Welcome and Administrative Matters

CZ2004 Human–Computer Interaction

Lecturers

- Prof MIAO Chunyan (ascymiao@ntu.edu.sg)
    - Course coordinator
    - Research background: intelligent agents, interactive new media
    - Teaching weeks 1-6

- A/P CHAM Tat Jen (astjcham@ntu.edu.sg)
    - Research background: computer vision, pattern recognition, 3D telepresence
    - Teaching weeks 8-13

Human–Computer Interaction?

Human–Computer Interaction?

<Watch the lecture video recording>
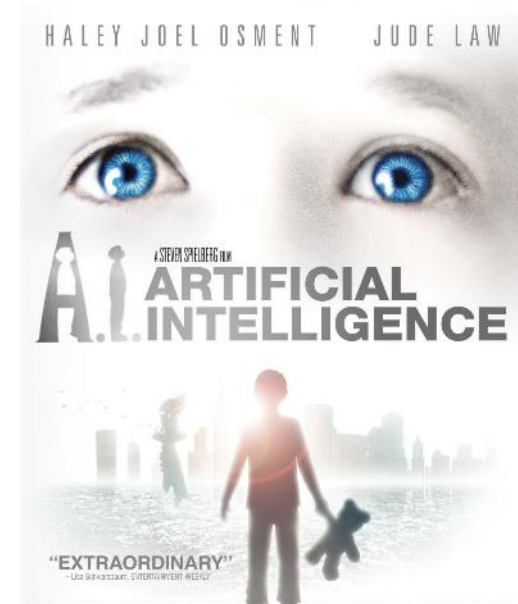
Human-Computer Interaction in Movies

Minority Report, 2002

Analysis: https://vimeo.com/49216050

A.I. Artificial Intelligence, 2001

Trailer: https://youtu.be/_19pRsZRiz4

Recent Consumer Technologies

Corning — A Day Made of Glass
https://youtu.be/6Cf7IL_eZ38

Microsoft Hololens
https://youtu.be/aThCr0PsyuA

Jibo Social Robot
https://youtu.be/3N1Q8oFpX1Y

Course Modules

- Module 0: Introduction to HCI
- Module 1: Usability
- Module 2: Guidelines, Principles, and Theory
- Module 3: Prototyping and Evaluation

Prof Miao

- Module 4: Humans (sensing, perception, etc.)
- Module 5: Human-Computer Interfaces
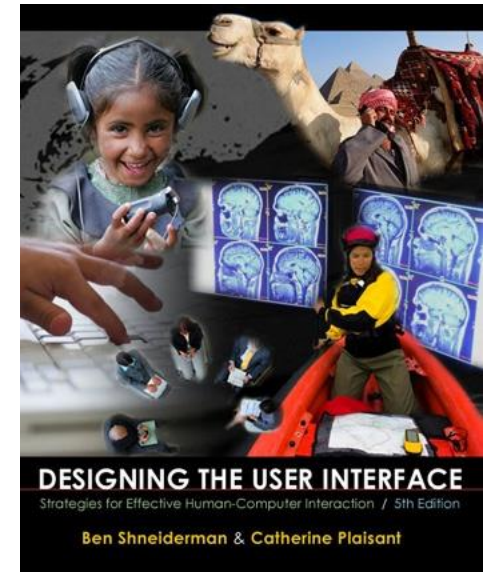- Module 6: Interaction and Design Concepts

Prof Cham

Textbook

Recommended Textbook for Modules 0-3:

"Designing the User Interface – Strategies for Effective Human-Computer Interaction"

5th Edition (2009)

Ben Shneiderman and Catherine Plaisant
Pearson/Addison Wesley, ISBN: 0-321-60148-3

No specific textbook for Modules 4-6:

Lecture material was extracted from many different books and research articles

You are of course welcome to read widely to learn more about this interesting subject!

Schedule

- Lectures
  - Twice weekly for 13 weeks
    - Tuesdays 4.30pm Venue: LT19
    - Fridays 3.30pm Venue: LT2A

- Tutorials
  - There are 6 tutorial sheets
  - First tutorial starts Week 3
  - Rough tutorial schedule (*subject to changes by individual tutors*): Weeks 3, 5, 8, 10, 12, 13

- E-Learning Week (likely)
  - Week 7
  - Separate material to be covered by self-study
    - consisting of videos and articles (already on NTUlearn)
  - Example classes will carry on as usual

Example Classes / Labs

- There are 5 example class sessions
  - but work mostly done outside sessions

- Venue: Hardware Lab 1 (N4-01a-03) OR Hardware Lab 3 (N4-B1a-05)

- A design scenario will be described, and students will proceed through different stages of design

- There are 3 assignments that count towards coursework marks
  1. Sketch a low-fidelity prototype
  2. Peer review of prototypes (based on design principles)
  3. Mockup a high-fidelity prototype

- Assignment deadlines are 1 week after sessions 2, 3, 5
  - Exclude recess week

- **Compulsory attendance at start of sessions 1, 3, 4**.
  Optional attendance for sessions 2 and 5.
  - If you are more than 20 minutes late, there will be a marks penalty
  - There are no make-up sessions for absentees
    - If you have an MC or other approved reason, there is no need to replace the session, just submit the assignment.
    - Otherwise a heavy marks penalty will be imposed.

- Lab schedule: go the the NTU MS Exchange public folder:
  https://webmail3.ntu.edu.sg/public/Common%20(Staff%20and%20Student)/School_xF8FF_Department/School%20of%20Computer%20Science%20and%20Engineering/2nd%20Year/?Cmd=contents, and look for the latest LabSchedule Excel spreadsheet.

Assessment Weightage

- **Overall Components**
  - Exams: 60%
  - Example Class Assignments: 40%

- **Within Example Class Assignments**
  - Lo-fi: 45%
  - Review: 15%
  - Hi-fi: 40%
  - (Assessment rubrics are described in example class manuals)

- **Coursework Quizzes**
  - May be introduced
  - If so:
    - Exams reduced to 50-55% of total, quizzes will take 5-10%, assignments remain at 40%

Exams

- Exam date/time: Monday 21 November 2016 at 9.00am (*please verify separately with OAS info*)

- Format: 4 questions to be completed in 2 hours

- Coverage: everything!
    - Includes all videos shown in lectures, e-learning material
    - Best way to learn is to attend all the lectures
        - There will be no "revision" lecture
        - Lecturers may emphasize or de-emphasize topics based on time spent on each slide

- Closed book exam
    - Students expected to understand all concepts and recognize terminology
    - ***Not*** required to memorize lists, tabular information or small details
    - **Won't** ask:
        - "Name the 5 usability measures covered in lectures."
        - "What is the average text entry speed for QWERTY keyboards?"
    - **May** ask:
        - "Why are usability measures important in UI design?"
        - "Explain the term *phi phenomenon*."

Reminder…

- We may continue to make minor updates to lecture notes, tutorials and example class manuals
  - Keep checking on NTUlearn for updated materials
  - *Check your NTU email box **frequently** for announcements etc.*

- All suggestions are welcome!!!

- Tutorial starts from week 3!!!

- Different lab groups start from different weeks!!! (check your own schedule)