For additional resources please see PRS Ch. 10-14 and www.kmdi.utoronto.ca/csc318F/tutorial/tira.pdf

To complete this assignment you must know:
- What is an evaluation?
- What is usability? What is usefulness? Compare/Contrast?
- What is free-form exploration? What is task evaluation? Benefits/Drawbacks?
- What is a conceptual model?
- What are some important factors of consideration in field work? In evaluation?

Tips Regarding Usability Goals
- Five criteria for usability:
  - Ease of learning: How much "training" is required? Are you designing for novices, experts or both?
  - Efficient/ergonomic use: Do users find the system natural, flowing, effortless?
  - Minimal errors: Is the functionality clear? Is the interface clear?
  - Retention over time: How do they use (or feel about) the system in 1 week? 1 month?
  - Subjective satisfaction: Do they like it?
- Which of these are crucial, important, not important for your target group?
- Usefulness is another factor: How much functionality meets the user's needs?
- Consider the difference between Free-form exploration and Task exploration
- Set standards according to the above
  - E.g. users should be able to correctly identify meaning of all icons on first inspection
  - E.g. users should be able to perform x tasks without having to ask questions

Tips Regarding the Scope of the Evaluation
- Consider how your prototypes differ. How much of the prototype will be used? What is the key functionality?
- Are there different target user groups to consider? Parents, teachers, children?
- How many tasks will the user perform?
- Does the order of the tasks matter?
- How many users is enough for one iteration? Depends on homogeneity of target audience: Homogeneity exists when different users overlap in performance & feedback. Key is differentiating between individual differences & group characteristics
- 3-5 users is enough to see homogeneity and get reliable feedback

Tips Regarding Preparing the Evaluation
- When **selecting participants,** each target user group should be represented
- Consider variety/variability among target user group
- Decide what additional instructions are needed to use the prototype (as opposed to the final system)
- Decide how to handle participant questions ahead of time:
  - Answer now vs answer later
  - Answer questions with questions, e.g. What does this button do? / What do you think that button should do?
- Pilot test your protocol with 1-2 people
- Design tasks from the perspective of the user (what needs to be accomplished) rather than from the perspective of the system (how it is structured/operates)

Tips Regarding Running the Tests
- Limit session to about 30 minutes, consider complexity and *order* of tasks
- Plan some unstructured interview questions for the end of the session
- Follow up on feedback/statements made by participants
- Be clear that this is a test of the prototype, not the user
- Be clear that finding problems is the goal of the session
- "Think aloud" techniques: verbalize and elaborate throughout the process
  - E.g. What are you thinking/feeling? Why did you try that?
- Don't be too "helpful": be careful about answering questions and about why you cannot answer some; do not be deceptive
- If you are videotaping or taking notes, explain why

Tips Regarding Analyzing the Results
- Compare results between users …
- How much commonality is there? What is the homogeneity?
- Which problems were reported by only one user?
- If each user reports entirely different problems, more users are needed
- If each user reports exactly the same problems, the interface is badly designed
- If there is >1 target user group, which group fared better? Why?

Tips Regarding Writing up the Design Review
- Quote users directly
- Refer to specific user behaviours
- Are user problems due to a problematic conceptual model, or interface details?
- What changes to the interface are implied by results?
- What are the possible tradeoffs if changes are made?