Capstone Design in CSE
컴퓨터공학 종합설계

3. Brainstorming

Software Projects: the first step

- Requirement gathering
  - Oral/written interview / Survey (설문조사)
  - Questionnaire
    - A document with pre-defined set of objective questions and respective options is collected.
    - Shortcoming: if an option for some issue is not mentioned in the questionnaire, the issue might be left unattended.
  - Domain Analysis (and literature survey)
    - Every software falls into some domain category. The expert people in the domain can be a great help.
  - Task analysis
    - Team of developers may analyze the operation for which the new system is required. It would be helpful if similar SW already exists.
  - Brainstorming: an informal debate
  - Prototyping
    - building user interface without adding detail functionality for user to interpret the features of intended software product

Brainstorming

- Method for creative problem solving developed by Alex F. Osborn, 1939.
  - Open communication on a table
  - Objective
    - generation of many ideas in short time
  - Rules
    - Do not judge proposed ideas (till the last.)
    - Ideas could be silly and crude.
    - More and faster.
    - Synergy by combination of many ideas

Tools for Brainstorming and Communication

source: wikipedia
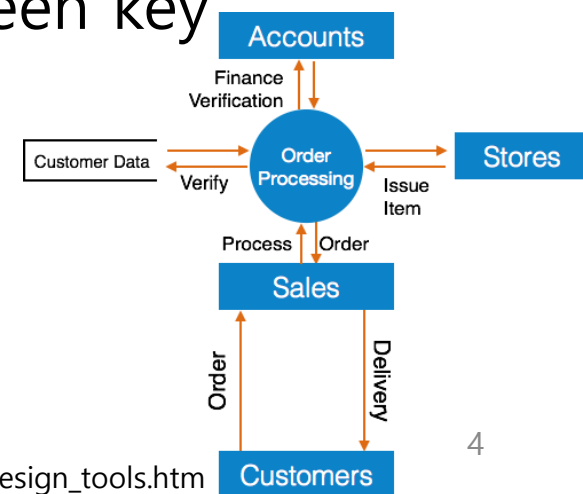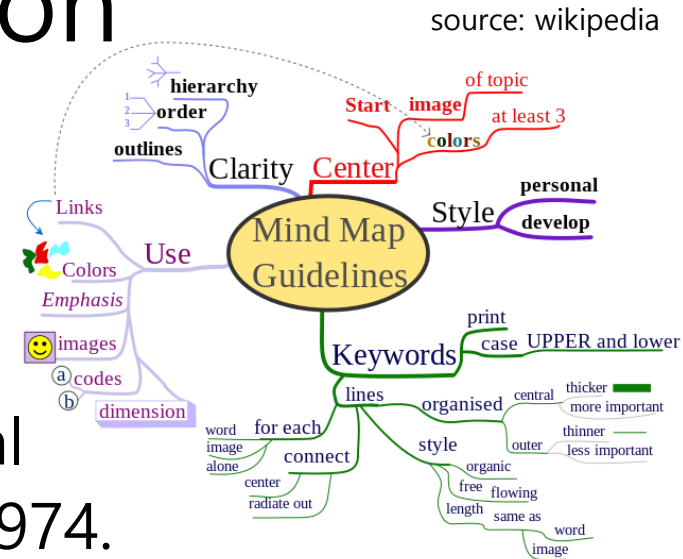
- Visualization
  - Sketch
  - Mind map
    - brainstorming by an individual
    - popularized by Tony Buzan, 1974.
    - Diagram used to visually organize information
    - Visualization of connection between key concepts (words or ideas)
  - Flowchart
  - Data Flow Diagram

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source: http://www.tutorialspoint.com/software_engineering/software_analysis_design_tools.htm

1주차 과제

- 기업 제안 과제 확인 후 희망 과제 리스트 제출
  - 벤처스타트업 아카데미 밴드 활용
  - 반드시 기업 제안 과제 선택할 필요 없으며, 자유롭게 제안도 가능함("자유 주제" 로 응답)

- 팀 미정인 학생은 본인에 대한 홍보 ppt (최대 3분)
  - 희망할 경우, 개발 고려하는 후보 주제 발표 가능
  - (선택) 본인의 능력에 대한 광고