Steps in a usability evaluation

- ***Define the goal of the test***
  - **Create hypotheses ('Diagnostic' or 'Formative')**
    - **Define measurements**
      - ***"Productive time"***
      - ***Occurrence of problems (define!)***
    - **Evaluating ('Summative')**
      - **Against what?**
        - ***Set goals***
        - ***Competing products***
        - ***Expert performance***
        - ***Existing system***
- ***Define populations of***
  - **Users**
  - **Environments**
  - **Tasks**
- ***Select samples***
  - **Users**
    - **Participant selection**
      - ***Stratification + random sampling***
      - ***If too costly***
        - **Representativeness**
    - **Assignment (if more than one version of system)**
      - ***Random***
      - ***Matched***
  - **Tasks**
    - **Random sampling too costly**
    - **Representativeness**
    - **More than one task?**
      - ***Random assignment***
      - ***Counterbalancing***
  - **Environments**
    - **Differences between the real world and your measurement situation**
    - **The actual situation**
      - ***Experimenter effect***
      - ***Expectancies***
    - **What can be done?**
      - ***Blind procedures***
      - ***Automation***

Create concrete tasks and environments
Recruit test persons
Choose things to register
- Governed by earlier choices
- Two types of main things
  - Events
  - States
- Remember!
  - Always operational definitions of everything

At test time
- Prepare
  - Cue cards (tasks)
  - Recording device
  - Test leader material
- Welcome the person
- Initial session one on one
  - Ethical information and consent forms
  - Ensure the participant that it is the system being measured
  - Pre-test questionnaire
- Warm up tasks
- Administer tasks according to plan
- Do not interfere with test person unnecessarily and never in such a way that the validity of the measurements are endangered
  - Ethical rules must be adhered to, of course
- Debrief
- Back up copy of recording

Analysis
- Don’t forget to validate observers

Prepare report