

Algorithms

Class 09

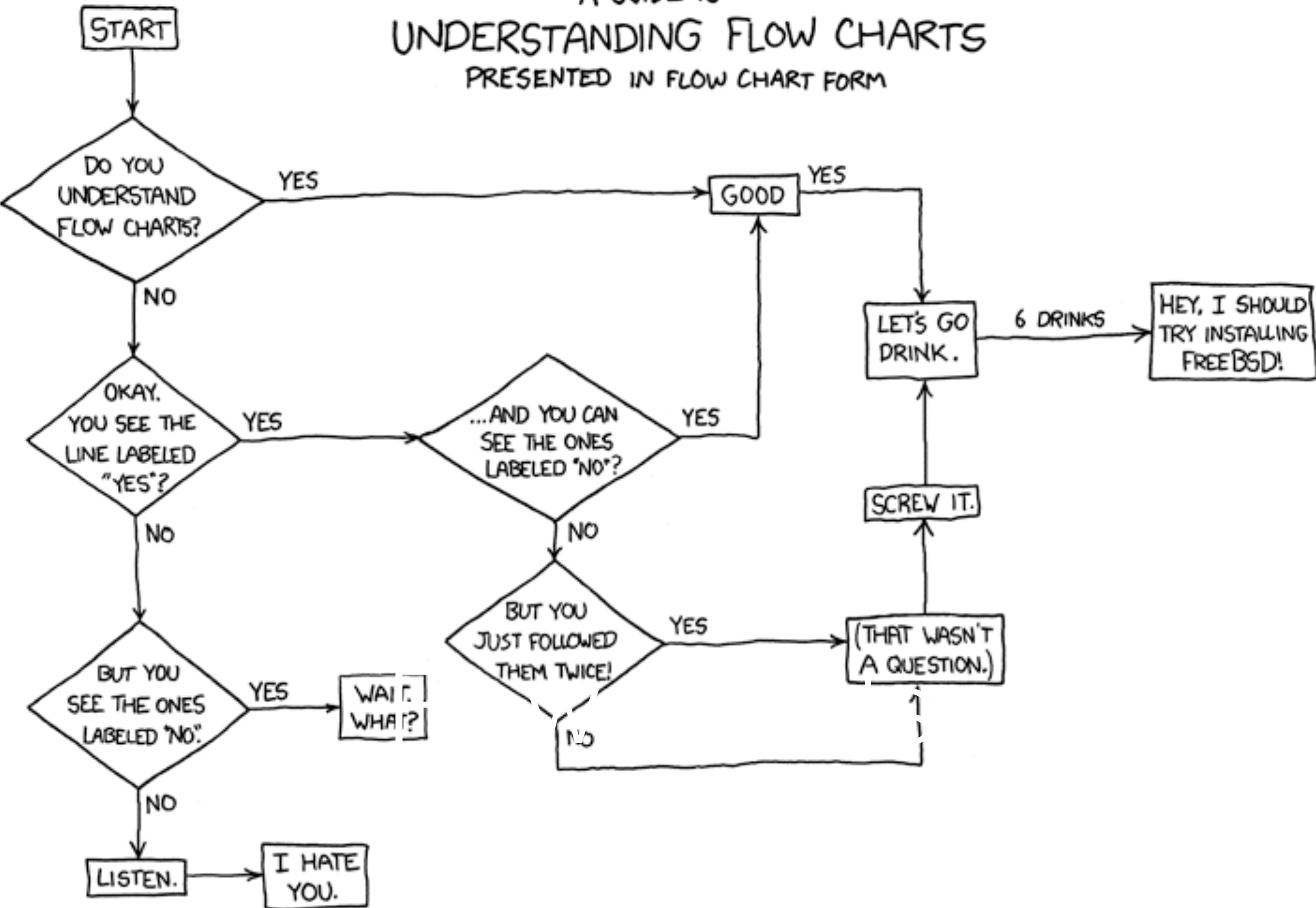
Agenda

- Mini ex 7
- Flow Charts
- Pause
- Øvelse med fremlæggelser
- Mini ex 8




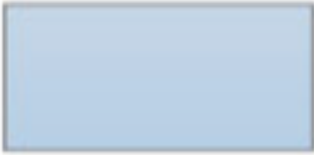

Mini ex 07: Form Art

- Fremlæg jeres projekter i gruppen
- Hvilke fordele og ulemper er der ved OOP?
- Udvælg én fra gruppen, som skal vise sit Form Art frem for resten af holdet


