



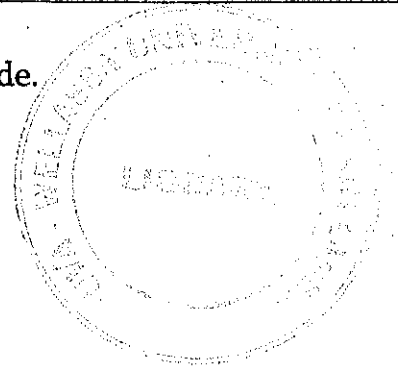
UVA WELLASSA UNIVERSITY, SRI LANKA
FIRST SEMESTER EXAMINATION – FEBRUARY 2011
IIT 301-2 HUMAN COMPUTER INTERACTION

TIME: ONE (02) HOURS

Total of 02 Questions: Each has 4 sub sections.
Each carry 20 marks which covers the 40% of your final grade.

Marks distribution for each subsection:
a- [4 marks] b- [4 marks] c- [6 marks] d- [6 marks]

Answer all of them



Q1.) Think that you have to design & implement a Human Resource Management (HRM) system for a manufacturing company, which has an employee base of over hundred, under several categories like laborers, technicians, store keepers, clerks and managers etc...This company has branches around the country. Your system should be capable of managing employee details, daily attendance records, leave plans, salary information and so on. So, there should be a limited no. of administrative privileges. Users can have their own portal to view their personal details. So, thinking of this scenario answer the following questions:

- a. Which type of an application you would like to offer to your customer? Please provide reasons.
- b. Provide a simple, but detailed diagram of your designed system.
- c. Suggest an efficient database table structure of your application.
- d. Suggest a suitable software development methodology for this project and mention what are the phases of it that you will consider the display design techniques?

Q2.) Think that you are given a project to design and implement a full scale banking system. The system should be capable of handling all the internal banking activities (used by the bank officers, like handling customers' account details (deposits, withdrawals), dealing with the ATMs and merchants who provide credit/debit card payment facilities (e.g. Shops, Filling stations and etc...) and online banking. So, there are 3 aspects of the whole system. But only one (central) database.

a. Draw a simple diagram of your system pivoting around the central database.

b. Provide class diagrams for the online banking system.

c. What is the best way to communicate with ATMs and merchants? (In other words how do you identify or keep track of the transactions done via ATMs and merchants?)

d. Discuss the differences between the two GUIs used in the internal system (used by the banking officers) and in online system (used by the customers).