Milestone 3 V1

PREPARED FOR

Jose Ortiz

PREPARED BY

Team 2

Globetrotter

JUL 22, 2021

Dear Jose Ortiz,

Please find enclosed our Milestone 3 document. As a team, we have closely examined the feedback for Milestone 2V1 and made changes to M2V2. Thanks to your feedback we feel confident with the updated sections that we have included in M2V2. As a result, we have copied those sections into our M3V1 milestone. The week and some days we had to complete this milestone, we met every single day, for multiple hours, in order to bring you our horizontal prototype. We look forward to your feedback on the milestone and the horizontal prototype as we are very eager to make improvements.

Yours Truly,

Team 2

SW Engineering CSC648/848 Summer 2021
July 22, 2021

Globetrotter Travel Assistant

Milestone 3

Team 2

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Revision History

Version	Date Submitted	Date Revised
M3V1	07/22/21	
M2V2	07/22/21	-
M2V1	07/08/21	
M1V2	07/08/21	-
M1V1	06/22/21	07/08/21

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1. Data Definitions

Entity Name		Entity Description					
	Column Name	**Column Description**	**Data Type**	**Length**	**Primary Key**	**Nullable**	**Unique**
activity		This represents something that a user does during a trip or is planning to do.					
	activity_id	The id of the activity.	varchar	36	true	false	true
	end_location	The id of the location at which the activity ends.	varchar	36	false	true	false
	end_time	The timestamp at which the activity ends.	timestamp	19	false	false	false
	start_location	The id of the location at which the activity starts.	varchar	36	false	false	false
	start_time	The timestamp at which the activity starts.	timestamp	19	false	false	false
	trip	The id of the trip that the activity is part of.	varchar	36	true	false	false
	trip_owner	The id of the trip's owner.	varchar	36	true	false	false
airline		A type of service_provider that sells flights.					
	airline_code	The IATA code of the airline.	varchar	7	true	false	true
	service_provider	The id of the service_provider that the airline represents.	varchar	36	true	false	true

airport		A type of location that belongs to an airport.					
	iata_code	The IATA code of the airport.	varchar	3	true	false	true
	location	The id of the location of the airport.	varchar	36	true	false	true
currency_code		A collection of codes for currencies.					
	code	The ISO 4217 code for the currency.	varchar	3	true	false	false
	name	The name of the currency.	varchar	255	false	false	false
file		This is a file uploaded by a registered_user to our web server.					
	extension	The extension of the file.	varchar	5	false	true	false
	file_id	The unique id of the file.	varchar	36	true	false	true
	file_name	The name of the file.	varchar	255	false	false	false
	folder_path	The folder path of the file.	varchar	255	false	false	false
	full_file_path	The complete path of the file.	varchar	255	false	false	true
	owner	The owner of the fil.	varchar	36	true	false	false
flight_activity		This is a type of activity that represents a flight in the user's trip.					
	activity	The id of the activity.	varchar	36	true	false	true
	flight_offer_json_data	The json data of the selected offer from the airline.	varchar	4095	false	false	false

	trip	The id of the trip.	varchar	36	true	false	false
	trip_owner	The id of the trip owner.	varchar	36	true	false	false
guest_to_trip_association		Associates a user to a trip as a guest.					
	guest	The id of the guest's user entity.	varchar	36	true	false	false
	trip	The id of the trip.	varchar	36	true	false	false
	trip_owner	The id of the trip owner.	varchar	36	true	false	false
home_location		Associates a user with a location as their home.					
	location	The id of the location which represents the registered_user's home.	varchar	36	true	false	false
	user	The id of registered_user which the home_location belongs to.	varchar	36	true	false	true
hotel_activity		This is a type of activity which holds information about a planned hotel stay.					
	activity	The id of the activity.	varchar	36	true	false	true
	hotel_offer_json_data	The json data of the selected offer from the hotel.	varchar	4095	false	false	false
	trip	The id of the trip.	varchar	36	true	false	false
	trip_owner	The id of the owner.	varchar	36	true	false	false
location		An address, a GPS coordinate or both.					

	city	The name of the city.	varchar	255	false	true	false
	country	The name of the country.	varchar	255	false	true	false
	latitude	The GPS latitude coordinate.	decimal	10.7	false	true	false
	location_id	The id of the location.	varchar	36	true	false	false
	location_name	The name of the location.	varchar	255	false	true	false
	longitude	The GPS longitude coordinate.	decimal	10.7	false	true	false
	postal_code	The postal code.	varchar	255	false	true	false
	state	The name of the state.	varchar	255	false	true	false
photo		This is a type of file which is also an image.					
	description	The description of the photo.	varchar	255	false	false	false
	file	The file which the photo represents.	varchar	36	true	false	false
	file_owner	The owner of the file.	varchar	36	true	false	false
	is_profile_photo	Tells whether the photo is a registered_user's profile photo.	bit	1	false	true	false
	photo_id	The unique id of the photo.	varchar	36	true	false	true
	title	The title of the photo.	varchar	255	false	false	false
photo_album		A photo album is created for each trip and is owned by a user. It is a collection of photos.					

	photo_album_id	The unique id of the photo.	int	10	true	false	false
	trip	The id of the trip which the photo_album belongs to.	varchar	36	true	false	true
	trip_owner	The id of the owner of the trip.	varchar	36	true	false	false
photo_to_photo_album_association		Associates a photo to a photo_album.					
	owner	The owner of the photo file.	varchar	36	true	false	false
	photo	The photo which is part of the album.	varchar	36	true	false	false
	photo_album	The album which the photo is part of.	varchar	36	true	false	false
registered_user		User that has registered. They may own trips, files, photos, photo albums, and reviews.					
	password_hashed	The bcrypt hash of the registered_user's password.	varchar	255	false	false	false
	preferred_currency	The registered_user's preferred currency.	varchar	3	false	true	false
	primary_phone_country_code	The registered_user's primary phone country code.	varchar	2	false	true	false
	primary_phone_number	The registered_user's primary phone number.	varchar	10	false	true	false
	secondary_phone_country_code	The registered_user's primary phone number.	varchar	2	false	true	false