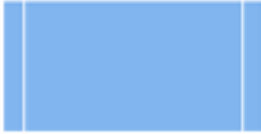


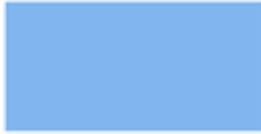
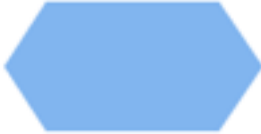






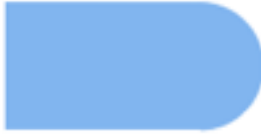



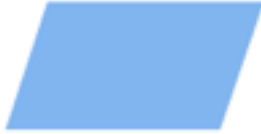
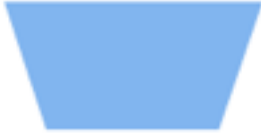



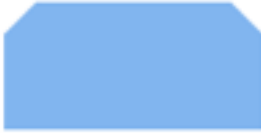




A GUIDE TO UNDERSTANDING FLOW CHARTS PRESENTED IN FLOW CHART FORM



Symboler

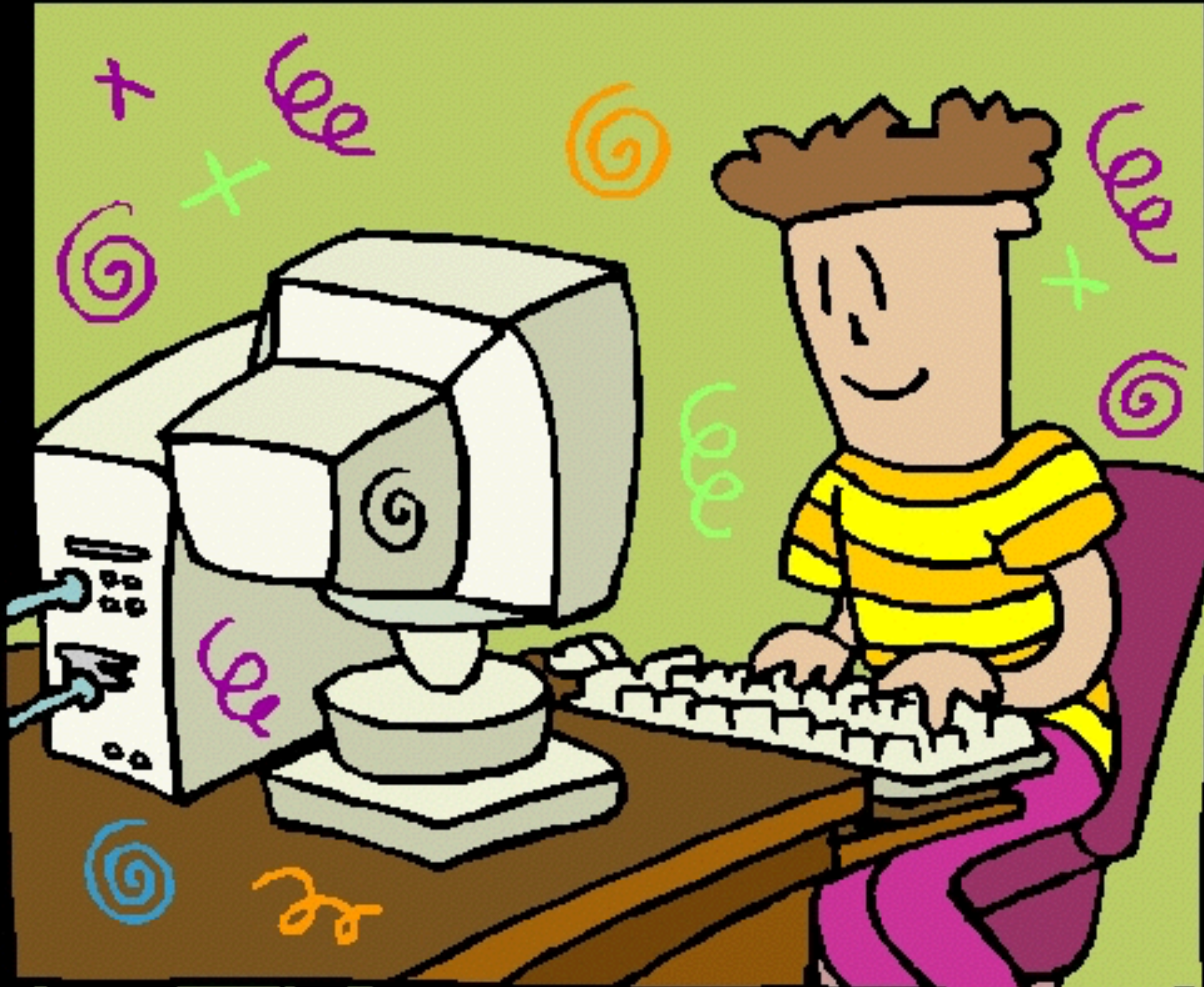
Symbol	Name	Function
	Start/end	An oval represents a start or end point
	Arrows	A line is a connector that shows relationships between the representative shapes
	Input/Output	A parallelogram represents input or output
	Process	A rectangle represents a process
	Decision	A diamond indicates a decision

