

Lüg-er

A baggage tracking mobile application

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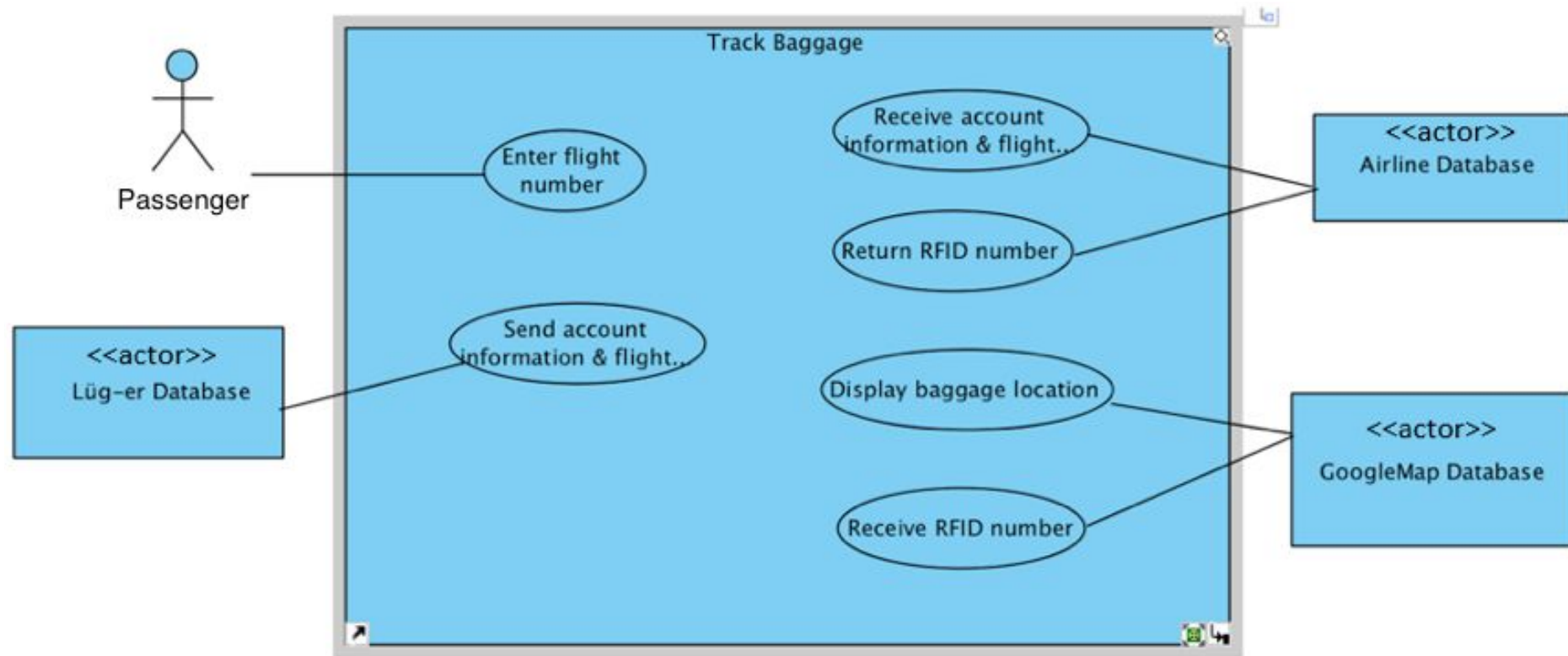
Vadim M Goncharuk