	secondary_phone_number	The registered_user's secondary phone number.	varchar	10	false	true	false
	user	The id of the user entity.	varchar	36	true	false	true
	username	The username of the registered_user.	varchar	255	false	false	true
review		A review of a service_provider written by a registered_user.					
	content	The text content of the review.	varchar	255	false	false	false
	reviewer	The id of the registered_user who made the review.	varchar	36	true	false	false
	service_provider	The id of the service_provider that the review is about.	varchar	36	true	false	false
service_provider		A company that sells services to users such as an airline.					
	location	The id of the service_provider's location.	varchar	36	false	true	false
	service_provider_id	The id of the service provider.	varchar	36	true	false	false
	service_provider_name	The name of the service_provider.	varchar	255	false	false	false
service_record		This is a record of a service purchased from a service provider such as a flight or hotel reservation.					
	activity	The id of the activity.	varchar	36	true	false	false
	json_data	The json data provided by the service_provider.	varchar	510	false	true	false

	service_provider	The id of the service_provider.	varchar	36	true	false	false
	service_record_id	The id of the service_record.	varchar	36	true	false	true
	trip	The id of the trip.	varchar	36	true	false	false
	trip_owner	The id of the trip owner.	varchar	36	true	false	false
trip		A trip holds activities and is named.					
	owner	The id of the trip's owner.	varchar	36	true	false	false
	trip_id	The unique id of the trip.	varchar	36	true	false	true
	trip_name	The unique name of the trip.	varchar	255	false	false	true
user		Unregistered user. They may be guests of trips.					
	email	The unique email of the user.	varchar	255	false	false	true
	user_id	The unique id of the user.	varchar	36	true	false	true
usersessions		Holds session information for logged in users.					
	data	The data associated with the logged in user's session.	mediumtext	0	false	true	false
	expires	The timestamp of when the session expires.	int	10	false	false	false
	session_id	The id of the user_session.	varchar	128	true	false	false

2. Functional Requirements

Priority 1

1. Registered users can edit their birthday.
2. Registered users can edit their email.
3. Registered users can edit their home city
4. Registered users can edit their home postal code.
5. Registered users can edit their home state
6. Registered users can edit their home street address.
7. Registered users can edit their password.
8. Registered users can edit their preferred currency.
9. Registered users can edit their primary phone number.
10. Registered users can edit their profile photo.
11. Registered users can edit their secondary phone number.
12. Registered users can edit their username.
13. Registered users can view the ‘Account Management’ page.
14. Unregistered users cannot access Account Management.
15. All registered users can view the cost of the trip when checking out.
16. All registered users can view the flights they are purchasing when checking out.
17. Unregistered users cannot access Checkout.
18. Registered users can login using the ‘Login’ page.
19. Users shall provide their password when logging in.
20. Users shall provide their username when logging in.
21. Registered users can reset their password from the ‘Login’ page by sending a reset link to the account’s email.
22. Unregistered users can view the ‘Registration’ page.
23. Login page will have a ‘forgot password?’ button.
24. The password field will be obscured on the Login page.
25. All users can contact the team.
26. All users can search for flights.
27. All users can view the “Meet the Team” page to find out more information about the team.
28. Registered users can delete photos they uploaded.
29. Registered users can upload pictures of their trip.
30. Unregistered users cannot access Photo Albums.
31. Unregistered users cannot access Previous Trips.
32. Unregistered Users shall provide their date of birth when creating an account
33. Unregistered users shall provide a password when creating an account.

34. Unregistered users shall provide a primary phone number when creating an account.
35. Unregistered users shall provide a username when creating an account.
36. Unregistered users shall provide their email when creating an account.
37. Unregistered users shall provide their first name when creating an account.
38. Unregistered users shall provide their home city when creating an account.
39. Unregistered users shall provide their home postal code when creating an account.
40. Unregistered users shall provide their home state when creating an account.
41. Unregistered users shall provide their home street address when creating an account.
42. Unregistered users shall provide their last name when creating an account.
43. Unregistered users will be able to create an account.
44. All registered users can add at least one destination.
45. All registered users can add multiple Activities to a Trip.
46. All users can choose from the available flights.
47. All registered users can edit the destination of a trip.
48. All registered users can edit the starting location of a trip.
49. All users can edit the displayed currency.
50. All registered users can remove the destination of a trip.
51. All registered users can remove the starting location of a trip.
52. All registered users can remove Activities from a Trip.
53. All Registered Users can specify a return date.
54. All registered users shall specify the dates of departure for each flight.
55. All users will be able to view arrival times for the available flights.
56. Unregistered users can access the Route Planner.
57. Registered users can delete trips that they previously created.
58. Registered users can edit trips that they previously created.
59. Registered users can purchase their Saved Trips.
60. Unregistered users cannot access Saved Trips.
61. Registered users can view trips that they previously created.
62. The displayed currency will default to the preferred currency of a logged in user.
63. The website will be easy for all Users to maneuver through.

Priority 2

64. Unregistered users shall provide their gender when creating an account.
65. Registered guests may purchase trips on which they are guests.
66. Registered guests will receive a confirmation email after checkout.
67. All guests added to the trip will be sent an email containing a link to the trip.
68. All users will be able to click on individual team images to find out more information about the specific member.

69. Registered users can add a photo description when uploading a picture.
70. Registered users can edit their photo descriptions.
71. Registered users can edit titles of pictures they uploaded.
72. Registered users shall give a title when uploading a picture.
73. Users will be sent a confirmation email after completing registration.
74. Registered users can create a review of their flight.
75. Registered users can delete their reviews.
76. Registered users can edit their reviews.
77. All users can look at reviews of Airlines.
78. All guests can view trips on which they are guests.
79. All users may add entertainment activities to a particular day of a trip.
80. All users may add hotel reservations to a particular day of a trip.
81. All users will be able to view weather information for each location.
82. Dates added to a trip may not overlap.
83. Registered users can edit trips on which they are guests.
84. Registered users may cancel flights which they purchased.
85. Registered users can be issued a refund for flights cancelled within 48 hours of departure.
86. Registered users can receive credit for flights cancelled within 48 hours of departure.
87. Users may export the schedule prepared by Globetrotter to a file.
88. Users may print the schedule prepared by Globetrotter.

