Use Cases

1. Station managers to use the controller to add new ticket machines and gates to the system at given stations.
2. Station Manager Creates/Obtains a Controller.
3. New Ticket Machines and New Ticket Gates are Created at Given Stations.
4. Feedback should be given to the Station Manager to confirm that the ticket machines and gates are created.
5. Station managers to use the controller to create time schedules which set the charging scheme for ticket machines in the system. Ideally, they would use a GUI to modify these schedules.
6. Station Manager Creates/Obtains a Controller
7. Station Manager has a time schedule set by the charging scheme for ticket machines in the system.
8. Station Manager sets the Time Schedules in the system (ideally by gui)
9. Feedback given to the Station Manager.
10. Users to select their origin and destination stations and calculate the charge based upon the day of the week, time of day and number of zones travelled. The machine should issue a ticket with a validity time, allowed zones and price and a validation code which checks the ticket is valid.
11. User selects origin station and destination station
12. Ticket machine calculates the charge from day of week, time of day and number of zones travelled.
13. Ticket machine issues a ticket with validity time, allowed zones, price and a validation code.
14. Users to validate their ticket at gates on gated entry and exit using the validation code (to simulate the ticket reader). If the validation code, time and zone do not match the ticket should be rejected.
15. User takes an issued ticket to the ticket gate.
16. Ticket gate validates the ticket information (validation code, time and zone).
17. If correct the gate opens.

Test Plan

# Test 1 : Ticket Machine and Gate Creation

Station Managers are to use the Central Controller Service to add new Ticket Machines and Gates to the system at given stations.

* preconditions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Step | Actions to Perform | Expected Result | Actual Result | PASS/FAIL | Notes |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

# Test 2: Time Schedule and Charing Scheme Creation

Station managers to use the Central Controller Service to create time schedules which set the charging scheme for ticket machines in the system.

* preconditions

|  |  |  |  |
| --- | --- | --- | --- |
| Test Step | Actions to Perform | Expected Result | PASS/FAIL |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Test 3: Ticket Issuing at Ticket Machine

Customer to select their origin and destination stations and the Ticket Machine calculates the charge based upon the day of the week, time of day and number of zones travelled. The Ticket Machine then issues a ticket.

* preconditions

|  |  |  |  |
| --- | --- | --- | --- |
| Test Step | Actions to Perform | Expected Result | PASS/FAIL |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Test 4: Ticket Validation at Ticket Gate

Customer to validate their issued tickets at the ticket gates. Only valid tickets should open the Ticket Gates.

* preconditions

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| --- | --- | --- | --- |
| Test Step | Actions to Perform | Expected Result | PASS/FAIL |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Test Results

The results of the test cases are shown in the table below.

|  |  |
| --- | --- |
| Test Step | Result |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| No. PASS | No. FAIL |
|  |  |