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This question paper consists
of 3 printed pages each
of which is identified by the Code
Number (COMP291101)

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School of Computing

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Requirements Engineering

Answer BOTH questions

Time allowed: 2 hours

TURN OVER

Question 1**Scenario**

JazzTime is a Jazz festival held in Leeds every year. Since its first conception in 2008, it has gone through several major changes regarding the structure, length and location, but the tickets have always been sold in a traditional way: through two event agencies. The organisers have decided to completely modernise the tickets selling system and the following concept has been created.

From this year on the tickets will be sold in 3 distinct ways:

- traditionally, by two event agencies*
- in electronic format directly on the festival website*
- through Virgin trains portal*

All parties will have access to the same unique tickets database of the new system to avoid double selling. A partnership with Virgin trains needs to be set up, so that Virgin can sell combi-tickets, including both the festival admission fee and the train ticket to the festival venue at a reduced price, from anywhere in the UK. The goal is to enable more music fans to have easier and cheaper access to Jazz. The system will have to be extended to support not only English, but also German, French and Italian. Since tickets will also be sold on-line, the PaymentsSecure company will be contracted to provide and ensure the security of the on-line payment system.

The Jazz event manager will take care of and negotiate all these details with the involved parties.

Additionally upon arrival at the festival venue, each participant has to self-check- in at a touch screen terminal, which scans the barcode on each ticket and issues a bracelet with an electronic chip. This bracelet can be used to load money, so that whenever someone wants to purchase snacks or beverages, they do not have to use cash, thus reducing waiting times. This measure was initiated by the program manager and will be deployed by the WristBands company.

Lastly according to government laws, the way the payment transactions are performed has to be audited by an external company at the end of the festival.

Answer the following questions based on the above scenario:

(a) Identify and name all the stakeholders of the JazzTime new ticket selling system.

[4 marks]

(b) Identify one goal, two functional requirements and one non-functional requirement in the scenario.

[4 marks]

(c) How can you gather further requirements that help you build the JazzTime new ticket selling system? Identify three different requirement elicitation methods and for each explain:

- (i) Why you think the method is suitable in the context of the JazzTime scenario.
- (ii) Which stakeholders the method is appropriate for.
- (iii) How you would implement the method in practice for JazzTime

[12 marks]

[20 marks total]

Question 2**Scenario**

RedBrick is a theatre venue in Leeds which provides a wide-range of entertainment including plays, concerts and private functions. The theatre has an extensive bar and food facility and provides merchandising to promote the theatre.

The major sections are: Plays, Concerts. Bars. Catering, Merchandising.

There are two PCs and a printer in the general office. One PC runs an accounting and payroll package and both PCs have Microsoft Office. There is an internet connection for email and web browsing. The tills are not connected to any other systems. Some of the staff have laptops which enable them to maintain their own diaries and spreadsheets.

(a) Suggest two business use cases for RedBrick theatre and for each, identify an appropriate business actor and suggest a suitable value proposal.

[4 marks]

(b) Name two use cases for a typical till and, for each, identify an appropriate actor and suggest an appropriate value proposal.

[4 marks]

(c) Write a use case description for the basic flow of events for one of the use cases for a till that you have identified above.. Briefly give an example of an alternate flow and an exception flow.

[6 marks]

(d) Currently the theatre do their event planning on a large whiteboard in the general office and are unable to sell tickets in advance. The theatre want a new system to plan events and ticket sales. Outline what steps you would take to produce a requirements specification for them.

[6 marks]

[20 marks total]