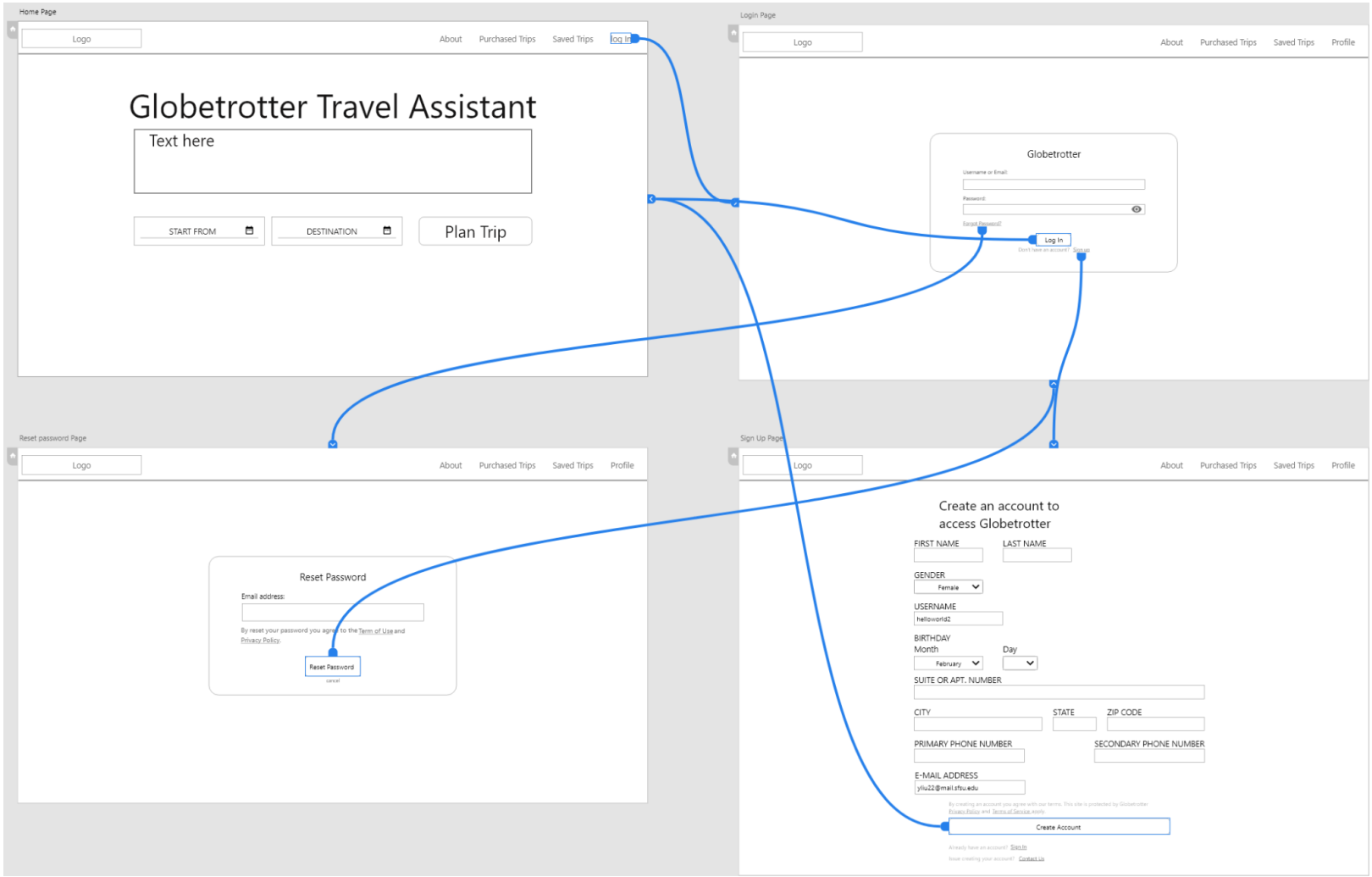
Priority 3

89. All registered guests can add guests to the trip.
90. All registered guests can add multiple flight stops in between the start and destination locations (waypoints).
91. All registered guests can add multiple flight stops in between the start and destination locations.
92. All registered guests can add other registered users to the trip.
93. All registered guests can add unregistered guests to the trip.
94. All registered guests can edit the destination of a trip.
95. All registered guests can edit the starting location of a trip.
96. All registered guests shall specify the dates of departure.
97. All registered guests can only add up to nine registered users to the trip.
98. All registered guests can only add up to one registered user at a time.
99. All registered guests can remove the destination of a trip.
100. All registered guests can remove the starting location of a trip.
101. All registered guests can remove waypoints.
102. Registered users will receive a confirmation email after checkout.
103. Unregistered guests may not purchase trips on which they are guests.
104. All registered guests can add at least one starting location.

