**ITIS 6400/8400 Human Computer Interaction**

**Spring 2018**

**CA01 – Needfinding Techniques**

**Names: ­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

This activity has 2 parts. In the first you will practice one of the techniques – participant observation. In the second part, you will fill in a matrix of the various needfinding techniques on their advantages, disadvantages, and critical issues.

**Part 1: Participant Observation (~30 minutes)**

This activity is to give you a flavor of what it is like to observe participants perform a task. Choose one person to play the role of the participant (P). Choose another to lead the observation (O). The rest are note-takers (N). The participant will use a weather app or website on their (or someone’s) mobile phone.

O should create 3 tasks for P to perform. Do not tell P ahead of time what these tasks will be. Do not help P perform these tasks, unless P gets stuck. Example tasks might be: check today’s forecast to decide whether it will be good weather for a picnic on Saturday, or check when it is likely to rain again.

Tasks:

1.

2.

3.

Ask P to “think aloud” as he/she performs these tasks. Silently observe P, while the note-takers mark down any observations. When completed, the note-takers should summarize what they saw with 2 key lessons: either problems or usability issues that the user seemed to encounter, or ways that the app could be improved to help the user with these tasks. What data could you gather to provide concrete evidence to convince a development team of these issues?

**Key Lessons:**

Everyone should create a small set (3-5) of interview questions that you would ask a participant after such an observation to learn more about what the user thinks of their experience to help you design a new mobile weather app. Have P answer them briefly.

To answer the following, consider how you would do this same evaluation on a larger scale to inform the re-design of this mobile weather app.

1. What kinds of tasks would you ask people to perform?
2. Beyond the simple notes you took here, what kind of data would you want to gather to provide evidence of issues?
3. How many participants do you think would be sufficient to inform this re-design?

**Part 2: Needfinding Matrix (~30 minutes)**

Complete the matrix on the next page with the key advantages, disadvantages, and issues for each of the needfinding methods.

|  |  |  |  |
| --- | --- | --- | --- |
| **Technique** | **Advantages** | **Disadvantages** | **Critical Issues for success** |
| Observation | * See actual behavior as it occurs |  | * Being able to observe the “right” set of tasks |
| Interviews |  |  |  |
| Focus Groups |  |  |  |
| Surveys (Questionnaire) |  |  |  |
| Diary Studies |  |  |  |
| Analyze existing system |  |  |  |