Binh Hue Hua

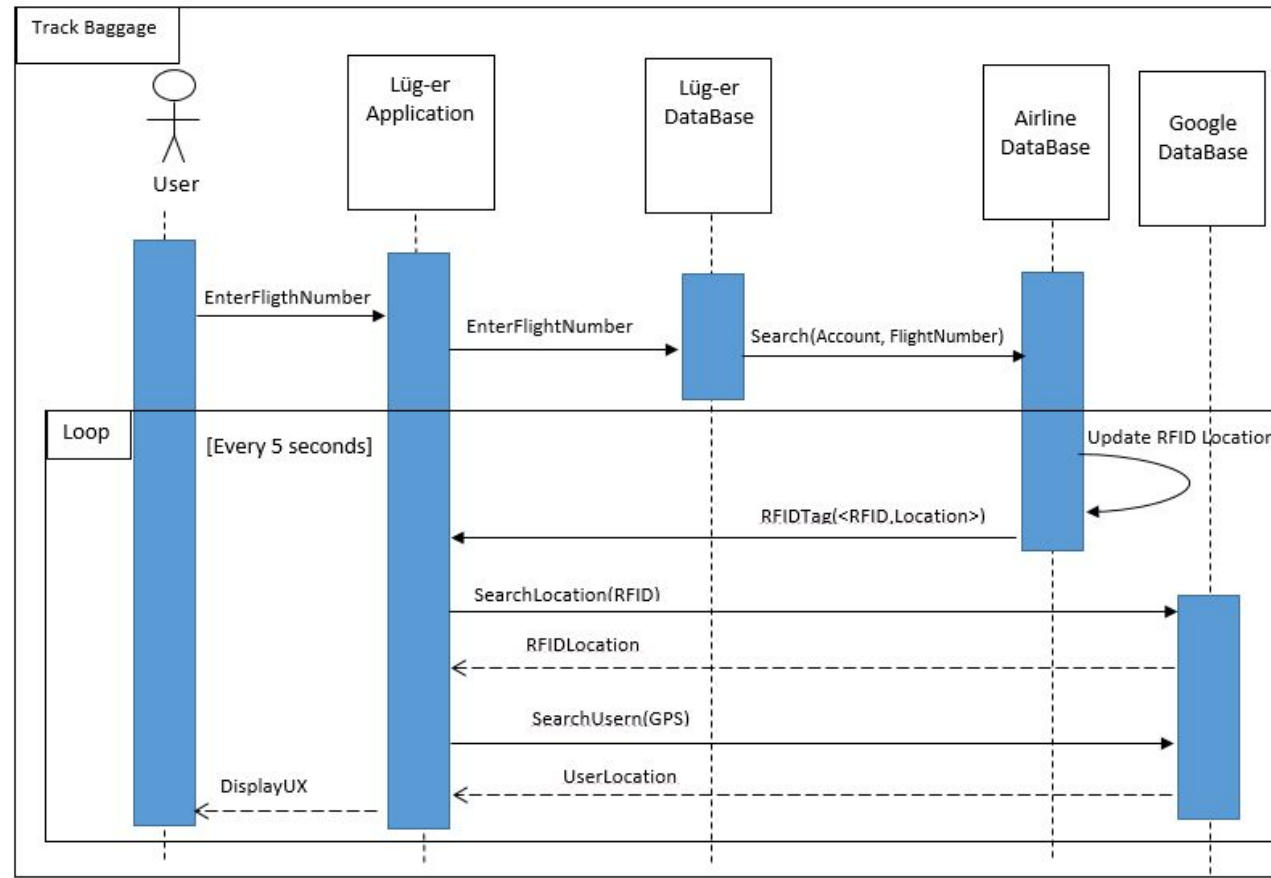
Leah M Ruisenor

Norris Spencer

Use Case Diagram for Track Baggage



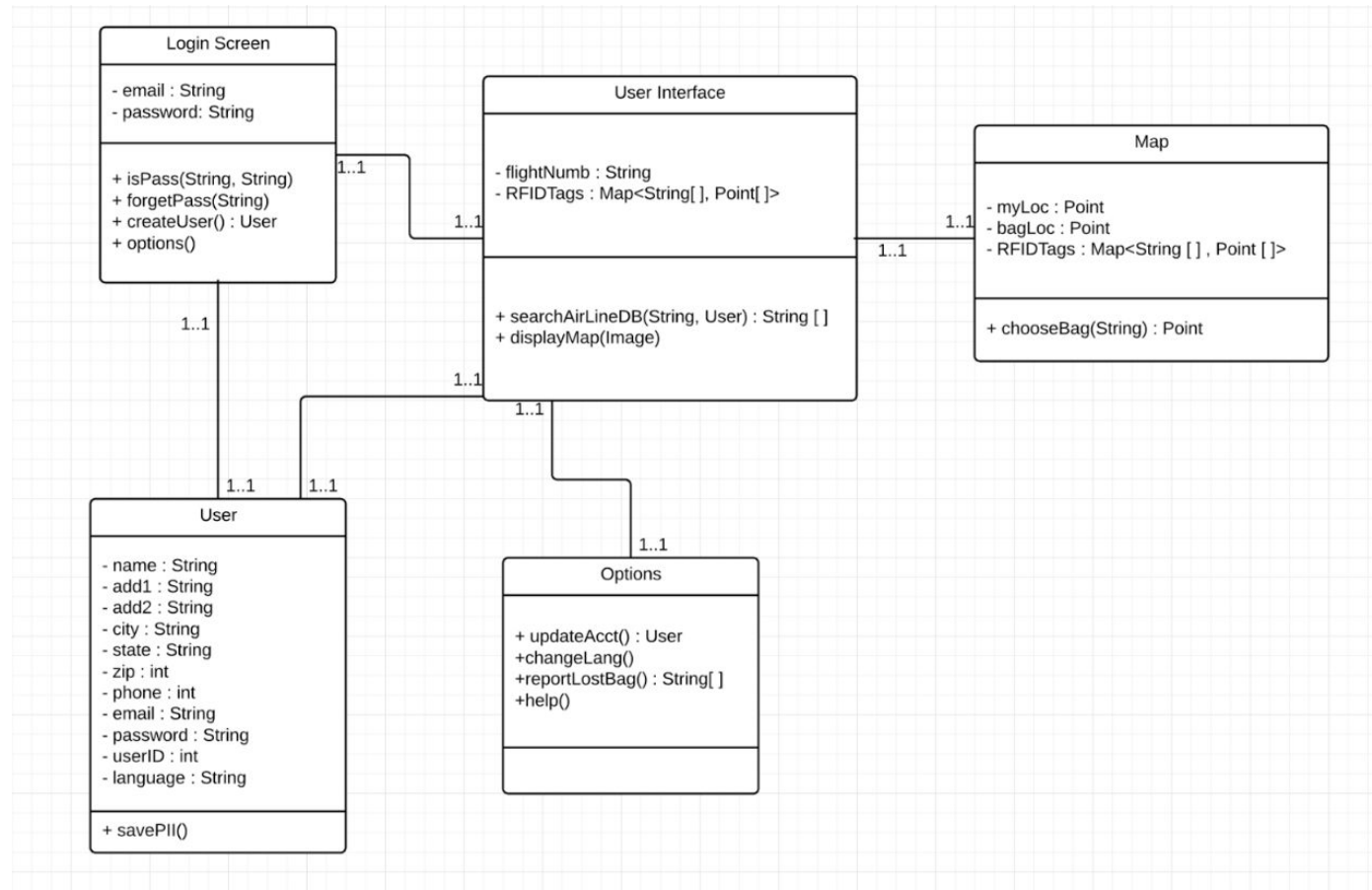
Sequence Diagram for Track Baggage



Functional Requirements

- **User Account:** create new account, reset account password, update account information..etc
- **Baggage Tracking:** report lost baggage(s), locate baggage(s), view baggage(s) location on the map, baggage(s) must equipped with RFID, baggage(s) must be registered at check in.
- **Map:** resizable map from Google Maps API, use a four-pointed star representing user location, use color to distinguish passenger location and their baggage(s) location.
- **Miscellaneous:** help options for technical support, contact information for the technical support team, passenger must have valid boarding pass.