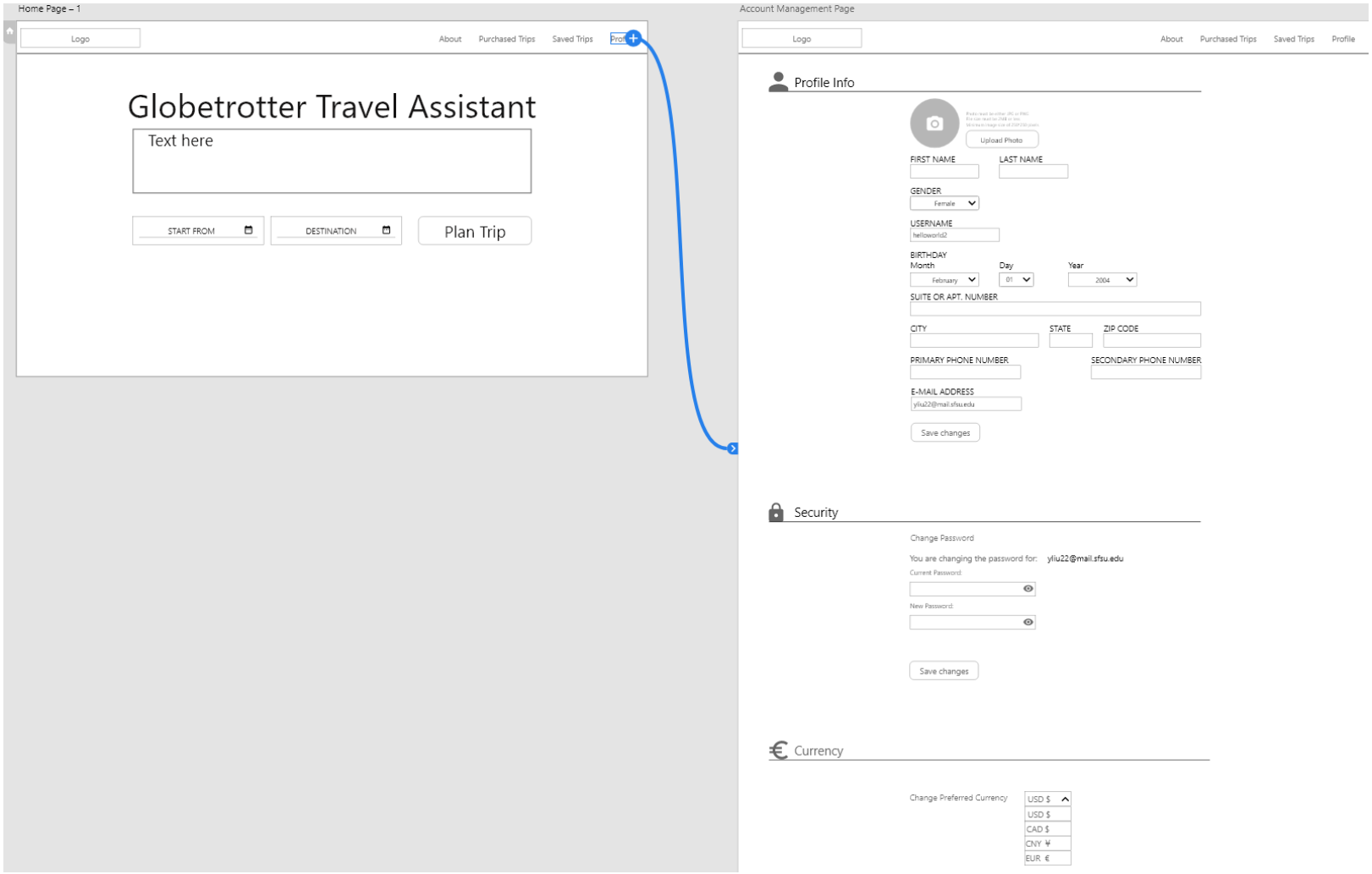
105. All users shall specify a budget.
106. Registered users can reserve other registered guests to hotels.

