

Sri Lanka Institute of Information Technology

B.Sc. Honours Degree/Diploma  
in  
Information Technology  
Specialized in Information Technology

Final Examination  
Year 3, Semester 2 (2019)  
**Regular Intake**

IT3060 - Human Computer Interaction

Duration: 2 Hours

October 2019

Instructions to Candidates:

- ◆ This paper has **03** questions.
- ◆ Answer all questions.
- ◆ Provide answers **only** in the provided spaces below the questions.
- ◆ The total marks for the paper is **100**.
- ◆ This paper contains 10 pages including the cover page.
- ◆ Electronic devices capable of storing and retrieving text, including calculators and mobile phones are not allowed.

**Question 1**

**(30 Marks)**

*“We must design for the way people behave, not for how we would wish them to behave.”*

— Donald A. Norman

- a. State whether you **agree or disagree** with the statement given above. Justify your answer by using a suitable example.

**(06 Marks)**

Agree / Disagree

- b. User research can be done with or without a product. Name four (04) User-research methods for each.

**(08 Marks)**

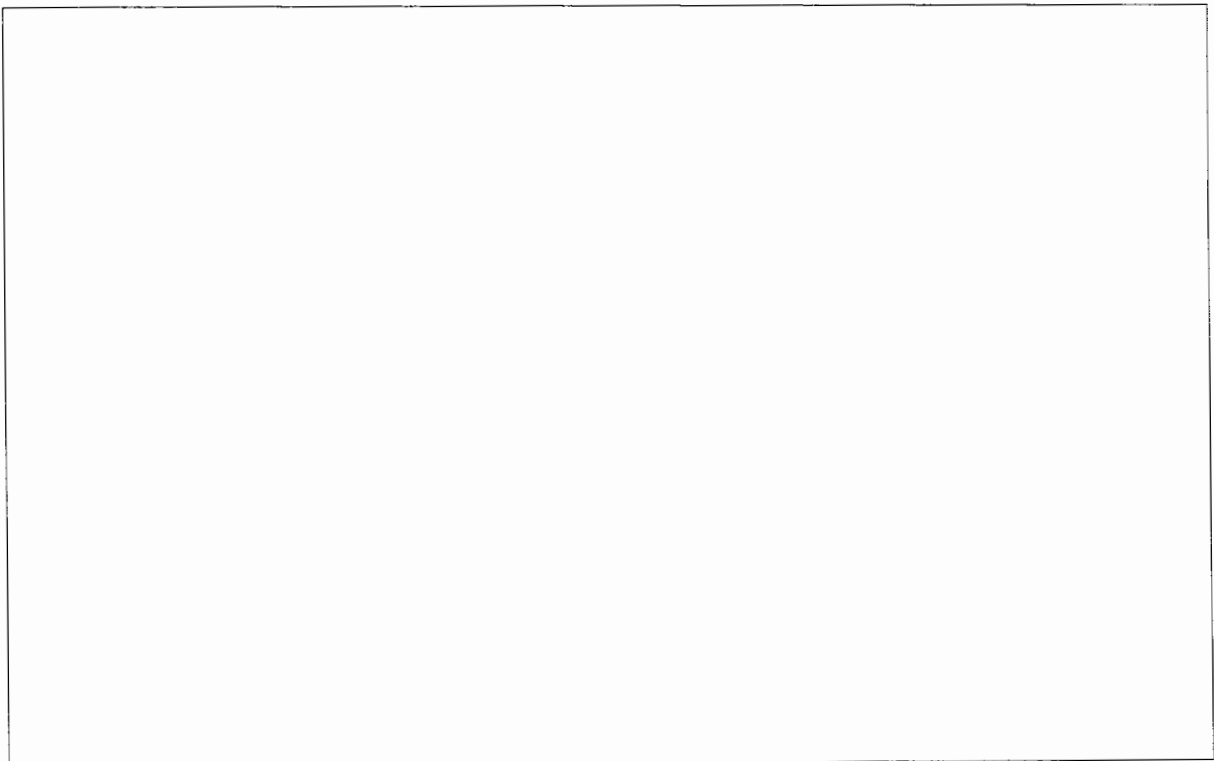
c. Name and briefly describe two (02) ideation techniques.

(08 Marks)



d. Justify the importance of getting the users involvement in the design process.

(08 Marks)



**(40 Marks)**

MediPro is a proposed medical software, which handles all the services relevant to outdoor patients including doctor channeling. You are hired to design this software application. MediPro provides its services to OPD patients for quick online doctor channeling and order prescribed drug(s) to the doorstep as a pay on delivery in case of emergency. The doctor can upload drug prescription (medication) details to the MediPro system after examine the patient. MediPro system generates a QR code for the drug prescription and patient can transfer it to any registered pharmacy. The pharmacist can update the system once drug(s) are dispatch for delivery or if unavailability of any prescribed drug(s).

a. Suggest the most suitable software solution for MediPro among Desktop, Web and Mobile app. Justify your suggestion.

