UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
(ONLINE)
SEMESTER I
SESSION 2020/2021

COURSE NAME : HUMAN-COMPUTER INTERACTION

COURSE CODE : BIM 30503

PROGRAMME CODE : BIM

EXAMINATION DATE : JANUARY/ FEBRUARY 2021

DURATION : 3 HOURS

INSTRUCTION : 1. ANSWER **ALL** QUESTIONS.
2. PLEASE MAKE SURE TO CLICK "SAVE ANSWER" BUTTON.

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THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

Q1   Questions **Q1(a)-Q1(c)** are based on the following scenario.

The use of Automated Teller Machines (ATMs) has become a part of everyone's life. These machines are everywhere, evolved from the time of primitive keypad until touch screen displays took over. The usability of ATMs is highly dependent on the design principles in order to have better user experience.

(a)   Analyze **SIX (6)** design principles that ATMs should have.

(12 marks)

(b)   Give **TWO (2)** reasons why system design approach is suitable for designing and prototyping the ATMs.

(2 marks)

(c)   Draw the hierarchical task analysis (HTA) to withdraw money if the ATMs were to use fingerprint as a secondary layer of authentication.

(6 marks)

Q2   Questions **Q2(a)-Q2(c)** are based on the following scenario.

Kiddies Apparel wishes to have a one-stop platform to connect with their buyers to explore a huge collection of kids' apparel and clothing.

(a)   Determine the goal and **THREE (3)** user needs for the above scenario.

(4 marks)

(b)   Analyze **TWO (2)** categories of stakeholders and the person involved in this project for each stakeholder.

(4 marks)

(c)   Suggest the principle approach to involve the user in designing a user-centric website for Kiddies Apparel.

(6 marks)

(d)   Draw a user-centric interface for the Kiddies Apparel website.

(6 marks)

Q3   Questions **Q3(a)-Q3(c)** are based on the following scenario

MySejahtera is an application developed by the Government of Malaysia to assist in monitoring COVID-19 outbreak in the country by empowering users to assess their health risk against COVID-19. This application also provides the Ministry of Health (MOH) with the necessary information to plan for early and effective countermeasures. The application has been widely used among Malaysian in the past 12 months and yet to be evaluated in terms of its usability and functionality. As a system analyst, you are given a task to evaluate the effectiveness of MySejahtera to the target users.

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(a)   Discuss **SIX (6)** items involved in "DECIDE" framework that can be used as a guide for the evaluation process.

(12 marks)

(b)   Suggest **TWO (2)** factors to be considered before the data analysis is done.

(4 marks)

(c)   Discuss **TWO (2)** strategies to protect participant's privacy according to Association for Computing Machinery (ACM) Code of Ethics and Professional Conduct

(4 marks)

Q4   Questions Q4(a)-Q4(b) are based on the following scenario.

A well-known university in Batu Pahat, Malaysia has collectively decided to establish a virtual university (i.e a totally digital and online university), in order to become a premier technical university in 2025. The virtual university (called UvU)platform must enable an effective teaching and learning online (i.e learning management platform, teleconferencing and massive open online courses), along with an integrated online solution to support the academic eco-system (such as student application and registration, payment, course registration, student assessment, outcome based education and tracking, graduation, as well as analytics and reporting dashboard). The main users for the UvU are the educators, students and administrators. The developers of the UvU are the ICT centre, and the global learning and content authoring centre, both being governed by Chief Digital Officer (CDO).

(a)   Discuss with relevant examples:

    (i)   **THREE (3)** relevant approaches to user support of the UvU for educators.

(9 marks)

    (ii)   **THREE (3)** relevant approaches to user support of the UvU for students.

(9 marks)

(b)   Discuss **ONE (1)** presentation issue when designing the user support of the UvU.

(2 marks)

-END OF QUESTION -

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