3. UI Wireframes

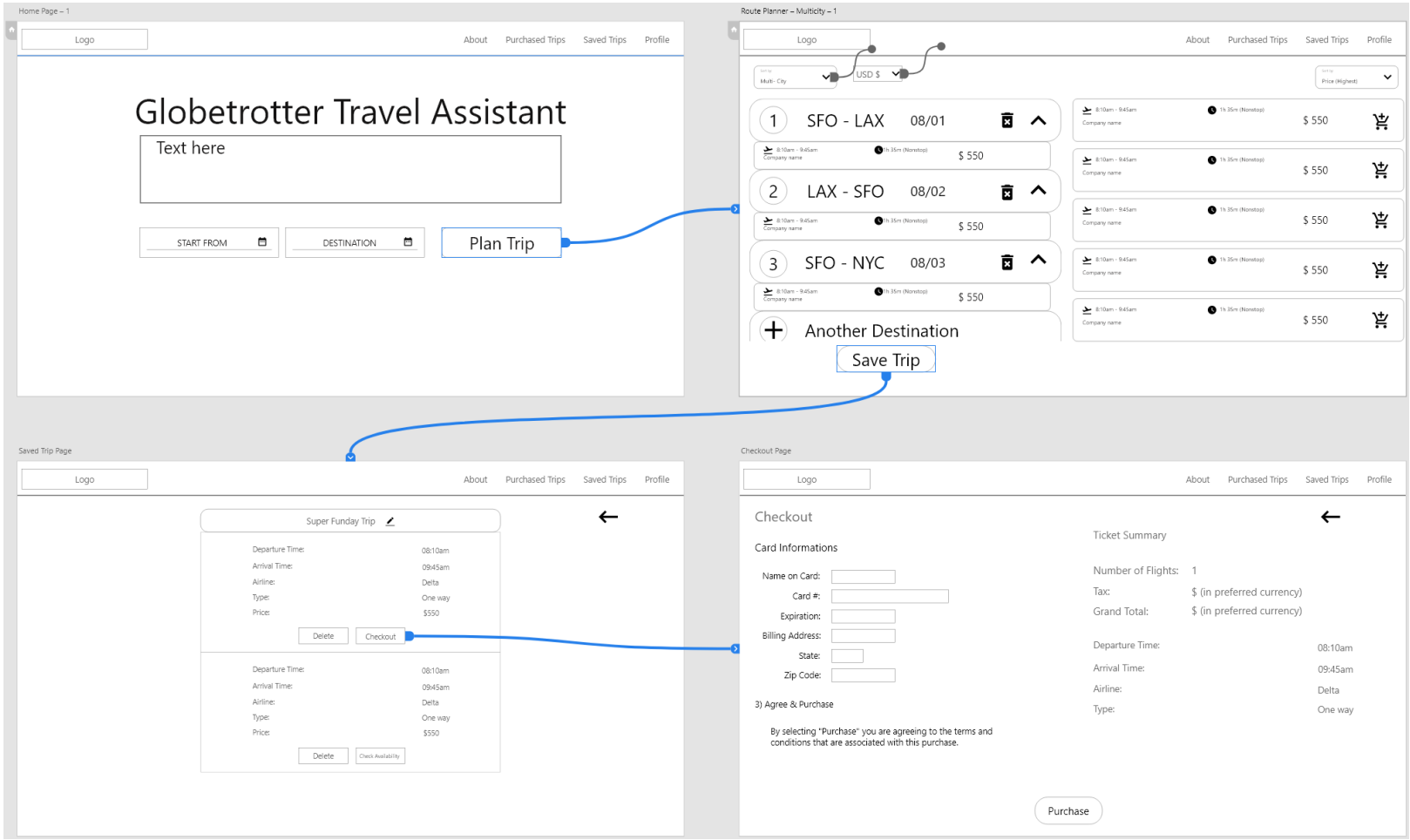
1: Creating an account & log in



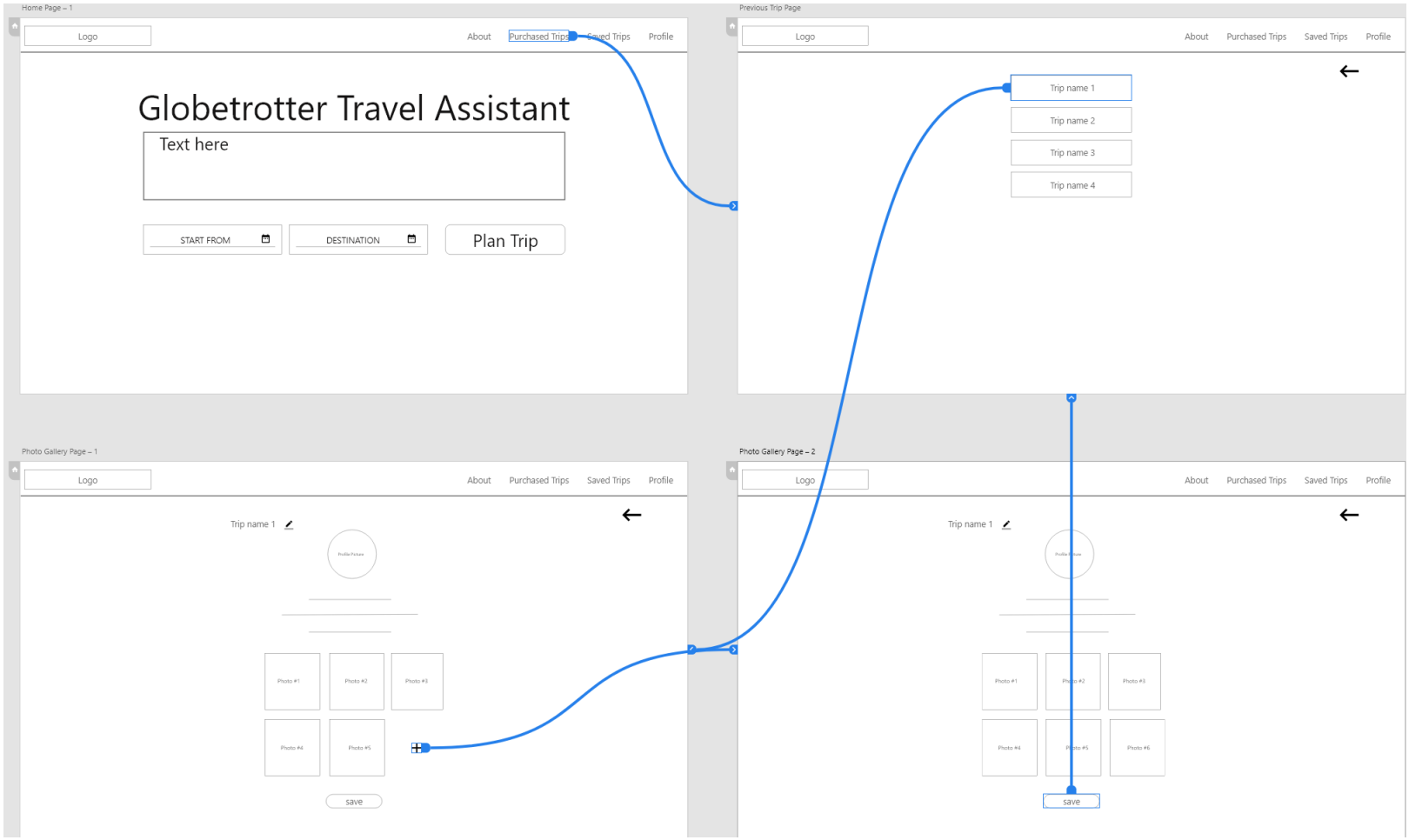
2: Go to Profile Info Page (logged in)



