

# USER-CENTRED DESIGN

## LECTURE NOTES

### WEEK 1 – What is Usability?

- 5 features of UCD include:
  1. *Interface Design*
  2. *Visual Layout*
  3. *Copywriting*
  4. *Brainstorm Coordination*
  5. *Usability.*
- **What is Usability?**

Usability is the extent in which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use. Usability is a quality attribute that assess how easy user interfaces are to use.
- There are 5 quality components to Usability:

**Neilsons Components of Usability**

  1. **Learnability** – How easy can they learn?
  2. **Efficiency** – Once learned, how quickly can they perform tasks?
  3. **Memorability** – When users return to the design after not using it, how easy can they reestablish themselves?
  4. **Errors** – how many errors does the user make and how severe are they?
  5. **Satisfaction** – how pleasant is the design?

### WEEK 2 – Users and Ethics delivered.

- Types of Users:
  - **Information Over loader:** Will tell you everything even if it's not relevant.
  - **The Devil's Advocate:** Always looking for a problem, might not even be problems.
  - **The control freak:** Wants to be involved in every decision making of the project.
- The Likert Scale –

Strongly Agree, Agree, neither Agree nor Disagree, Disagree, Strongly Disagree
- NASA Task Load Index (NASA-TLX) is a rating scale widely used for assessing workload.

## WEEK 3 – Using Personas to win the market

- **Why do we need a plan?**

To communicate what we want to achieve, not only to ourselves but to customers.

- Team Mission Statement
- Project details
- User requirements
- Functional requirements
- Data/workflow diagrams
- Screenshots of prototypes.

- **What is a persona?**

- A persona is a representation of a user, typically based off user research and incorporating user goals, needs, and interests.

[NAME, BACKGROUND, NEEDS AND GOALS, SKILLS AND EXPERIENCE]

- What does the user want to do? (John wishes to improve his cooking skills.)
- What does the user want to feel? (John wants an easy way to search recipes)
- Long term motivations. (John wants to improve his cooking skills so he can get birds)
  
- The primary persona is the single persona who's goals and needs are met completely.
- *Design for the primary accommodates the secondary.*
  
- **Scenarios** focus on the story of the persona.
- Must end with the goal achieved.
- **Context Scenarios** describe the context and settings of the application.
- **Data needs** – basic units of data. What goes into the database (name, id, username)
- **Functional needs** – basic unit of functionality. (save username, loading file)

### Context Scenarios

- High level, no interaction details
- Focus is on how the user can achieve their goals

### Key path Scenarios

- Incorporates functional and data needs into the scenarios
- Illustrates a path from the beginning to the end of the required goal of the user.
- Much more detail.

## **Example of Scenarios**

### Context Scenarios

- Lisa is in a lecture and realizes that she's confused when the instructor starts talking about mitosis. She takes note of the time.
- Later that day, she opens up her bspace course site and goes directly to the webcast for the day and reviews the portions of lecture via the webcast she needed clarification on.

### Key-path Scenarios

- Lisa is in a lecture and realizes shes confused when the instructor talks about mitosis. She takes note of the time.
- Later that day she opens up her bspace course site, clicks "Most recent webcast" link. BSpace switches to the 'use webcast' view and the webcast for the day plays.
- Lisa looks at her notes to see the time she noted earlier, and enters it into the lecture time field and presses enter. The lecture jumps forward to the part where mitosis is explained.