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Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
(ONLINE)
SEMESTER I
SESSION 2020/2021**

COURSE NAME : MOBILE APPLICATION
DEVELOPMENT

COURSE CODE : BIM 30603

PROGRAMME CODE : BIM

EXAMINATION DATE : JANUARY/ FEBRUARY 2021

DURATION : 3 HOURS

INSTRUCTION : 1. ANSWER **TWO (2)** QUESTIONS
ONLY.
2. PLEASE MAKE SURE TO
CLICK "SAVE ANSWER"
BUTTON.

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

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Q1 Question Q1 (a) to Q1 (d) are based on the following scenario.

You are the head of IT department of Alfims Technology Sdn. Bhd. which has been appointed by a well known retailing company to develop an online shopping application. The mobile application should be completed in 3 months.

- (a) Discuss the most suitable mobile application development framework for developing the required application with appropriate justification.
(10 marks)
- (b) Suggest functional and non-functional requirements of the mobile application.
(10 marks)
- (c) Elaborate most suitable monetization strategies for the mobile application.
(10 marks)
- (d) Propose other technology for e-commerce using mobile computing that could enhance shopping experience with appropriate examples.
(10 marks)

Q2 Question Q2 (a) to Q2 (d) are based on the following scenario.

You are required to develop an interactive mobile learning application for pre-school children. The application must include learning mathematics, science and English language. The application should implement augmented reality technology and be able to run on Android and iOS platforms. You are given only 4 months to develop and deliver the application.

- (a) Discuss major opportunities of including wearables platform for the mobile application.
(10 marks)
- (b) Elaborate major design and implementation challenges for wearables platform discussed in Q2 (a)
(10 marks)
- (c) Suggest approaches that developers can apply to make the developed application more accessible to children with special needs.
(10 marks)
- (d) Discuss major usability challenges in the mobile application development.
(10 marks)

Q3 Question Q3 (a) to Q3 (d) are based on the following Figure Q3.

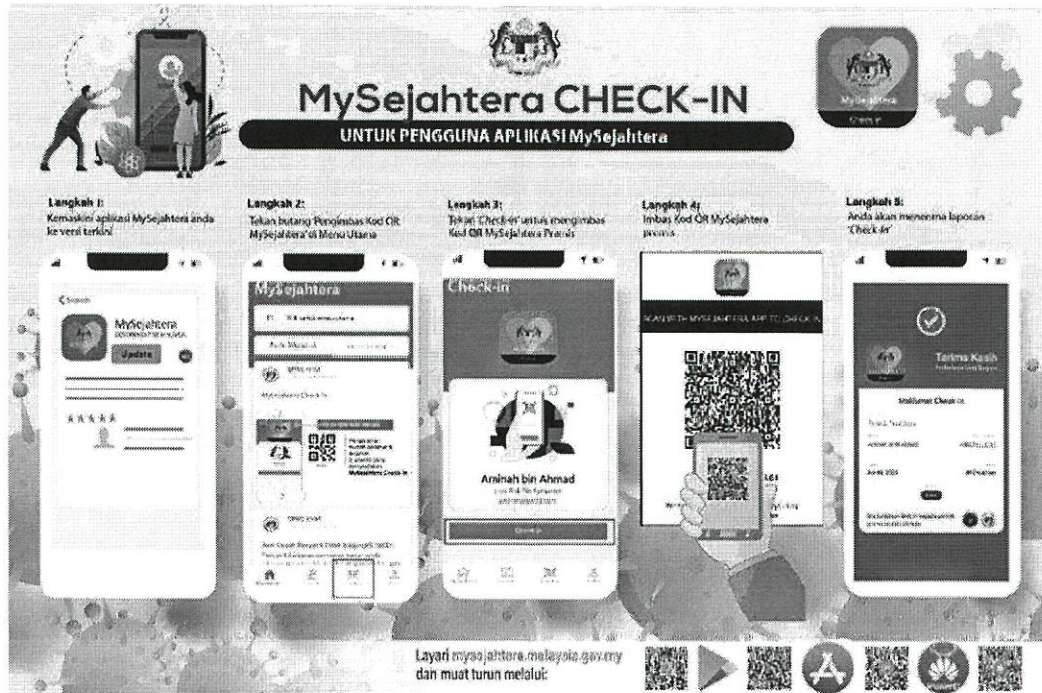


FIGURE Q3

- (a) Elaborate whether Android / iOS design guidelines has been implemented in the user experience (UX) and user interface (UI) design. (10 marks)
- (b) Discuss reasons why developers may ignore the design guidelines. (10 marks)
- (c) Explain approaches that developers can apply to make the developed application more accessible to people with visually impaired. (10 marks)
- (d) Suggest the external application services that is suitable for enhancing the mobile application. (10 marks)

- END OF QUESTION -

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