3. Full process of search, add and checkout.



4. Access to Previous (Purchased) Trips and Photo Gallery



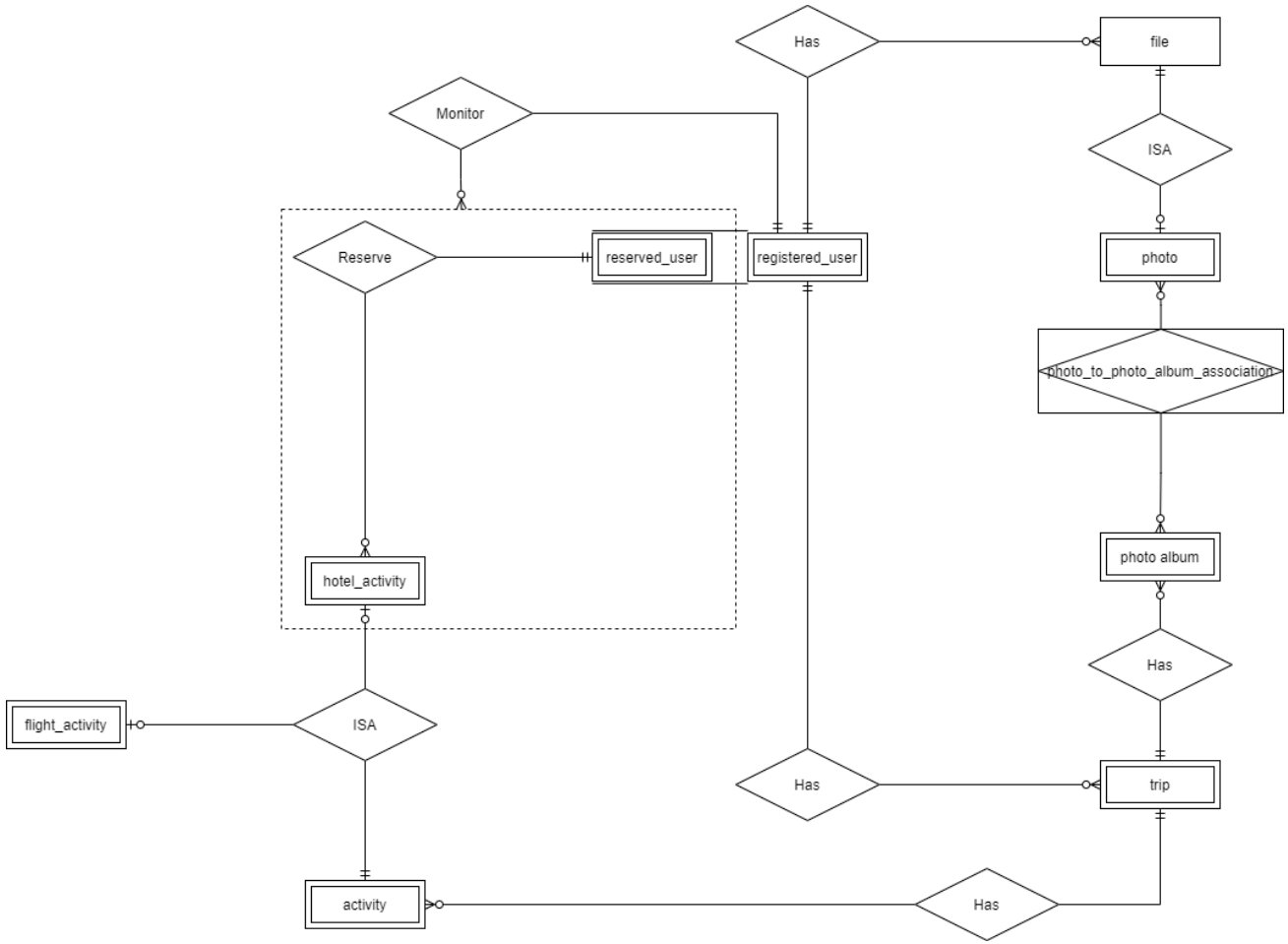
4. Database Architecture and Organization

Business Rules for Photo Albums

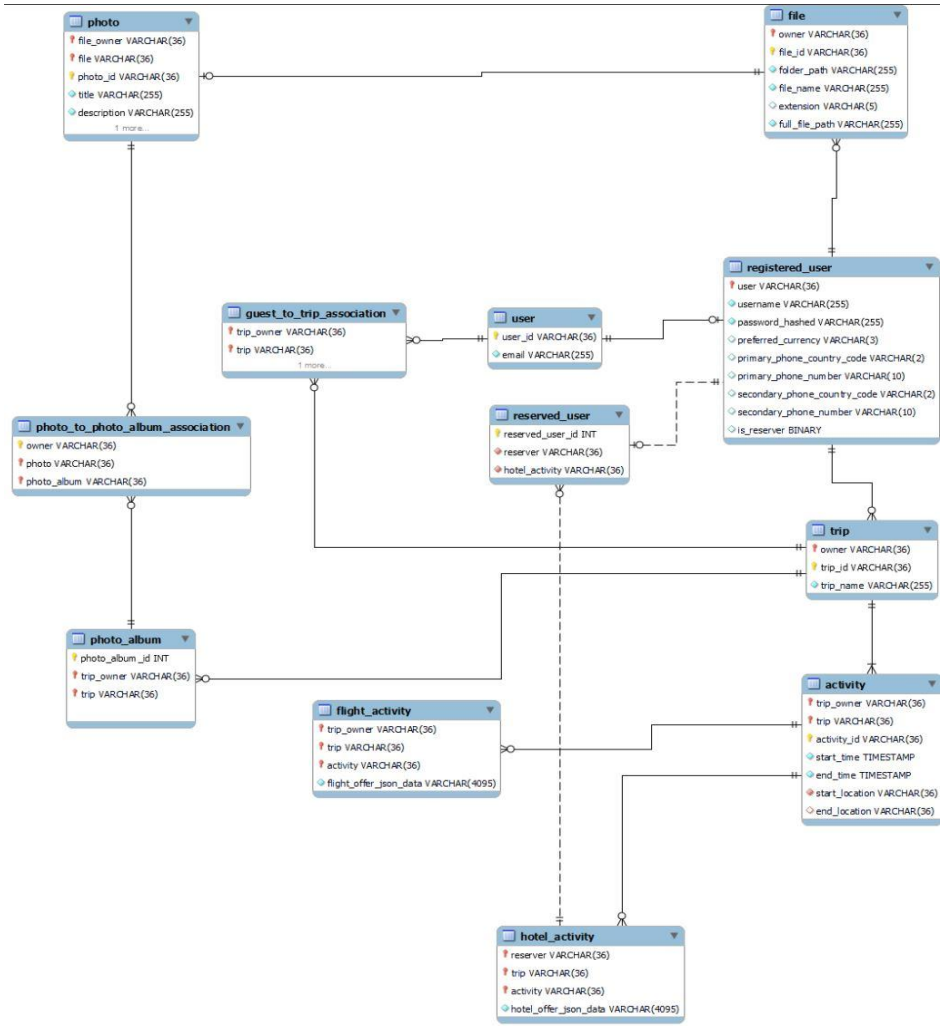
Entities, Attribute, Relation, Quantitative

1. Registered User
    a. A Registered User has many files.
    b. A Registered User shall have many Trips.
2. File
    a. A File can be a Photo.
3. Photo
    a. A Photo ISA File.
    b. A Photo shall be photo_to_photo_album_association by many Photo Albums.
    c. A Photo shall have one name.
    d. A Photo shall have one description.
4. Photo Album
    a. An Album shall photo_to_photo_album_association many Photos
    b. An Album shall have only one Trip.
5. Activity
    a. An Activity is either a flight activity or a hotel activity.
6. Flight Activity
    a. A Flight Activity ISA Activity.
7. Hotel Activity
    a. A Hotel Activity ISA Activity.

