

Continuous Assessment Lab 1

Description

Consider a ticket booking system for a large coach company, UAHTOURS. Customers can make enquiries about coach journeys, book and pay for their tickets by one of two methods: over the phone via an operator at a call center, or by walking into any one of a number of ticket offices nationwide to be served by the sales staff there.

Enquiries involve the operator or sales staff querying the system with the start and end points of the journey and the customer's preferred dates and times of travel. The system responds with the possible journeys as well as seat availability for these journeys, which the operator or sales staff conveys to the customer. This process is repeated until either the customer halts the process or a suitable journey is found, after which the customer is asked if they wish to make a booking. To make a booking, the system creates a new booking with a unique booking reference, the operator or sales staff confirms the details given for the journey and number of seats reserved, and enters the customer's name. The system automatically adds the date and time. Customers can then choose to confirm the booking immediately or have their bookings held for 24 hours, in which case the operator or sales staff tells them the booking reference. After 24 hours, an unconfirmed booking will be deleted and the reserved seats marked as free once more.

Customers have to pay in order to confirm a booking, either by credit card if the transaction is occurring over the phone, or by cash or credit card if in a ticket office. A booking made at some earlier time can be located via the booking reference. Credit card details must be validated by the system. In the ticket office, confirmation and payment is completed once the system has printed out the tickets, which are handed to the customer, and the system then archives the booking. For confirmation and payment over the phone, the details are sent by the system to the ticket office local to the journey start point, where the tickets are printed out and kept for collection by the customer, prior to the journey. The booking details are archived when the tickets have been collected.

Produce a **requirements document** that includes examples functional and non-functional requirements, including:

- (i) A use case diagram showing the actors and use cases (UCs)
- (ii) Use case descriptions (scenarios) of two UCs. Include alternative courses, exceptions, precondition, post-conditions when applicable.
- (iii) Sequence diagram of the selected scenarios
- (iv) High level class diagram

Submission

Submit via Blackboard by the deadline.

Marking Criteria

Clarity and conciseness in the written requirements as well as the logical flow from requirements to the Use Case diagram provided (including the textual description in a template) and sequence diagram(s).

Extra Documentation

You should consider IEEE830 standard and Use case templates in your report.