Desktop / Web app / Mobile app

(10 Marks)

stakeholders	user requirements	business goals

- c. Sketch a storyboard for the doctor channeling and the drug ordering process.  
The design should involve the user initiating the software, steps in the doctor chandelling process, order and receiving drugs.

Note: The marking is based on the completeness, clearness, and the flow of the scenario.  
(12 Marks)

d. Design wireframes to represent four (04) main GUI's of MediPro.

(10 Marks)

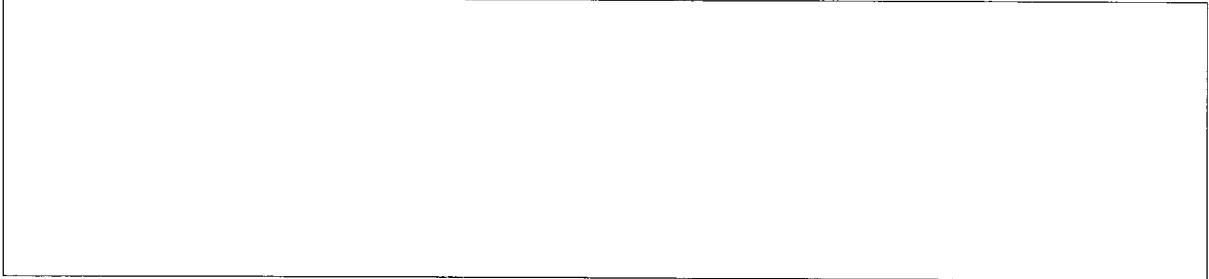
- e. State three (03) social issues you would consider when designing the MediPro system.  
(03 Marks)

**Question 3**

**(30 Marks)**

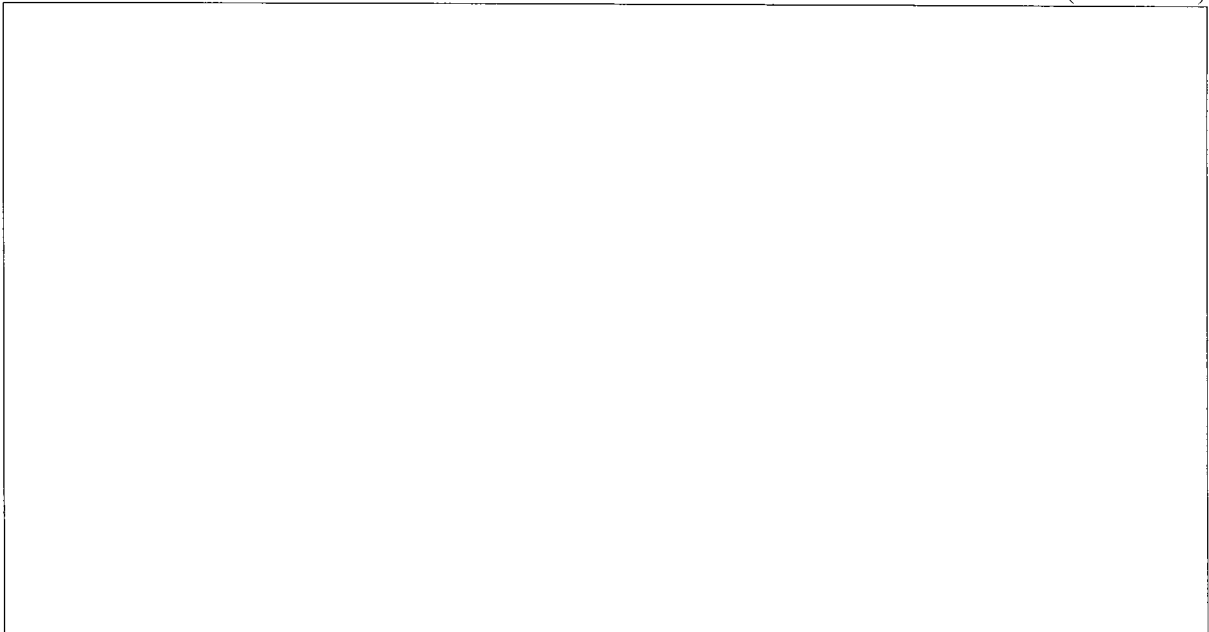
- a. What is interaction design? Explain using the web application developed for the HCI project.

(05 Marks)



- b. Compare main interaction types by giving suitable examples for each.

(06 Marks)



- c. What is “*coded prototype*”? State two (02) main reasons to select it for prototyping.

(04 Marks)





d. Assume that you are given a task of designing an innovative interactive game to reduce mental stress of university students in Sri Lanka.

I. Choose a typical user profile, and produce a detailed, complete persona.

(05 Marks)

II. Formulate a detailed main scenario for the selected user above.

(06 Marks)

III. Explain how to use “**contextual inquiry**” method to find real needs of users of the proposed game.

(04 Marks)

===== End of the Question Paper =====