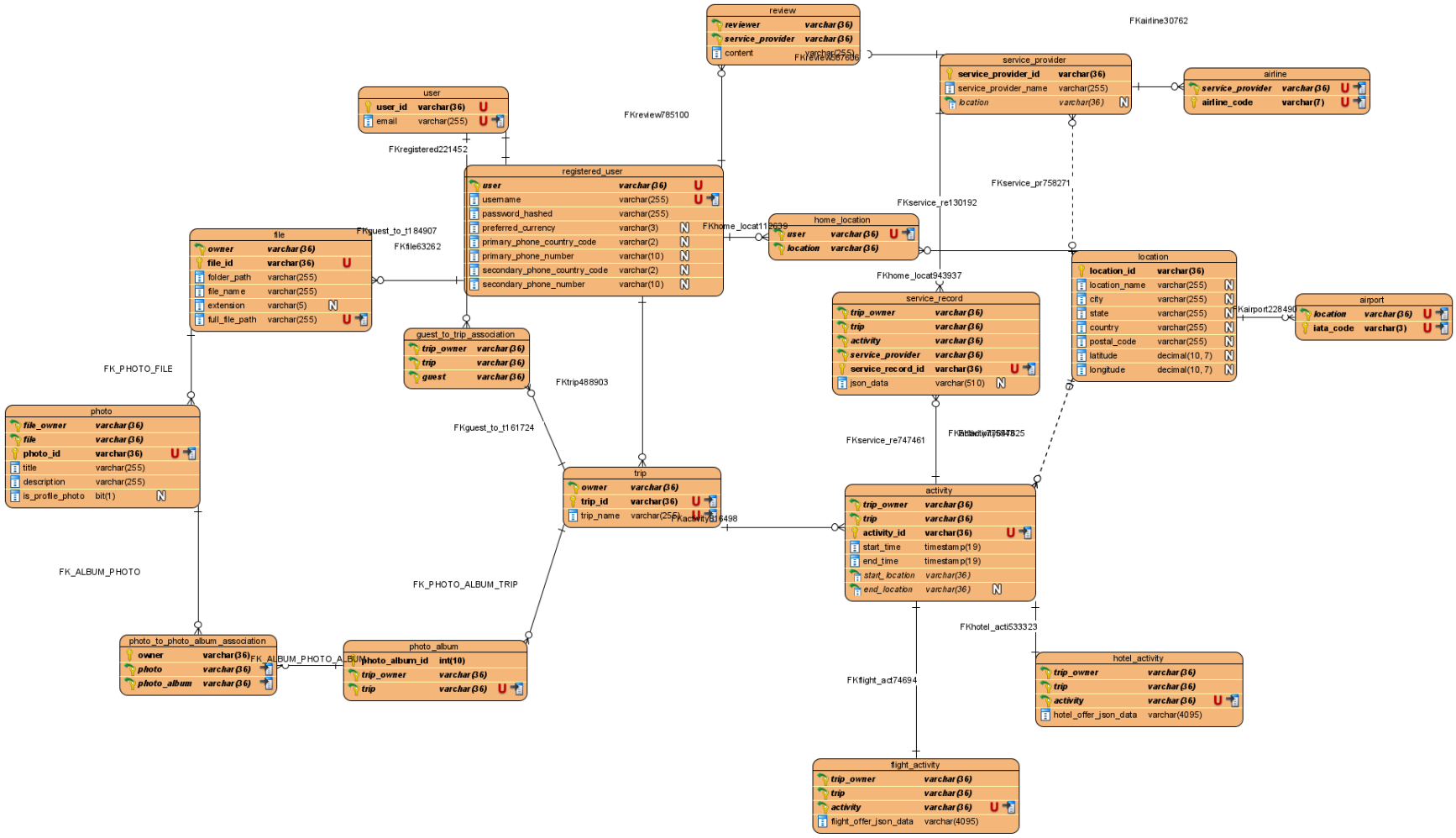
Entity Relationship Diagram (Photo Albums)



Database Model (Photo Albums)



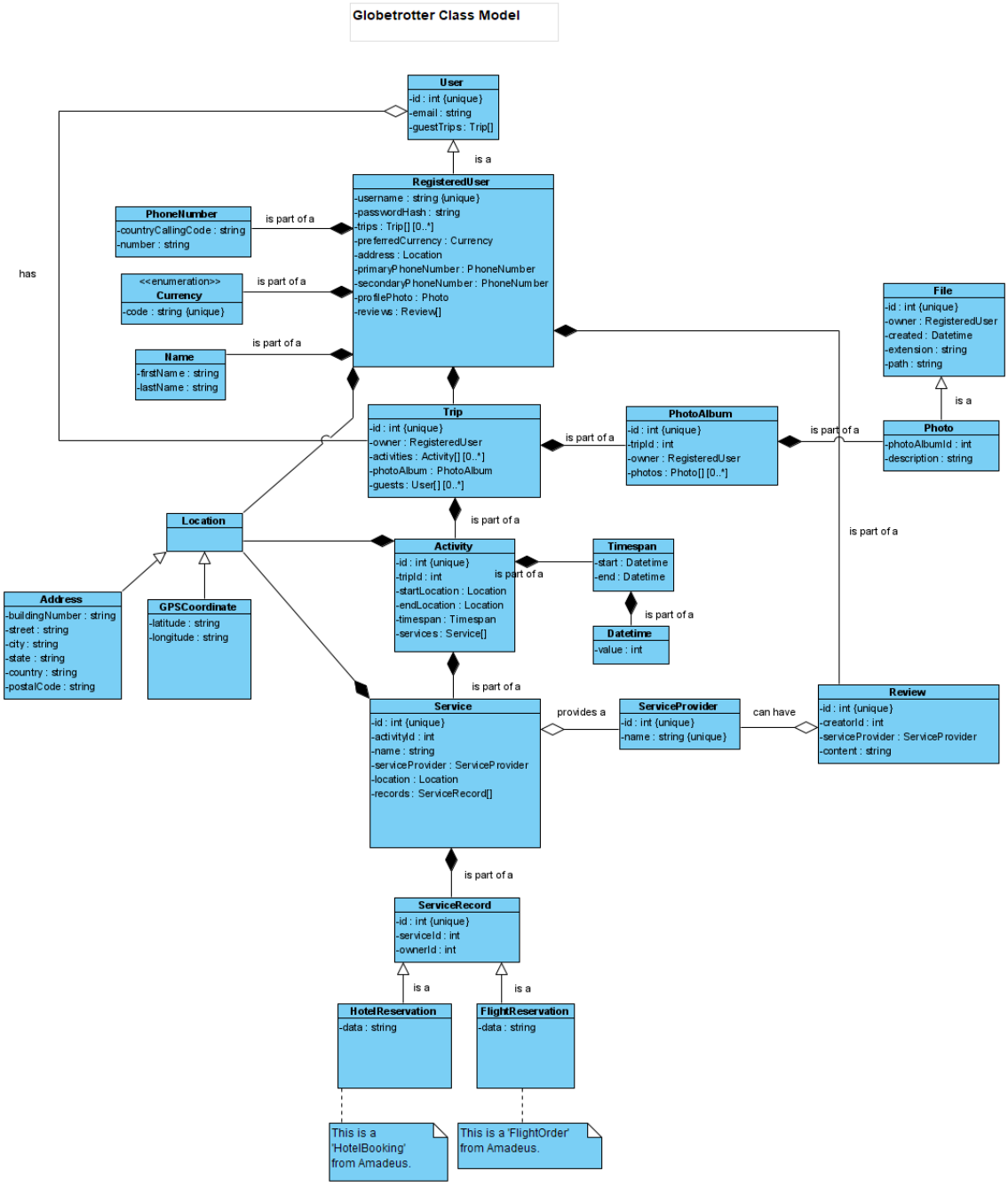
Database Model (Full)



