6 Nov 2012

CS 4249: Revision

KAN Min-Yen

Week 12

		Syllabus	Content
Culladavia		Week 1 (14 Aug)	Course overview and Reacquainting with HCI
Syllabus		Week 2 (21 Aug)	Needfinding
		Week 3 (28 Aug)	Mini-Team Pitches and Prototyping
		Week 4 (4 Sep)	Selected topics in Evaluation
	First half:	Week 5 (11 Sep)	Experimental Design
	Basics of HCI	Week 6 (18 Sep)	 Team presentations: Theories 1 GOMS and KLM by Xu Chunfeng, Tan Wei Young, Lim Jia Mei, and Breton Chan (Only available to class registrants in IVLE). Fitts' Lew, and Guiard's Law of Bimanual Skill by Hui Shan Ang, Justin Soon, Kah Hong and Violet Leong. Seven Stages of Actions, Levels of Processing by Zhou Wan Yi, Norizainum Bte Abdul Muin, Fong Yi Shyang, and Looi Wenhe Selective Attentional Theories by Lim Shun Fa, Wee Wei Jin, and Yu Zhiwei Ryan.
			Recess Week
	Second half:	Week 7 (2 Oct)	Team presentations: Theories 2 External and Distributed Cognition by Lam Wei Li, Phee Keng Kok and Tan Thai Lin Edwi Situated Action, Plans and Scripts by Chan Jing Chuan Victor, Lee Tai Yun, Wah Hui Ning and Yong U-Wern Justin. Social Loafing and the Collective Effort Model by Chin Jiaying Estee, Chong Ming Xun ar Aw Jia Hao Edwin.
	Phenomena and	Week 8 (9 Oct) E-learning week for SoC	Capstone 1: Human Processing and Abilities Video lectures on YouTube.
	Theories of HCI		Memory 1 Memory 2 Perception Motor Abilities
		Week 9 (16 Oct)	Team presentations: Theories 3 Emotional Design Model by Lai Yit Hann, Chin Gui Pei and Goh Horng Bor. Pleasure Model by Low Guan Hong, Ng Joon Kiat Steve and Wong Yong Ming. Conversation Analysis and Theory by Balaji Preetl, Chang Jian Jong Byron, Chua Wei Kia Rayner and Rimmalapudi Srimanjula Chowdary. Berrypicking. Information Scent and Information Foraging by Leong Kai Khee, Ng Yew Chong and Lu Tian Long.
		Week 10 (23 Oct)	Capstone 2 - Cognitive Models and Affective Computing
		Week 11 (30 Oct)	Guest lecture: TBA by NUS HCI Lab and Capstone 3
		Week 12 (6 Nov)	Guest lecture: Brain Computer Interface by Ang Kai Keng (I2R) and Revision
		Week 13 (13 Nov, no class due to Deepavali/Diwali)	Class postponed to reading week
		Reading Week	Project presentation at the SoC Term Project Showcase on Tuesday 20 Nov at SR1

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Videos

- Up to date (2011-2012) videos have been a large feature of this class.
- Make sure to review them for the final. They are an integral part of your learning.
- <u>http://youtu.be/nTFEUsudhfs</u> Salman Khan: Let's use video to reinvent education
- <u>http://youtu.be/hc0c-5VUrOs</u>
 Jeff Chapin: Design As a Tool for Better Conversations
- <u>http://youtu.be/C3rxCLhzmXY</u> Bill Verplank: Interaction Design
- <u>http://youtu.be/H0_yKBitO8M</u> Tom Wojec: Build a tower, build a team

http://youtu.be/ U6PoUg7jXsA Joshua Foer: Feats of memory anyone can do

- http://youtu.be/ Ud8WRAdihPg Alan Kay on Learning and Computer Science
- http://youtu.be/ <u>4oG0ZvkhzCY</u> An Introduction to Activity Theory

- http://youtu.be/lfBpsV1Hwqs Jane McGonigal: The game that can give you 10 extra years of life
- http://youtu.be/TYIh4MkcfJA Asch Conformity Experiment
 - http://youtu.be/ 2NENIXsW4pM Eric Whitacre: A virtual choir 2,000 voices strong

This is not exhaustive list, but covers most of the major topics that we've touched on.

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Pedagogical Goals

- Design an effective plan for evaluating a computing interface
- Execute a plan for evaluating a user interface and report the findings in an actionable way
- Improve time and project management skills in interface design projects
- Improve presentation and argumentative skills

Learning Outcomes

- Relate and explain why specific theories and phenonema of human computer interaction apply to a case study
- Design and execute a proper evaluation methodology for an interface design

- Relate and explain why specific theories and phenonema of human computer interaction apply to a case study
- Design and execute a proper evaluation methodology for an interface design
- Apply an appropriate statistical test to test an evaluative hypothesis about an interface
- Describe any hazards or difficulties of an evaluation plan with respect to human subject ethics
- Describe how an interface design meets or fails to satisfy a user requirement or specific user goal

Final Exam

- This examination paper contains NINE (9) questions and comprises of TWELVE (12) printed pages, including this page. Some questions have multiple parts.
- 2. It is suggested that you limit your response length to the space provided.
- You may use the backs of the pages as scratch paper, as they will be disregarded, unless specifically noted by you on a printed side.
- This is a CLOSED BOOK examination, allowing ONE (1) A4 sized sheet of notes, handwritten, printed, or otherwise.
- 5. You may use pencil or other erasable medium in answering this paper.
- The questions are presented in an approximate order of the topics' appearance in the syllabus. Specifically, they are not ordered by their perceived difficulty or estimated time to answer. You may want to do the questions out of order.
- You should not feel the need to use up all of the space below a question to write the answer. The answer space is allocated based on the <u>most lengthy</u> response we expect a relevant answer to take.

Question	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Total
Max	7	15	9	10	9	12	18	10	10	100
Marks										