UML Class Diagram



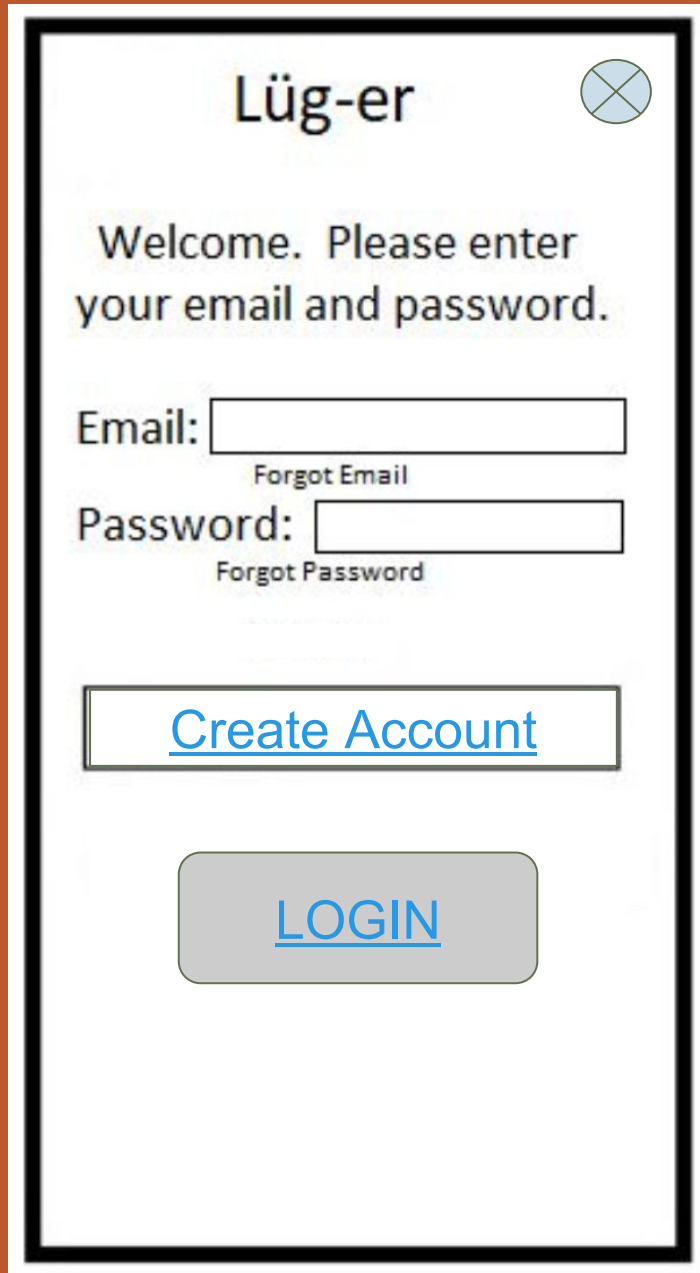
Development Testing

- **Unit Testing:**
 - Verifying account creation
- **Component Testing:**
 - Verifying databases connectivity
 - Verifying latitude and longitude received from Airline Database.

Prototype



Baggage Tracking



The image shows a mobile application interface for 'Lüg-er'. At the top, the title 'Lüg-er' is displayed next to a circular close button with an 'X'. Below the title, a welcome message reads: 'Welcome. Please enter your email and password.' There are two input fields: 'Email:' and 'Password:'. Each field has a 'Forgot' link below it ('Forgot Email' and 'Forgot Password' respectively). Below the input fields, there is a blue link 'Create Account' and a grey button with the text 'LOGIN'.

Lüg-er

Welcome. Please enter your email and password.

Email:

[Forgot Email](#)

Password:

[Forgot Password](#)

[Create Account](#)

[LOGIN](#)

- Must have an account with the Lüg-er database to use application.
- “Create your Account” opens the *Account Information* screen.
- The “X” closes the application and automatically logs the user out if the user has not already done so.
- Email and password verified against Lüg-er database.

