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## American International University- Bangladesh (AIUB)

## Department of Computer Science

## Software Quality and Testing

## Spring 2016-2017

## 

## Project : Developing a TEST PLAN for Automated Ticket Issuing System for Bangladesh Road

## Transport Corporation (BRTC)

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## Objective:

The objective of this project is to develop (write) a test plan. The students will apply their knowledge and understanding learned from the course in order to develop the test plan based on the requirements and functionalities of the system.

## Submission Rules:

Deadline: **April 18,** **2017 (Tuesday)**

Group: Group of four

Submission: A hard copy of the test plan  
Project marks: 20% of the final term marks

Late submission: Not allowed

## Problem Statement:

## Your software firm Datasoft, Inc. has been awarded a contract to develop software for Bangladesh Road Transport Corporation (BRTC) that provides automated ticket selling. You are the Test Lead of the project. Based on the requirements and functionalities of the system, you have to develop a software test plan. General specifications of the software application are as follows:

“An automated ticket issuing system sells bus tickets. Users select their destination, and insert a credit card and then enter a PIN (personal identification number) number. The bus ticket is issued and the credit card account is charged with its cost. When the user presses the start button, a menu display of potential destinations is activated along with a message to the user to select a destination. Once a destination has been selected, user is requested to insert his/her credit card. The validity of the credit card is checked and the user is then requested to input a PIN number. When the credit transaction has been validated, the ticket is issued.

”

The software has the following set of requirements:

* The software will support interface to touch screen monitors as well as keyboard interface.
* The software will support display of the list of incoming buses, their destinations and arrival and departure times, fare.
* The software will support multiple ticket purchase simultaneously.
* The software will support limiting the number of tickets purchased at the same time. This privilege control will be done by the administrator access only.
* The software will support ticket cancellation before final confirmation of the purchase.
* The software will support purchased ticket cancellation support by the administrator.
* The software will support credit transaction and validation.
* The software will support next and previous navigation during ticket purchase process.
* The software will support ticket availability information.
* The software will support information display via web.
* The software will use Oracle database server.

The major functionalities of the system are as follows:

* 24/7 service
* Ticket availability information display
* Train arrival and departure time display
* Touch screen menu selection
* Source and destination selection
* Multiple ticket issue in one transaction
* Limit the number of ticket issue at the same time
* Cancellation of transactions any time during transaction
* Credit/Debit card transaction
* Coin/Taka recognition and acceptance

A sample test plan outline is given below. Use it for your project; however you can customize it.

**Sample TEST PLAN Outline:**

**1. Test Plan Identifier**

**2. References**

**3. Introduction**

**4. Test Items**

**5. Software risk issues**

**6. Features to be tested**

**7. Features not to be tested**

**8. Approach**

**9. Item Pass/Fail criteria**

**10. Suspension Criteria and Resumption Requirements**

**11. Test Deliverables**

**12. Remaining test tasks**

**13. Environmental needs**

**14. Staffing and Training needs**

**15. Responsibilities**

**16. Schedule**

**17. Planning Risks and Contingencies**

**18. Approvals**

**19. Glossary**