HCI – Seminar 9

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WHAT IS HEURISTIC EVALUATION?

An examination of the interface to judge its compliance with recognised usability principles (the "heuristics").

adapted from: https://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/

NEILSEN'S 10 USABILITY HEURISTICS

1. Visibility of system status
2. Match between system and the real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help users recognize, diagnose, and recover from errors
10. Help and documentation

HOW MANY EVALUATORS ARE NEEDED?

- One person will never be able to find all the usability problems in an interface. Therefore, it is necessary to involve multiple evaluators in any heuristic evaluation (3-5 is ideal).

- Evaluators should inspect the interface alone, and then aggregate the findings.

adapted from: https://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/

HOW TO CONDUCT AN EVALUATION

Evaluators should go through the interface at least twice:

- The first pass would be intended to get a feel for the flow of the interaction and the general scope of the system.
- The second pass then allows the evaluator to focus on specific interface elements while knowing how they fit into the larger whole.

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HOW TO DOCUMENT FINDINGS

- Write a list of usability problems in the interface with references to those usability principles that were violated by the design.

- It is not sufficient for evaluators to simply say that they do not like something; they should explain why they do not like it (i.e. referring to a specific heuristic).

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ACTIVITY

Individually, conduct heuristic evaluations of your digital prototype:

1) For the first pass, use the same task list as in your user test 2 weeks ago. Focus only on the interface elements relevant to the current goal.

2) For the second pass, conduct a more thorough screen-by-screen analysis, focusing on each interface element before moving on.

As a group:

3) Complete an ‘aggregate’ heuristic evaluation sheet. Label each problem with the name of the evaluator that discovered it.

4) Discuss your findings. Give each problem a severity rating and describe how it should be fixed.

DELIVERABLES

Include the following into Chapter 9 of your portfolio:

- Evaluate your digital prototype by filling in this table:

Problem	Heuristic Violated	Severity	Fix
What? Why? Where? …has happened Who found it?			

- Write a short summary on how this helped you improve the usability of your app.

ADDITIONAL READING

The Neilsen-Norman group have some great resources to help you better understand the Heuristic Evaluation method:

https://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/

https://www.nngroup.com/articles/ten-usability-heuristics/

https://www.nngroup.com/articles/usability-heuristics-applied-video-games/ (might be useful for assignment 2)

In addition, the 'supplementary materials' link on this page is an attempt at producing a generic checklist for heuristic evaluations of mobile application.

https://www.hindawi.com/journals/tswj/2014/434326/sup/

PREPARATION FOR NEXT WEEK

Finish reading Chapter 15

For next week's seminar:

- Bring along your current prototype
- Discuss issues & make improvements
- Finalise your mid-fi/hi-fi prototype for usability testing
- Be ready to demo your digital prototype