Lüg-er



Account

Name:

Address 1:

Address 2:

City:

State:

Zip:

Phone:

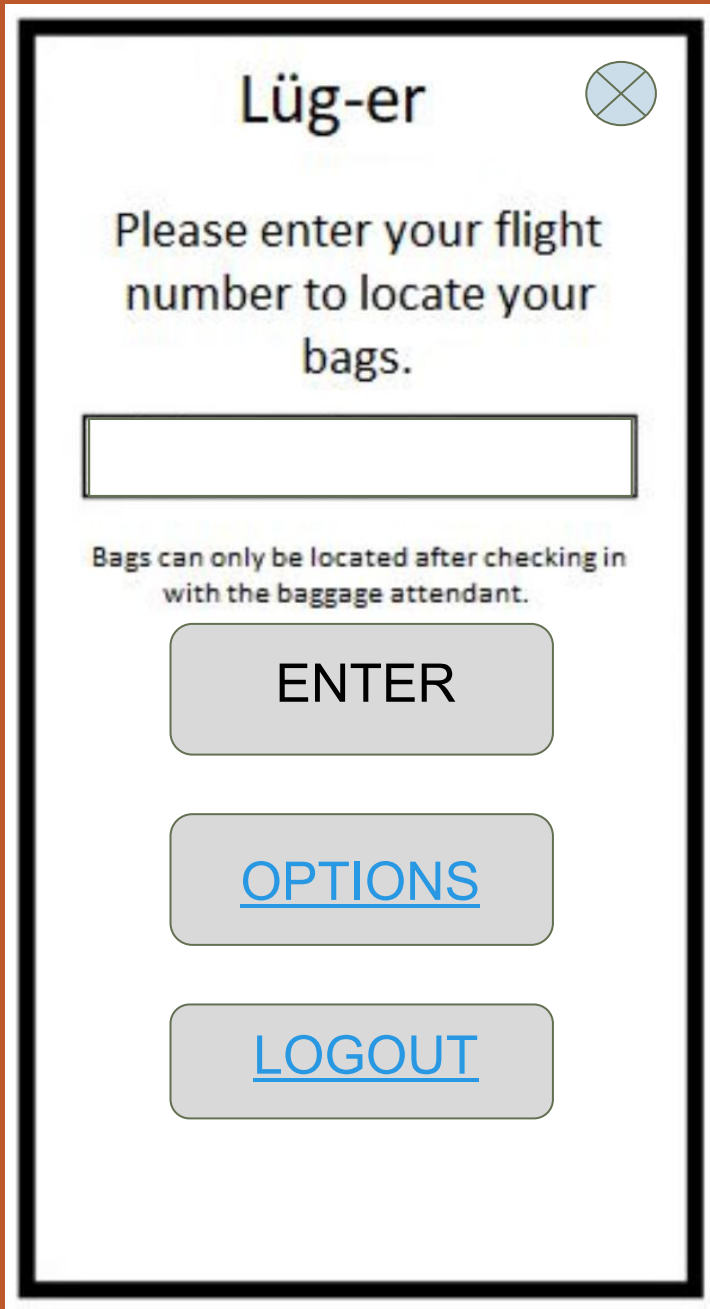
Email:

Password:

[DONE](#)

[CANCEL](#)

- Enter Personally Identifiable Information (PII) and select “Done” when all information is entered.
- The Lüg-er Database will save the PII but will not activate the account until the user verifies the email that is sent when the previous step is complete.
 - For this demo, let's assume we have already gotten the confirmation email and by clicking DONE it will take us to the Track baggage step.
- “Cancel” simply returns to the *Log-in* screen.



The screenshot shows a mobile application interface for 'Lüg-er'. At the top left is the title 'Lüg-er' and at the top right is a close button (a circle with an 'X'). Below the title is a prompt: 'Please enter your flight number to locate your bags.' This is followed by a text input field. Below the input field is a note: 'Bags can only be located after checking in with the baggage attendant.' At the bottom are three buttons: 'ENTER', 'OPTIONS', and 'LOGOUT'. The 'OPTIONS' and 'LOGOUT' buttons have blue underlined text.

Lüg-er

Please enter your flight number to locate your bags.