Symboler

	Terminator Indicates the beginning or end of a program flow in your diagram.		Subroutine Indicates a predefined (named) process, such as a subroutine or a module.		Connector Indicates an inspection point.		Collate Indicates a step that organizes data into a standard format.
	Process Indicates any processing function.		Preparation Indicates a modification to a process, such as setting a switch or initializing a routine.		Off-page connector Use this shape to create a cross-reference and hyperlink from a process on one page to a process on another page.		Sort Indicates a step that organizes items list sequentially.
	Decision Indicates a decision point between two or more paths in a flowchart.		Display Indicates data that is displayed for people to read, such as data on a monitor or projector screen.		Off-page connector		Merge Indicates a step that combines multiple sets into one.
	Delay Indicates a delay in the process.		Manual input Indicates any operation that is performed manually (by a person).		Off-page connector		Database Indicates a list of information with a standard structure that allows for searching and sorting.
	Data Can represents any type of data in a flowchart.		Manual loop Indicates a sequence of commands that will continue to repeat until stopped manually.		Off-page connector		Internal storage Indicates an internal storage device.
	Document Indicates data that can be read by people, such as printed output.		Loop limit Indicates the start of a loop. Flip the shape vertically to indicate the end of a loop.		Or Logical OR		
	Multiple documents Indicates multiple documents.		Stored data Indicates any type of stored data.		Summing junction Logical AND		

Hvorfor flow charts?

Nemt at kode



Debugging



Lettere kommunikation



Lettere kommunikation?



Logikken kan være for kompliceret

Ufleksibelt



Software

- Lucidchart
- Creately.com
- Papir og blyant

Eksempler

Pause

Øvelse

- Arbejd i jeres studiegrupper
- Vælg ét spil fra jeres smartphones
- Udvælg en bestemt interaktion og lav en flow chart over den
- Fremlæg jeres flow chart: 3 min. pr. gruppe

Mini ex 08

- Select any one of the coding challenges, and follow the tutorial and experiment in p5.js (change some parameters, add or delete things).
- You are required to ****add a new function/syntax**** based on the selected coding challenge. Draw a flow chart of the selected coding challenge together with your new function. Upload your sketch + a flow chart to the directory called "mini_ex8"
- Create a README file and upload to the same directory. The readme file should address the following:
 - What is your selected coding challenge?
 - What function/syntax have you added?
 - What is the difficulty of this week mini exercise?
 - How may we see, organize and communicate things differently by using a flow chart?