**Elite Test Plan**

**Project Name**: Subway system simulator

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**1. Introduction:**

**1.1 .Purpose:**

The Subway simulator system is a simulation system through which passenger will be operated automatically. There are several components included in our project like trains, tracks, switches and sections.

**1.2 .Scope:**

**The main objective of this project is to develop simulator of the train system which will run automatically without driver. On the client side the system will run on windows/mac/Linux whereas updates about trains schedule information will be taken care on server side. The main goal of this project would be development of a website which supports desktop application.**

**1.3 Project Identification:**

The table below specifies the list of documents which are required in order to develop the test plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document  (and version / date) | Created or Available  (Yes/No) | Received or  Reviewed  (Yes/No) | Author or Resource | Notes |
| Requirements Specification | Yes | Yes | Subway System Simulator |  |
| Data Management Plan | yes | Yes | Subway System Simulator |  |
| Functional Specification | Yes | Yes |  |  |
| Use-Case Reports | Yes | Yes | Subway System Simulator |  |
| Project Management Plan | Yes | Yes | Subway System Simulator |  |
| Design Specifications | Yes | Yes | Subway System Simulator |  |
| Prototype | Yes | Yes | Subway System Simulator |  |
| User’s Manual | Yes | Yes | Subway System Simulator |  |

**2. Test Approach:**

Testing will be carried in various stages with different types.

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| --- | --- | --- | --- | --- | --- |
| **Test**  **Cases** | **Test Condition** | **Steps / Setup** | **Expected Result** | **Actual Result** | **Pass / Fail** |
| **1 Train** | | | | | |
| 1.1 | To check whether train has started after pressing start button or not. | By pushing start button the train has to start. | The train will start. | **Passed** |  |
| 1.2 | To check whether the train has reached proper location or not. | Train will reach destination in specified route send by track. | The train has not reached the location properly. | **Failed** |  |
| 1.3 | To check whether the speed of the train is correct or not | Train checks whether the train meets minimum/maximum speed or not. | The train is maintained proper speed and reaches destination within time. | **Passed** |  |
| 1.4 | To check whether the train is running in proper section or not | The track will change switches and decides on which section a particular train has to run. | The train will reach destination through specified sections. | **Passed** |  |
| 1.5 | To check whether the train is occupying proper section or not | The track will about a section on which the train has to occupy | The train will occupy particular section specified by dispatcher | **Passed** |  |
| 1.6 | To know information about the train which is ahead in order to change switch | The track blocks the route of the train in which it is running. | The train route changes if there is any train ahead | **Passed** |  |
| 1.6 | To check whether the train is updating speed and section number in which it is entering dynamically | Train will send information to track every 5 sec about speed and section number in which it is entering. So that track could block all those routes | The train reaches destination with limited speed and in the location blocked by the track. | **Passed** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Track** | | | | | |
| 2.1 | To check whether which section is enabled so that section is blocked | Whenever train occupies particular section that section is blocked has to be known. | Train reaches destination specified by track. so that track blocks that particular route | **Passed** |  |
| 2.2 | To check whether the section is disabled after train has reached its destination. | After train has reached particular destination know about that and unblock the section has to be known | After Train reaches destination specified by track. so that track unblocks that particular route | **Failed** |  |
| 2.3 | To check whether all the switches are working properly. | Train will ask track to change switch. It will recheck for 3 times whether the switch has turned or not. | The train will occupy that particular section side in which switch is turned. | **Passed** |  |
| 2.4 | To check whether track is sending about section information to train | Section will be blocked for the route that train has occupied | The train gets information about which all possible routes available. | **Passed** |  |
| **Dispatcher** | | | | | |
| 3.1 | To check whether the dispatcher is working properly or not | This can be analyzed based on maps which includes stations and positions of trains. | If everything is going well all those information is displayed in dispatcher. | **Passed** |  |
| 3.2 | To check whether emergency stop button is working properly or not. | By clicking on stop button and know whether the system has stopped. | The entire system will stop immediately | **Passed** |  |

**Environment Requirements**

**We need NetBeans IDE for using java technology and swing for designing graphical user interfaces. We still have to decide about testing tools**

**Test Schedule**

**Up to now we are working on the requirements document, project management documents. We still have to schedule our test plan, once we done with our requirements we will schedule our test plan.**

(\*) few columns will be completed under testing phase. We will submit it after.