DELFT UNIVERSITY OF TECHNOLOGY Faculty of Electrical Engineering, Mathematics and Computer Science



Interim Exam

CS4015 Behaviour Change Support Systems Wednesday 27 January 2016, 9:00 – 12:00 hr

- This interim exam includes 10 multiple-choice questions and 5 open questions
- The minimal and maximal points that can be obtained are as follows:

Question		Points
Participation interim exam		10
Multiple-choice questions (Question 1 till 10)		0-40
11		0-10
12		0-10
13	*	0-10
14		0-10
15		0-10
	Total	10-100

- Points for the Multiple-choice part is equally weighted with change correction.
- Minimal number of points needed for a positive mark: 58 points
- Use the first sheet to provide your answers for the multiple-choice questions. Write down the number of questions and letter of your answer (A,B, C, or D).
- Each multiple-choice question only has one correct answer
- This is a closed book examination, the use of books, readers or lecture notes is not allowed, the use of calculators, computers, mobile devices are also not permitted
- For the open questions, write clearly and avoid verbose explanations, and explain your answers
- Write on each sheet your name, student number and course code (CS4015)
- For each answer, clearly indicate the question number
- Total number of pages: 5

Question 4

Which of the following statement is a core claim about goals according to the Goal Setting Theory?

- A There is a linear function between on one hand goal difficulty, and on another hand effort and performance, within the limits of one's ability and commitment.
- B Performance levelled of or decreased as long as the limits of people's ability are not reached
- C Specific, difficult goals lead to lower performance compared to goals that state a general intent to do one's best
- D Relationship between goal and performance is not affected by a person's self-efficacy

Question 5

Looking at Trans-Theoretical Model of change, in which of the following 4 stages is consciousness raising to stimulate a stage transition the most effective?

- A Contemplation stage
- B Preparation stage
- C Action stage
- D Maintenance stage

Ouestion 6

Which of the following 4 strategies is the most effective way to influence self-efficacy according to Bandura?

- A Mastery experience
- B Social modelling
- C Improving physical and emotional states
- D Verbal persuasion

Question 7

What are the 3 stages of the Behaviour Change Intervention Design process according to Susan Michie's Behavior Change Wheel

- A Stage 1: understanding the behaviour; stage 2: identify intervention options; stage 3: identify content and implementation options
- B Stage 1: understanding key issues behind persuasive systems; stage 2: analysing the persuasion context; stage 3: design of system qualities
- C Stage 1: understanding; stage 2: discovery; stage 3: design
- D Stage 1: innovation; stage 2: early adoption; stage 3: late adoption

Question 12

A financial administrator for a large international consultancy company wants to enhance the change that employees enter the travelling cost they have made the previous week in the administrative system of the company on time. This will help the company to have updated insight of their spending. (A) Explain how the administrator can use the strategy of persuasive profiling for this. (b) Explain how the administrator can use the Nudge theory for this. (c) Finally explain how the administrator can use message framing for this.

Question 13

A university wants to develop an application that supports students in their first year of a Bachelor course computer science. The university has identified self-motivation (e.g. intrinsic motivation) to study this course as the key factor that this application should support. Therefore, the ideas put forward by the Self-Determination Theory will be used to design the application. (A) Make a conceptual drawing of the Self-Determination Theory. Furthermore (B) give a description of the basic factors in the theory, and (C) give examples on how the ideas of this theory can be translated into the design of application (One example for each factor of the theory).

Question 14

An online web shop wants to increase the chance that once customers engages in the process of buying an selected item they actually place the order and pay for the item. For this the shop wants to use the principle that Fogg calls Tunneling. (A) Describe what Fogg means with the principle of Tunneling. (B) Give an example how in the design of the web shop this principle can be used to achieve this aim to increase sales.

Question 15

Both Fogg's Behavior Model and COM-B model of Michie's Behavior Change Wheel explain which key factors determine the condition under which a person would exhibit a specific behaviour. (A) Make conceptual drawings of Fogg's Behavior model, and (B) explain this model. (C) Make conceptual drawing of Michie's COM-B model, and (D) explain the model. (E) Explain the difference between the two models.

---- End of examination ----