Human-computer interaction

Bronze Level

This badge is a basic introduction to HCI: that interfaces need to be evaluated by observing people doing tasks, and that heuristics exist for identifying common interface problems.

Useful links:

http://www.cs4fn.org/fundamentals/hci.php

http://www.cs4fn.org/usability/cogwalkthrough.php

http://www.cs4fn.org/usability/hotelalarm/observe.php

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

To complete the badge the candidate must:

1. Show understanding of the general principle of interface evaluation by evaluating an interface by observing a user. The candidate should be able to discuss the good and bad features of the interface with the examiner, using heuristics to guide the discussion. As preparation, it is recommended that the candidate:
   * Choose a small digital interface (such as an alarm clock, text message input, burglar alarm, microwave oven, clock widget etc.).
   * Identify two or three tasks that users would do with the interface (such as setting the time or setting an alarm).
   * Observe one or two users doing the tasks (a novice user will likely highlight issues; a parent or grandparent can be a good choice). A "think-aloud" or "cognitive walkthrough" approach is useful.
   * Note all the issues that the user has with the interface, and map them onto interface heuristics (e.g. Nielson's heuristics at useit.com).
   * Present the above observations as a short (one or two page) report.
2. Convey the concepts of this badge to someone who doesn't know about the topic. This might be:
   * A short talk at a parents' evening or to the club
   * A short video suitable for non-experts showing what is wrong with the interface in terms of the heuristics
   * Introducing HCI effectively to someone who is considering doing the badge themselves

**STAFF USE ONLY**

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of Completion: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_\_\_

Branch of Club: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Staff Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Staff Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Date Badge Awarded: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_\_\_

Comments/Notes: