# Final Project Documentation (FPD) Document TravelBuddy

https://github.com/JJambros/CSC-340-group6

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**Final Version** 

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# **Project Overview**

The goal of the TravelBuddy web application is to help users plan trips by finding and viewing various service providers, particularly flights or 'trips', in selected destinations. Users can explore different locations on a map, narrow down their searches with specific locations in the selected country and read reviews. Service providers can create and manage profiles showcasing their services in different areas.

#### **Product Features**

The TravelBuddy app is designed to enhance the trip-planning experience by providing a comprehensive platform for discovering and booking services. Below are the key features and functions:

- **Destination Exploration:** Users can select a destination on an interactive map to view various locations and services available in that area.
- **Service/Location Filtering:** Users can narrow down their selections based on their own preferences.
- **Profile Management:** Users can create and update profiles with personal information so providers can tailor their products to their interests.
- **Service Listing:** Service providers can create and manage profiles showcasing their services, including contact information and pricing.
- Travel Specials/Promotions: Timed promotions and travel specials for likely-to-be-interested parties can be made available via providers on user homepages.
- Review and Rating System: Users can read and write reviews for services they have used, and providers can respond to these reviews.

#### Laith Al-mesad

Actor: Customer

#### **Functional Requirements:**

- Allow customers to create or update their profiles.
- Collect information such as name, email, and travel dates.
- Provide detailed information about each service, including descriptions, prices, and customer reviews.
- Enable customers to subscribe to or book services directly through the app.
- Allow customers to write and submit reviews for services they have used.
- Enable customers to provide detailed feedback.
- Display submitted reviews to future customers to help them make informed decisions.

#### Non-Functional Product Requirements:

#### **Usability:**

- The app should have an intuitive and user-friendly interface that is easy to navigate.
- All major functions should be accessible within three clicks or taps from the main screen.
- The design should be visually appealing and consistent across all devices.

#### Performance:

- The system should respond to user actions within two seconds.
- The app should be able to handle up to 10,000 simultaneous users without performance degradation.
- Data retrieval and updates should occur in real-time to ensure accuracy.

#### Security:

- Customer data should be protected with encryption both at rest and in transit.
- Implement multi-factor authentication for user logins.
- Regular security audits and updates should be performed to safeguard against vulnerabilities.

#### Joshua Ambrose

Actor: Provider

#### **Functional Requirements:**

- Allow providers to create a profile.
- Allow providers to modify their profile.
- Allow providers to create and delete the services they provide.
- Allow providers to modify the price of the services they provide based on given user information.
- Allow providers to remove listings.
- Provider system will display customer statistics to help providers tailor their services to users.
- Provider system will allow providers to view and respond to customer reviews.

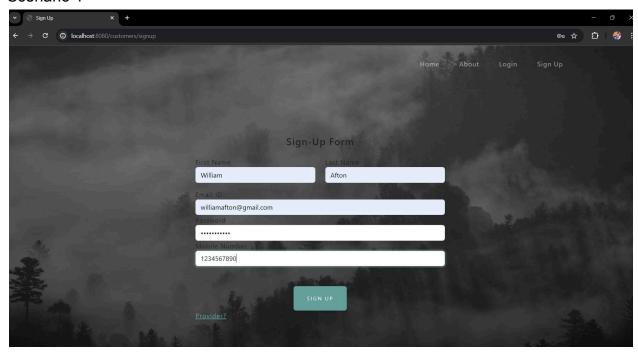
#### Non-Functional Requirements:

- Profile management UI should be user-friendly and easy to understand.
- Relevant user statistic data should be able to be accessed within 3 seconds from each page.
- Provider data should be securely stored.

# Scenarios with Screenshots

a. Customer - Laith Al-mesad

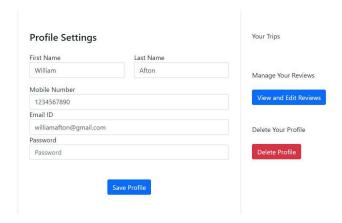
#### Scenario 1 -



#### Scenario 2 -



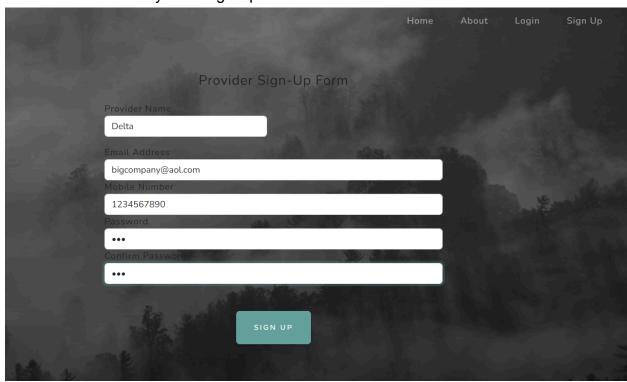




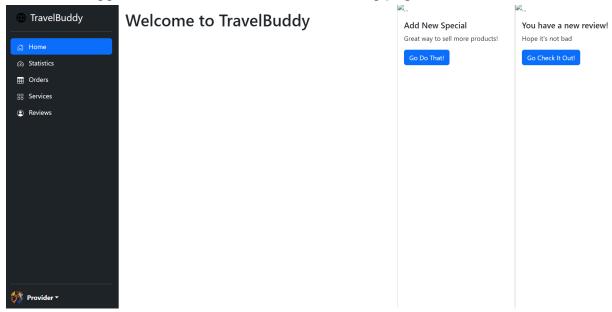
**Scenario 1**: Create account, post and update searchable service for customers Initial Assumption: Provider has access to the webapp and is on the mainpage.

#### Normal:

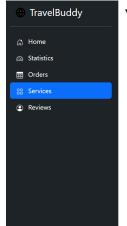
- Provider navigates to the registration section.
- Creates an account by entering requested info.



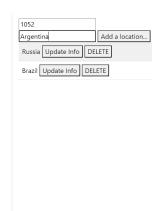
Provider is logged in and directed to the main landing page.



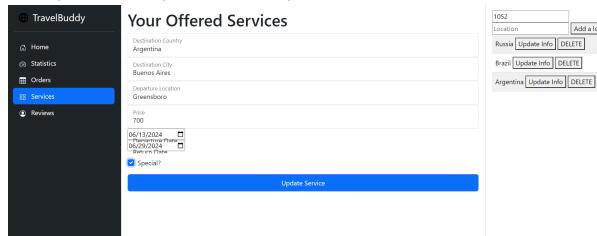
- Provider clicks 'services' in the nav-bar and adds a location (country) to the list of provided services.
- List of countries is updated below with 'update' and 'delete' buttons showing.



**Your Offered Services** 



Click 'update' to add specific info to the provided service.



Add a location...

Database is updated and all info is searchable for customers.

#### What Can Go Wrong:

Provider can input invalid data.

#### Other Activities:

Delete a service instead of updating it.

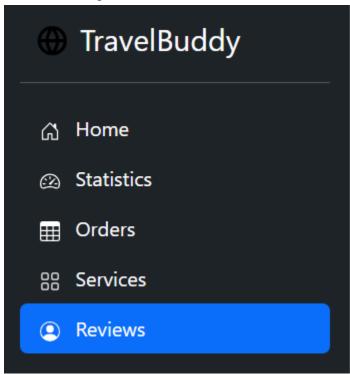
System State on Completion: Provider account is created and has posted services that are searchable by customers.

**Scenario 2**: Reply to review of a trip that a customer made after purchase Initial Assumption: Provider has received reviews of their services.

#### Normal:

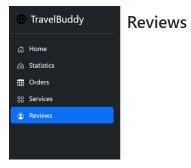
Provider logs in and is directed to the main landing page.

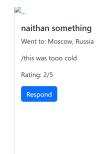
• Provider navigates to the received review section.



# Reviews

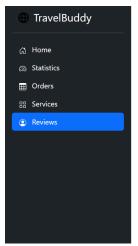
• Provider is shown a list of recent reviews.

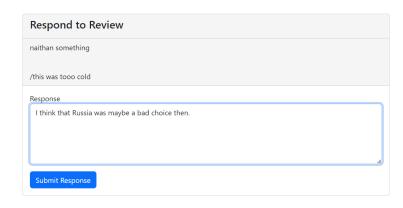




• Provider selects a review to reply to with displayed customer info.

Provider is able to write and then submit a reply.





• Webapp saves the reply and publishes it in response to the given review.

#### What Can Go Wrong:

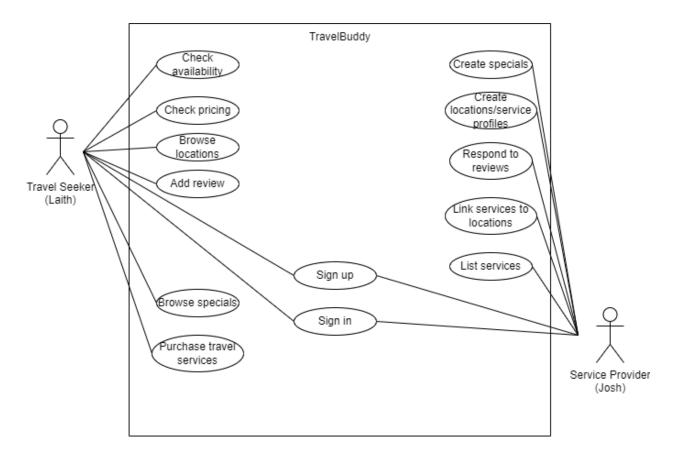
• Information is incorrectly or incompletely submitted.

#### Other Activities:

Navigate to other reviews once completed.

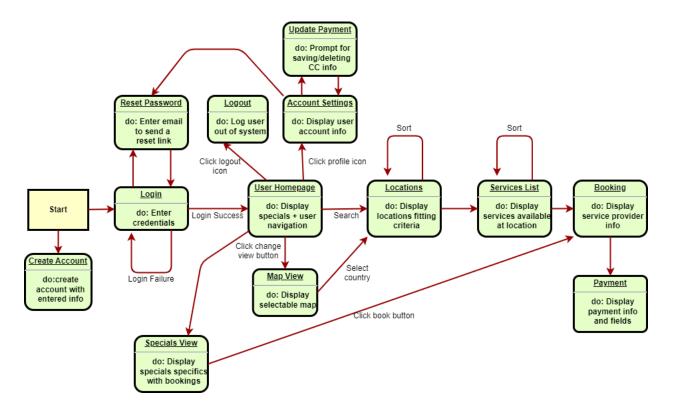
System State on Completion: Reply is saved in the database and associated with the listed service.

# Use-case model

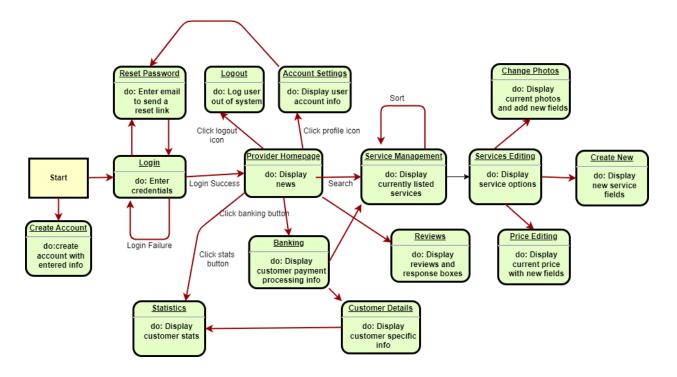


## State Machine Diagrams

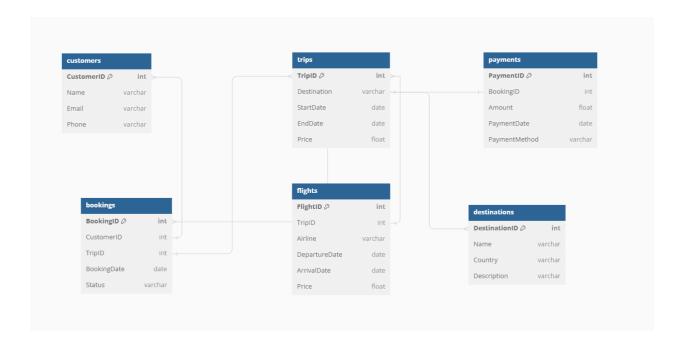
#### a. User - Laith Al-mesad



#### b. Provider - Josh Ambrose



#### **Database Schema**



### Software Architecture - MVC

