Human Computer Interaction
Rapid Design Tutorial

One of the key skills of an HCI designer is the ability to take a design idea from an abstract concept to a sketch of the design and then be able to explain the sketch clearly enough that they can test it quickly on other people. In tutorial today we will be practicing this skill by designing a new app on paper.

The Brief: An alumni of the University of Edinburgh has given you a small grant to design a new app that helps students revise for exams. You will need to design the app and test it out on other people in the tutorial.

1 Brainstorm

You will spend 5 minutes brainstorming ideas for the app in silence onto provided sticky notes. This is an open brainstorming activity similar to free writing. That means that you are allowed to write anything you want onto the sticky notes.

2 Affinity and Discussion

Spend about 15 mintues discussing the ideas.

Form into groups of no more than 10 around either a wall or table. Put your sticky notes out onto the wall or table and perform a mini version of the affinity diagrm. Spend a few minutes reading other peoples' ideas and then discuss the ideas. Feel free to move the sticky notes around the wall as well as add new ones. What does the group feel that a good revision app must have?

3 Sketch

Spend about 15 mintues sketching your idea.

Individually each person should sketch out their app. You need to sketch out all the main screens and be able to explain what would happen on the other screens. We have provided some of the same materials from the co-design session, so feel free to make use of colored paper, sticky notes, scissors, etc.

In the next step you will be showing your app to other people, so make sure your app drawing is large enough and clear enough that annother person can read it.

4 Human Computer

Another discount usability approach is something called "The Human Computer". The idea is quite simple. You ask your participant to interact with a drawing as if it was a computer and then you explain or show what the computer would do in response. For example, if the user says "I want to click the next button" you would show them the drawing of the next screen. If they say "I would type in 3:30pm into this box" then you would write "3:30pm" into the box using a pencil. If the box doesn't handle letters, then you might show them an error screen, or just say "You see the error: letters are not allowed in this box."

The Human Computer is designed to be a flexible method. If the user tries something unexpected then you sould either verbally tell them what will happen, or create a new interface and show them. It is normal to use sticky notes to draw things like dialogs and warnings on-demand.

You will use the human computer approach to test your app idea with other people in the tutorial. First explain your app to them, what is it supposed to do, how does it help with revision. Then give them a simple task to complete using the app. Similar to a think-aloud watch as they try and interact with your sketch.