

FIT3175: Usability

Week 1 - Introduction to Usability

Human-Computer Interaction

Researches the design and use of computer technology, focused on the interfaces between people and computers.

Key aspects

- How do design it?
 - Consider design approaches (graphic design, requirements gathering)
- How do we build it?
 - Consider implementation techniques and tools (prototyping techniques, development tools)
- How do we evaluate it?
 - Consider evaluation techniques (productiver, usability testing, formative and summative evaluation)

Usability

The effectiveness (accuracy and completeness), efficiency (resources in relation to the accuracy) and satisfaction (comfortable and acceptable) for the user.

Related to the ease of access or use of a product or website

Quality attribute that assess how easy user interface are to use

- Learnability
- Efficiency
- Memorability
- Errors
- Satisfaction

What makes good UI?

- Easy natural interaction
- Enables required tasks to be performed
- Minimises resources + effort required to perform tasks
- Go beyond aesthetics to consider the usability of interface
- Cannot rely on intuition

What happens if UI is good?

- Higher profits
- User Satisfaction
- Lower training costs
- Provides business advantages

What happens if UI is poorly designed?

- Loss of productivity
- Loss of custom
- Poor learning
- High training costs
- Health problems
- Accidents, disasters
- Irritation, frustration, annoyance, confusion, anxiety, dissatisfaction

Human Factors

- Problem solving
- Reasoning
- Pattern recognition

Important to take human factors into consideration when designing. Need to comply with laws to ensure equal opportunity legislation

Design which is focused on the user needs to:

- Take account of users' abilities and limitation
- Consider how people can be assisted
- Think what could provide quality experiences
- Involve people in all stages of the design process