

COMPUTER SCIENCE TRIPOS Part IA – 2012 – Paper 2

9 Software Design (CM)

Consider a restaurant software ordering system. The system should allow the waiter to handle customers' orders by adding them, cancelling them, scheduling parts of the order (to make the starter arrive earlier than the main course). The cashier should be allowed to let customers pay for their meals, and print receipts.

- (a) List two requirements (one functional and one non-functional) of the system using the MOSCOW requirement prioritisation method. [2 marks]
- (b) Draw a use case diagram for a restaurant ordering system and give the use case detailed description of the use case CancelOrder. [7 marks]
- (c) Define a class diagram with a maximum of three classes for the restaurant ordering system. [2 marks]
- (d) Show the activity of processing a meal order within the system using an activity diagram. [4 marks]
- (e) Show the use case realization (through interaction diagrams) of one of the use cases you have drawn for part (b). [5 marks]