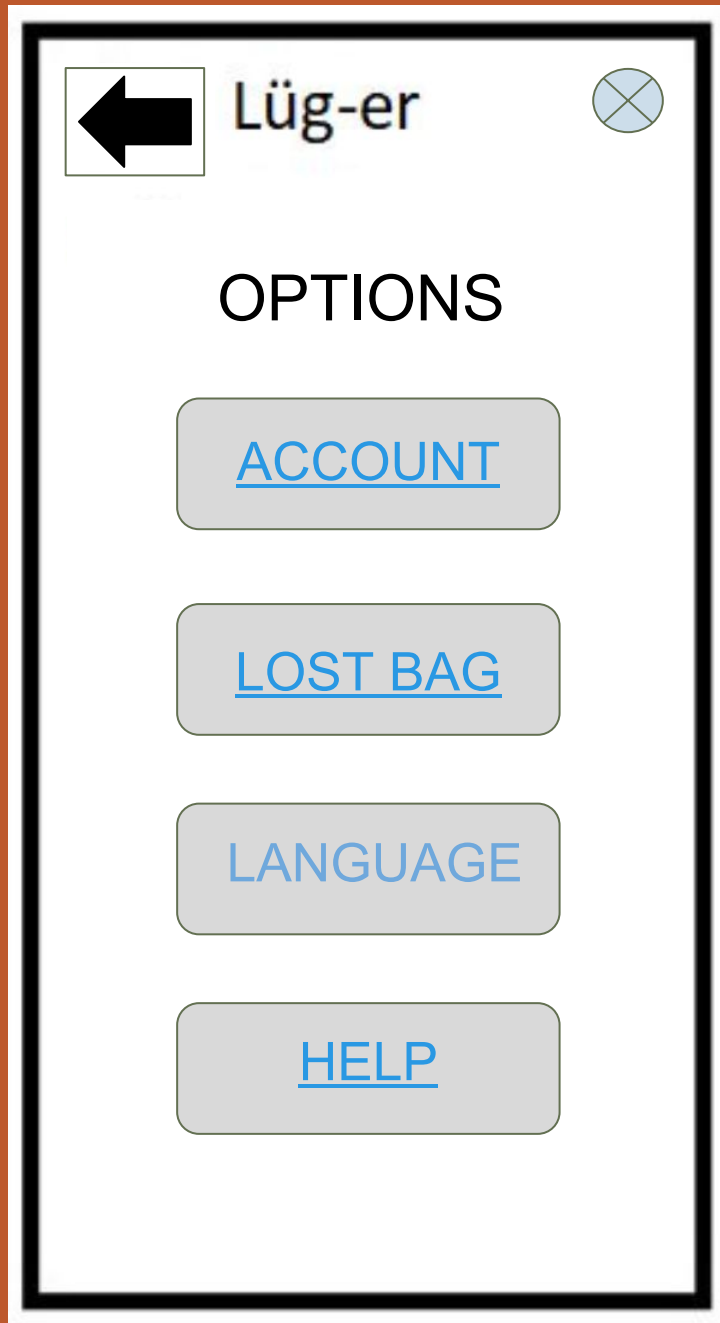
Bags can only be located after checking in with the baggage attendant.

