From Students…
…to Professionals

Alpha Presentation
Lounge Management System

The Capstone Experience
Team United Airlines Digital Technology

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Project Overview

- United Airlines provides lounges for customers
- Our system manages these lounges to provide customers with a better experience
- This is accomplished through the automation of administrative tasks
- This results in a better customer experience by allowing staff to focus on interacting with customers, giving the appearance of a higher staff to customer ratio
System Architecture

The diagram illustrates the system architecture for the United Airlines Digital Technology project. The back-end components include

- **.NET Core WebAPI**
- **Existing United Airlines APIs**
- **Built JS/CSS files (client code)**
- **SQL Server**

The front-end components are

- **React JS**
- **United-owned iOS device running a progressive web app**

The system is hosted on AWS, with the back-end services connected through the United Network.
Home Screen

HELLO JEFF

ANNOUNCEMENTS

Welcome!

Welcome to the UAL lounge management system. This is your 'My Home' page. To access more operations, select a widget on the left of the screen.

NOTIFICATIONS

There are no notifications to display.

MY TASK

1. Replenish shower supplies and daybed supplies.
## Wait List

![Waiting ListManagement](image)

### Waiting List Management

**Estimated Wait Time:** 25 min

**Show:** 10 entries

<table>
<thead>
<tr>
<th>CUSTOMER</th>
<th>FLIGHTCARRIER</th>
<th>FLIGHTNUMBER</th>
<th>OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patel Deven</td>
<td>UA</td>
<td>719</td>
<td>Notify, Remove</td>
</tr>
<tr>
<td>Spiwak Jon</td>
<td>UA</td>
<td>092</td>
<td>Notify, Remove</td>
</tr>
<tr>
<td>Thomas Justin</td>
<td>UA</td>
<td>802</td>
<td>Notify, Remove</td>
</tr>
<tr>
<td>Tiger Woods</td>
<td>UA</td>
<td>0192</td>
<td>Notify, Remove</td>
</tr>
<tr>
<td>Zhu Katrina</td>
<td>UA</td>
<td>039</td>
<td>Notify, Remove</td>
</tr>
</tbody>
</table>

Showing 1 to 5 of 5 entries
Adding New Customers
API Documentation

```
Amenity

DELETE /Amenity/{id} Delete a single amenity

POST /Amenity/{id} Edit a single amenity

POST /Amenity Add a single amenity

POST /Amenity/{id}/ServiceStatus Update the service status of an amenity

Customer

GET /Customer/TestGetInfo/{id}

POST /Customer/{id} Update a customer. Properties not passed in or set to null will not be changed.

POST /Customer/OnEnterLounge/{loungeId} Indicate a customer entering a lounge

Lounge

GET /Lounge Fetch a list of all lounges

GET /Lounge/{id} Get a specific lounge

GET /Lounge/{id}/AmenityCategories Get all amenities in use at a given lounge as well as aggregated status data for each

GET /Lounge/{loungeId}/Amenities/{categoryId} Fetch all individual amenities and their state for a given lounge and category.

POST /Lounge/SeedDB For development purposes only, seed the database with test data. This will only work if the database does not already have data.

Waitlist

GET /Waitlist/{loungeId}/ForCategory/{amenityCategoryId} Get the current list of customers waiting for a given amenity category in a lounge

DELETE /Waitlist/{entryId} Remove a customer from a waitlist, given their entry ID

POST /Waitlist/{entryId}/Notify Notify a customer on the waitlist

POST /Waitlist/AddCustomerManually Add a customer to the waitlist who is not already in the database
```
What’s left to do?

• Tracking amenity turnover time
• Tracking customer use and extracting actionable data
• Refine user interface
Questions?