments to the flowchart based on the validation exercise.

9. Share and Implement

- Distribute to stakeholders: Share the final flowchart with all relevant stakeholders and team members.
- Use as a reference: Implement the flowchart as a reference document during development to

ensure adherence to the defined process.

10. Maintain and Update

- Review periodically: Periodically review the flowchart to ensure it remains accurate and relevant.
- Update for changes: Make necessary updates to reflect any changes in the process or improvements identified during implementation.

Example Flowchart Symbols

- Oval: Start/End
- Rectangle: Process/Action Step
- Diamond: Decision
- Parallelogram: Input/Output
- Arrow: Flow Direction