ENTER

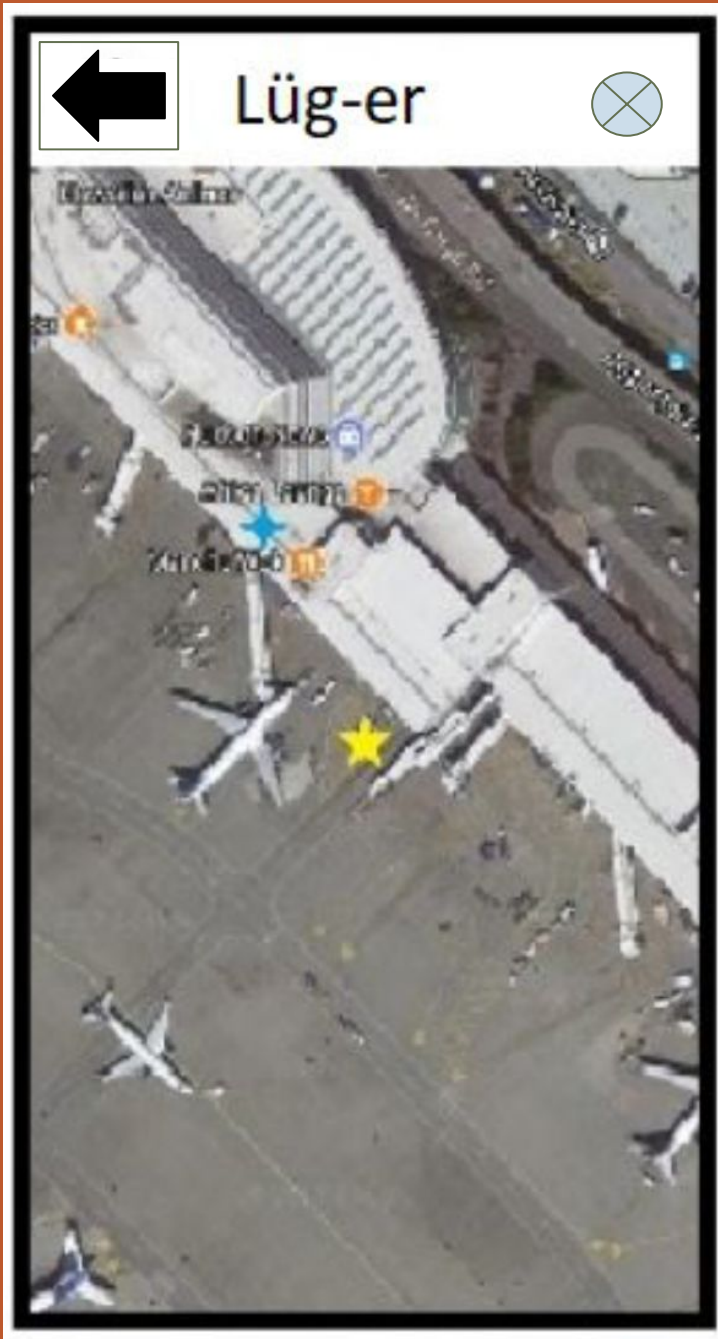
OPTIONS

LOGOUT

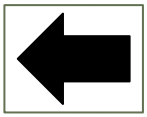
- Entering the Flight Number and selecting “Enter” begins the track baggage process of the application.
- “Options” opens the *Options* screen
- “Logout” logs the user out and returns them to the *Log-in* screen.



- “Account” opens the *Account Information* screen and allows the user to modify their PII.
- “Report Lost Bag” opens a screen with the contact information of the departure and destination lost baggage handler contact information.
 - This action also files a report with the airport database of the departure and arrival destination databases for further handling by the appropriate personnel.
- “Language” allows the user to select the preferred language of the application.
- “Help” opens the *Help* screen that provides the user with contact information for the Lüg-er support team.



- The “Yellow Star” is the current location of the users baggage
 - For the purpose of this demo, we will assume that the user only has one bag. The final product will have a drop box available for the user to select which bag they want to display.
- The “Blue Star” is the current location of the user.
- The “Return Arrow” will be return to the *Enter Flight Information* Screen.



Lüg-er



Lost Bag

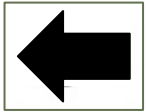
SeaTac 800-555-1234

Houston 800-556-2345

New York 800-557-3456

etc...

- Displays the contact information of the lost baggage handlers for the arrival and departure airports.



Lüg-er



Help

For technical assistance,
please email:
Lug-er@techsupp.com

- Displays the contact information for the Lüg-er support team.

Lüg-er



Please enter your flight
number to locate your
bags.

Bags can only be located after checking in
with the baggage attendant.


[ENTER](#)

[OPTIONS](#)

[LOGOUT](#)

- Entering the Flight Number and selecting “Enter” begins the track baggage process of the application.
- “Logout” logs the user out and returns them to the *Log-in* screen.

Lüg-er



Account

Name:

Address 1:

Address 2:

City:

State:

Zip:

Phone:

Email:

Password:

DONE

CANCEL

- Enter Personally Identifiable Information (PII) and select “Done” when all information is entered.
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Questions?



Baggage Tracking