CSMC 434 Section 0201, Spring 2018
User Research Assignment Rubric

Questions 1 and 2: Reading.
Questions 3 and 4: These are essays and will be graded using the standard CMSC 434 essay rubric.

Question 5 asks you to evaluate two microwaves. Unlike the in-class activity, we are not comparing microwaves to each other. Instead, each microwave will be evaluated on its own, according to a more structured heuristic evaluation form (see next page or the Assignment), and on the basis of three usage scenarios (see the Assignment).

The heuristic evaluation form has 7 questions to answer. Each answer will be worth 10 points.

10 points: Answer is complete and clear. Score is fully justified using at least two concrete examples from the three usage scenarios. No grammar or spelling mistakes.

8 points: Answer has the properties of a 10-point score, except there are one or more grammar or spelling mistakes.

5 points: Answer is incomplete or not convincing. There is one or fewer concrete examples from the three usage scenarios.

0 points: Answer doesn't make sense, or answer refers to microwave features that aren't there (or mentions a lack of microwave features that actually are there).

You have two microwaves to evaluate, so the total score for this question is out of 140 points.

Question 6: For this question, you need to observe six independent microwave users. You cannot watch the same person use the microwave more than one time. You can tell each person that you are observing microwave use for a homework assignment. If they want to talk about it, please let them. Otherwise, don't bother them. It is ok to spread out your observation over a few days.

While observing microwave users, write down anything that might seem even a tiny bit relevant. I recommend actually that you watch 8 microwave users, and then throw out the first two users’ data because the notes you took on them will be subpar. But for the 3rd-8th users, you have some practice under your belt and you will take better notes.

Afterwards, go through your notes. For each microwave user, answer the following questions:
  a) What is the user trying to do?
  b) How is the user trying to do it?
  c) Did the user make any mistakes?
  d) Did the user get an unexpected results?
  e) Did the user say anything about their microwave experience?

Each answer is worth 3 points, so there is a total of 5 * 6 * 3 = 90 points for this question. The TA will award 0-3 points at his discretion. It's ok if your answers are short. If you think you messed up an observation, just throw it out and watch another microwave user until you have 6 sets of observation notes that are good.
Usability Heuristic Evaluation

For each heuristic, select one of the following scores. Then describe the issues or good qualities that led to the score. You want to write at least 2 sentences of explanation for each score.

Scoring Scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>I don't agree that this is a usability problem at all</td>
</tr>
<tr>
<td>1</td>
<td>Cosmetic problem only: need not be fixed unless extra time is available on project</td>
</tr>
<tr>
<td>2</td>
<td>Minor usability problem: fixing this should be given low priority</td>
</tr>
<tr>
<td>3</td>
<td>Major usability problem: important to fix, so should be given high priority</td>
</tr>
<tr>
<td>4</td>
<td>Usability catastrophe: imperative to fix this before product can be released</td>
</tr>
</tbody>
</table>

Sources:

- Nielsen, J. (1995). *Severity Ratings for Usability Problems* (Links to an external site.).

1. **Visibility of system status**

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

2. **Match between system and the real world**

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

3. **Consistency and standards**

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions (iOS, Android, etc.)

4. **Error prevention**

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or allow for undo.

5. **Recognition rather than recall**

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

6. **Flexibility and efficiency of use**
Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

7. Fun to Use

Using the product should be a pleasant experience. When possible, it should be delightful, amusing, and enjoyable. Help users feel empowered and capable.