

COMPSCI 345  
SOFTENG 350

## Human-Computer Interaction (HCI)

### Test Tutorial

Associate Professor Robert Amor

### Test Reminder

- Friday, 8 April at 1pm
- 50 minutes
- MLT1 (for surnames starting with A-R)
- OCH2 (for surnames starting with S-Z)
- Short answer
- Heim, Chapters 1-6 plus Guest lectures
- Previous years' tests online

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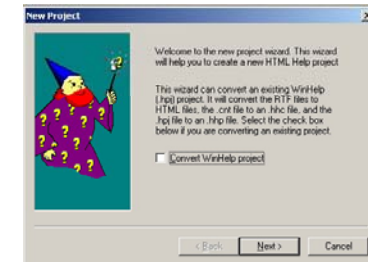
### Execution/Evaluation Action Cycle

- The Gulf of Execution looks at how easily an interface allows to carry out the actions we intend.
- Think about the front page of an online bookshop where you wish to purchase a copy of the course textbook by Heim.
  - Describe information and functions that, if missing, would increase the gulf of execution for this task.

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### Metaphor

- The metaphor of a wizard is often used for configuration tasks, as shown in the picture.
  - List three properties of a wizard that makes them an appropriate metaphor for this task.
  - Describe ways in which this metaphor can break down.



<http://www.beansoftware.com/>

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## Stakeholders

- Identify the stakeholders in the four main categories for the new “HOP” Auckland transport card website.

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## Discount Usability Engineering

- Discount Usability Engineering utilises the “thinking aloud” protocol.
  - Describe what is involved in using this technique
  - How would you use this technique to help implement User Centred Design

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## Interaction Styles

- Consider the abilities of Command Line Interfaces versus Menu-based Interfaces. Specify environments and tasks which would be better suited for each of these interface styles.

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## Interaction Styles

- Imagine that you want to delete a single file. Discuss the advantages of a Direct Manipulation interface versus a Natural Language interface for this task.

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## Design Principles

- What are some of the trade-offs when increasing screen complexity in regards to usability?
- How would this influence your approach to user interface design?

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## Design Principles

- Which Gestalt principles are being used in this website?
- How can you tell?

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The screenshot shows a web page for 'Human Computer Interaction: COMPSCI 345 SOFTENG 350 Semester 1, City Campus'. The page features a blue header with the university logo and navigation links. A search bar is present in the top right. The main content area is divided into sections for course details, class times, and a welcome message. The layout uses a grid system with clear visual hierarchy and consistent styling.

**COURSE DETAILS**

- Course Page
- Course Information
- People
- Lectures
- Tutorials
- Exams
- Assignments
- Tests and Exams
- Resources
- Articles
- Topics & Responsibilities
- Personal Portal
- Forum

**Computer Science**

**Human Computer Interaction:  
COMPSCI 345  
SOFTENG 350  
Semester 1, City Campus**

- Class Times
- Text book (Required)
- 601 & 602 Students
- Most Frequently Asked Questions

Welcome to Human Computer Interaction (HCI). For computer users the interface 'is' the system and for the 'average' system over half the code is entirely about managing the user interaction. This makes HCI an important area of study and research within Computer Science. As you will find during the course, HCI encompasses everything from designing a web page like this to developing Virtual Reality environments! We often combine knowledge from psychology, design and computer science.

**2011 Class Times**

Lectures: There are 3 lectures a week for this class (check them on Student Services Online)

- Monday 2pm in MLT1
- Thursday 10am in MLT1
- Friday 1pm in MLT1

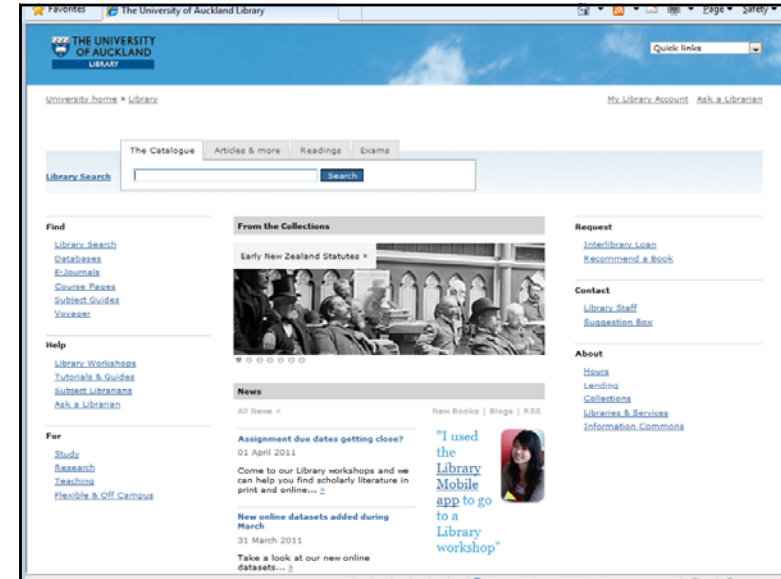
We do expect you to attend all lectures!

Tutorials: From week 2 there will be five lots of one hour lab/tutorial sessions each Monday and Tuesday. Approximately the same material will be covered in each session. They are at Monday 11, 12, 1 and Tuesday 10, 11 in G75 (Ground floor tutorial room in the CS building). You are expected to attend one of these sessions each week.

## Heuristic Evaluation

- Perform a heuristic evaluation on the following webpage using Nielsen's 10 Usability Heuristics. You are aiming to use this site to find Heim's textbook on 'The Resonant Interface'.

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## Low-Fidelity Prototype

- At what stages of a software project would you consider using low-fidelity prototyping?
- Describe some of the benefits that low-fidelity prototyping provides.

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## Scenarios

- Write a scenario for the task of purchasing online music a mobile phone to be downloaded onto the mobile phone. You need to include:
  - Scenario name
  - PACT analysis
  - Scenario description

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