Hot Topics in

Xiaojuan Ma
Fall 2016

COMP 4901G  Topics in Applications of Computer Science and Engineering
• Instructor
  – Xiaojuan Ma (mxj@cse.ust.hk)
  – Office: Rm3562

• TA
  – Mingfei Sun (msunag@connect.ust.hk)

• Location and Time
  – Rm 6591, Lift 31-32
  – Lecture: Mon & Wed 12:00pm – 13:20pm
  – Office hour: Wed Fri by appointment
Course Website and Space

• Course website: http://home.cse.ust.hk/~mxj/page/COMP4901G-201609.html
• Team Link: https://comp4901g201609.slack.com/
• We will use Slack for course communication
  – Make course announcement
  – Publish course materials
  – Submit assignments
  – Public discussion
  – Private message
• Give me an email address and I will invite you
  – My Slack Team ID is xm
Slack Joins The Billion-Dollar Startup Club

http://www.forbes.com/sites/ellenhuet/2014/10/31/slack-raises-120m-at-1b-valuation/
Lecture Structure

Week N-1

Week N

Week N+1

Lecture N  Practice N
Course Learning Outcomes

- **Knowledge/Content Related:**
  - **Course ILO #1:** Understanding the basic concepts and methods in HCI research
  - **Course ILO #2:** Understanding the foundations and trends of HCI applications

- **Academic Skills/Competencies:**
  - **Course ILO #3:** Design an interactive system using various methods through different design activities.
  - **Course ILO #4:** Prototype an interactive system with assorted digital and physical tools
  - **Course ILO #5:** Evaluate an interactive system through user studies.

- **Other Learning Outcomes:**
  - **Course ILO #6:** Communicate effectively with target users and different stakeholders in academia and industry
Grading Scheme

• In-class activities + assignments: 45%
• In-class presentation: 15%
• In-class midterm quiz: 10%
• Final proposal: 30%
• Bonus: 2% +
(1) In-Class Activities 45% + Bonus 2%

• Semi-flip classroom (every Wednesday)
  – A “taste of HCI” exercise: design, prototyping, etc.
  – A game / exercise related to the topic of the week

• Attendance + Activeness
  – Bring a pen/pencil and a deck of paper
  – 1 bonus point for answering a question, etc.
  – Bonus points can be used to trade missing activities

• Assignment Late Policy (usually due Friday)
  – Three “late day” quotas
(2) In-Class Presentation 15%

- Each of you will give one talk on different topics
  - A “Ted-style” talk of technology digest

- Grading rubrics
  - 15 points per presentation
    - 3 points basic
    - 2 points each for: comprehension, recall, Q&A, slides, manner, time management
  - Voted by the audience
(3) In-class Midterm Quiz (10%)

• Case analysis
• Semi-open book
(4) Final Proposal 30%

• Build your own idea – no copycat

• A 2~4-page extended abstract (8 points)
  – Academic style
  – Abstract, intro, related work, needfinding, your idea, design, prototyping & evaluation, conclusion, references

• A poster of the needfinding results (4 points)

• A 10~60 seconds video demo / ad (8 points)
  – Business style on the same idea
  – Marketing your idea to users and stake holders

• Get started earlier
(4) Final Proposal 30%

- User Research Poster Exhibition (Nov 28 Mon)
  - User needfinding results
  - Audience rating on
    - Users identification, need verification, design justification
    - Poster design

- Video Showcase (Nov 30 Wed)
  - Final concept + prototype demo
  - Audience rating on:
    - Novelty, feasibility, usability
    - Video quality
<table>
<thead>
<tr>
<th>Course Learning Outcome</th>
<th>Exemplary</th>
<th>Competent</th>
<th>Needs Work</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding the basic concepts and methods in HCI research</td>
<td>Define and clarify the basic HCI concepts and methodologies, and provide proper examples for demonstration</td>
<td>Define and clarify the basic HCI concepts and methodologies.</td>
<td>Define the basic terminologies and methodologies in HCI research, have difficulty in explaining the details, conditions, and contexts.</td>
<td>Have difficulty in explaining the basic concepts and processes of common design / prototyping / evaluation methods in HCI research</td>
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<tr>
<td>Understanding the foundations and trends of HCI applications</td>
<td>Elicit the history of HCI applications, the key changes, and driving forces, clarify the major challenges and future directions</td>
<td>Elicit the history of HCI applications, and explain the key changes and driving forces</td>
<td>Elicit the history of HCI applications, have difficulty in explaining the key changes and driving forces</td>
<td>Have difficulty in identifying the core values, scopes, challenges, and trends in HCI applications</td>
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<td>Design an interactive system using various methods through different design activities</td>
<td>Conduct common design activities such as needfinding, make good use of design tools such as mindmap, and generate clear design insights</td>
<td>Conduct common design activities such as needfinding and make good use of design tools such as mindmap</td>
<td>Conduct common design activities such as needfinding and brainstorming, have difficulty in using design tools such as mindmap</td>
<td>Have difficulty in conducting common activities such as needfinding and brainstorming in design process to generate design ideas</td>
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<tr>
<td>Prototype an interactive system with assorted digital and physical tools</td>
<td>Conduct common prototyping activities, make good use of various prototyping tools, and generate prototypes at different fidelities</td>
<td>Conduct common prototyping activities and make good use of various prototyping tools</td>
<td>Conduct common prototyping activities, have difficulty in using various prototyping tools</td>
<td>Have difficulty in conducting common prototyping activities and using various prototyping tools</td>
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<td>Evaluate an interactive system through user studies</td>
<td>Design and conduct user studies and data analysis, make good use of various prototyping tools, and generate good design implications</td>
<td>Design and conduct user studies and data analysis, and make good use of various prototyping tools</td>
<td>Design and conduct user study and data analysis, have difficulty in using various evaluation tools</td>
<td>Have difficulty in designing user studies and conducting data analysis</td>
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<td>An ability to communicate effectively with target users and different stakeholders in academia and industry</td>
<td>Explain HCI designs / applications to a general audience and handle questions, and make good use of multimedia</td>
<td>Explain HCI designs / applications to a general audience and handle questions</td>
<td>Explain HCI designs / applications to a general audience, have difficulty in handling questions</td>
<td>Have difficulty in explaining HCI designs / applications to a general audience</td>
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</table>


“Stay hungry. Stay foolish.”

- By Steve Jobs
Learning Aims

Conscious  Critical  Creative
Work for Today

• Join Slack and play with it
• Sign up for “Ted” talk topic in Doodle
  – http://doodle.com/poll/twmm2bktu6myud38
  – Deadline: Wednesday, September 14, 2016
  – Post your top 3 choices of topics
  – First come first serve
• Watch three selected Ted Talks
  – Submit screenshots + justifications
  – Deadline: Saturday, September 17, 2016
Questions?

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