**Bus Seat Reservation**

Objective: To create an application that serves the public a bus seat reservation system through online.

**Requirements:**

1. Create a scoped Application dedicated to a Bus Seat Reservation
2. For this application, there are 3 types of Users:
3. Users

* Anyone who can access the application

1. Operators

* Users who will manage all reservations

c. Administrators

* Users who manage the instance

1. Access to the application is divided into 2:

a. Administrators and operators can access both Service Portal and Platform

b. Users can only access the Service Portal.

* Users can be either registered or guest users.

1. The application will save the following records:

a. List of Bus Company

b. List of Bus Unit

c. List of Bus Stop

d. List of Seat Reservation

1. Express Company records should have the following fields:
2. Name
3. Contact Person
4. Contact Number
5. Email
6. Bus Stop records should have the following fields:
7. Name
8. Type (Terminal/Not terminal) - at least those types
9. Bus Unit records should have the following items:

a. Number

b. Departure schedule

c. Company

d. Accessibility:

* Aircon
* Non-aircon

e. Bus stops

f. Status

1. Seat Reservations should have the following fields:

a. Bus

b. Applicant

c. Origin

d. Destination

e. Status:

* Awaiting approval
* Approved
* Rejected
* Completed
* Canceled

f. Cost

g. Seat Number

1. Create a menu in the platform that allows operators and administrators to add/update the availability of Bus Units
2. Create a menu in the platform that allows operators and administrators to check reservations.
3. Create a menu in the platform that allows operators and administrators to check daily scheduled reservations.
4. Create a menu in the platform that allows operators and administrators to check weekly scheduled reservations.
5. Create a menu in the platform that allows administrators to add/update availability of Bus stops
6. Create a menu in the platform that allows administrators to track the trend of:

※ Completed reservations by company per month

※ Completed reservations per month

1. Users can reserve/schedule a seat through the portal-side only.
2. Users can view bus and seat availability in the portal.
3. Users can confirm a completed reservation in the portal.
4. Users can cancel a seat reservation 30min-1hr prior to the departure schedule.
5. Users can update their reservation anytime before the 30 minute prior to the ticket reservation departure time..
6. When reserving a seat where origin != terminal , a popup will appear notifying about how long will it take for the bus to arrive at the origin location.
7. When reserving a seat, users will be alerted on how much the fare will be.
8. When a space is reserved, operators should be notified via email.
9. When a seat reservation is updated operators should be notified via email.
10. When the details of a Bus have been updated, users who have reservations on that seat of the bus should be notified via email.

※ Operators should be placed in cc

**Final Output:**

1. Exported xml.
2. 20 – 30minutes presentation (PPT & Demonstration)