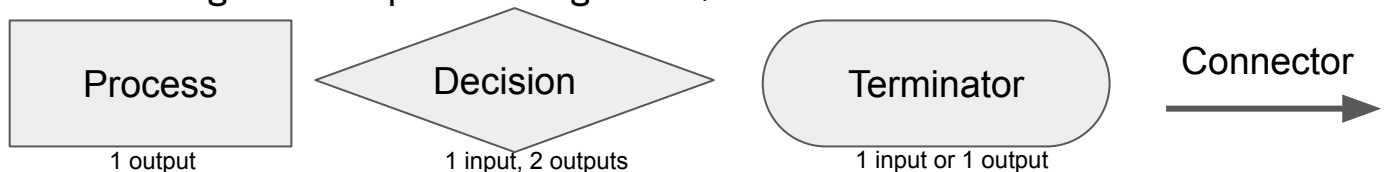


Step-by-Step process of how to develop a flow chart.

1. Gather information of how stages in the process are ordered using:
 - a. flow chart shapes to determine the path according to convention
 - b. knowledge about how the process proceeds from start to finish.
2. Decide what decisions and stages of progress exist. Identify the starting point. From the start, move incrementally through steps in order of occurrence to deduce the successive steps. Draw diamonds for the decisions, rectangles for the stages/steps.
3. Identify the terminators (rounded rectangles).
4. At the whiteboard, lay out the “flow.”
 - a. Make sure the diagram flows starts from the “start terminator.”
 - b. All the **arrows touch the shapes** they connect, so that a continuous path can be traced. For visual organization, all shapes and lines are connected by 90 degree bends or straight lines. Note **do not use diagonal connections!**
 - c. Finish connecting the path **through** all steps and decisions leading toward at least one “end terminator.” Process steps connect on the **middle** of each side, with **one** output.
 - d. Decisions diamonds have only **two** outputs: **Yes** or **No** labels **along** (not blocking) the output, connecting at the **corners**.
 - e. All text exists inside the shapes, except the Yes/No decision output labels. Use minimal words for visual simplicity. No color is needed.
5. Follow the **flow** visually to see if it works. Make sure there are no infinite feedback loops, that each loop has an escape. Make sure there are no floating shapes, everything is **connected**.
6. Draw your finished flowchart in Google “Draw” or “Slides.”

Every flowchart uses universal shape conventions:

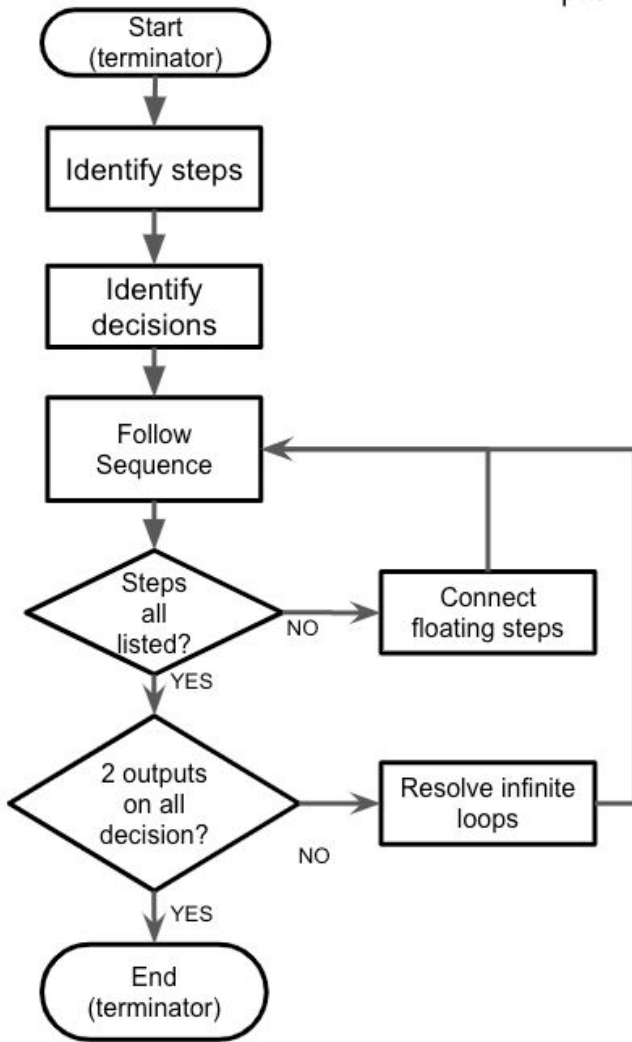
The shapes in a flowchart determine their function. Process or steps use rectangles. Decisions use diamonds, and have two outputs. Terminators, flowchart start and end points are rounded rectangles. All shapes touching arrows, which indicate the flow.



No longer used in COMM165 (but may be seen in other flowcharts)



Flowchart tutorial flowchart



A flowchart is a diagram that uses a continuous path describing a process, system or model.

These are strict conventions that are followed.

- All the **arrows touch the shapes** they connect.
- Diamonds are connected on the corners.
- All other shapes connect at the middle.

For visual neatness:

- All shapes and lines are connected by 90 degree bends or straight lines, Note **NO diagonal connections!**
- Text is minimal.
- Color/Shade is optional, often black and white only. No hollow or curved arrows.
- All **text is inside boxes**; **Yes/No labels are next to the decision outputs.**

The emphasis is on **“flow.”**

No floating shapes. No unescaped decisions.

The diagram **“flows”**-- follows the whole process from “Start” to “End” along a line.

Flowcharts help one think through the steps of a decision making process. The layout requires ordering steps in sequence of importance. For example: renting an apartment or diagnosing a broken lamp, the diagram helps narrow down the solution from a large set of potential states.