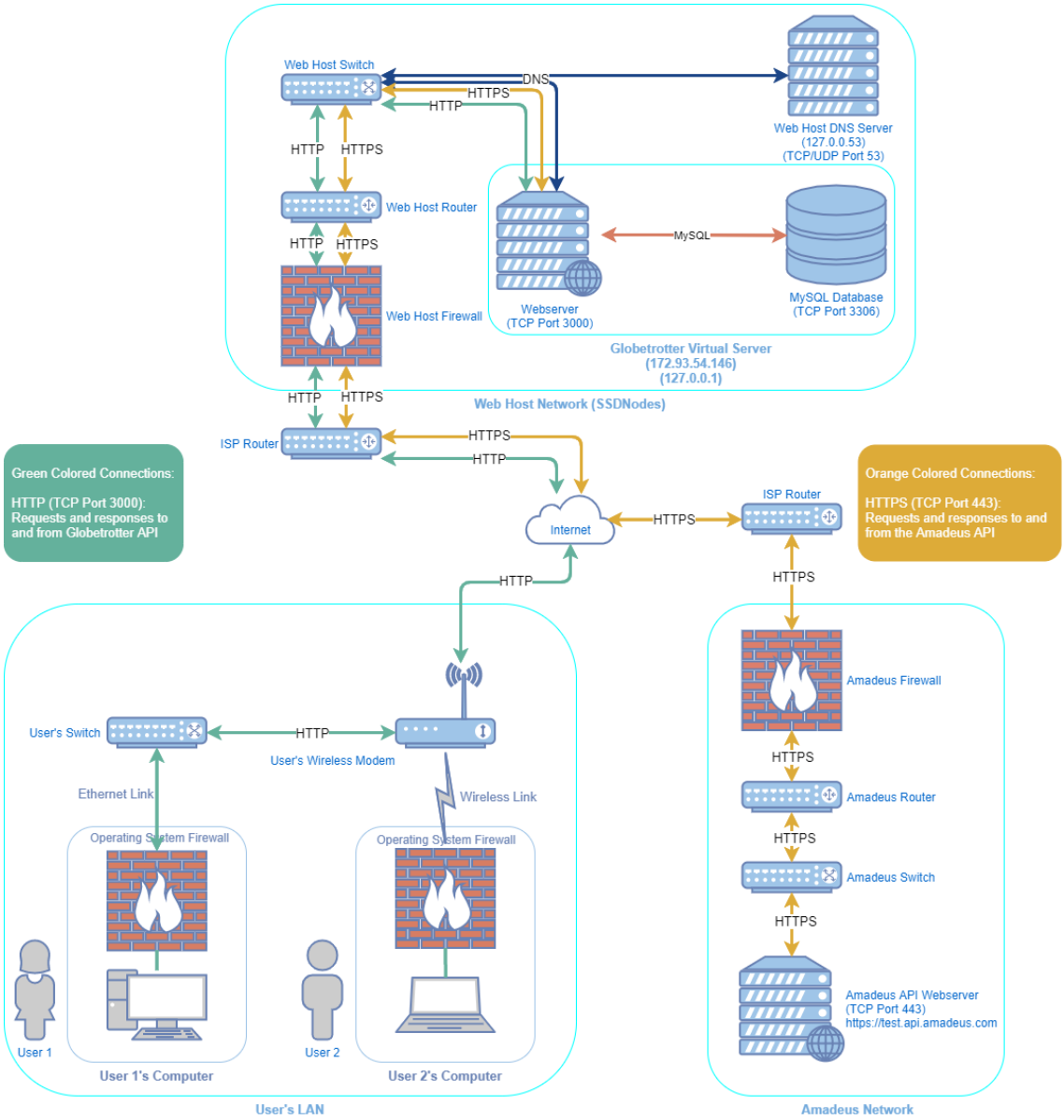
Search Implementation

- We will be using MySQL as our database management system because some of our team members already have some experience with MySQL.
- Photos will be kept in a file system and not stored as blobs.
- The user will be able to search for users by Username or Email.
    - Users will have a dropdown choice os Username and Email to choose from and confirm their choice witht the “next” button.
    - After they have confirmed what they are going to be inputting, the user will input their text in the textbox and press submit to perform the search.
    - SELECT * FROM GlobetrotterV1.users WHERE username LIKE '%${searchString}% will be used to search for users by username where “searchString” is the input of the user.
    - `SELECT * FROM GlobetrotterV1.users WHERE email LIKE '%${searchString}%'` will be used to search for users by email where “searchString” is the input of the user.

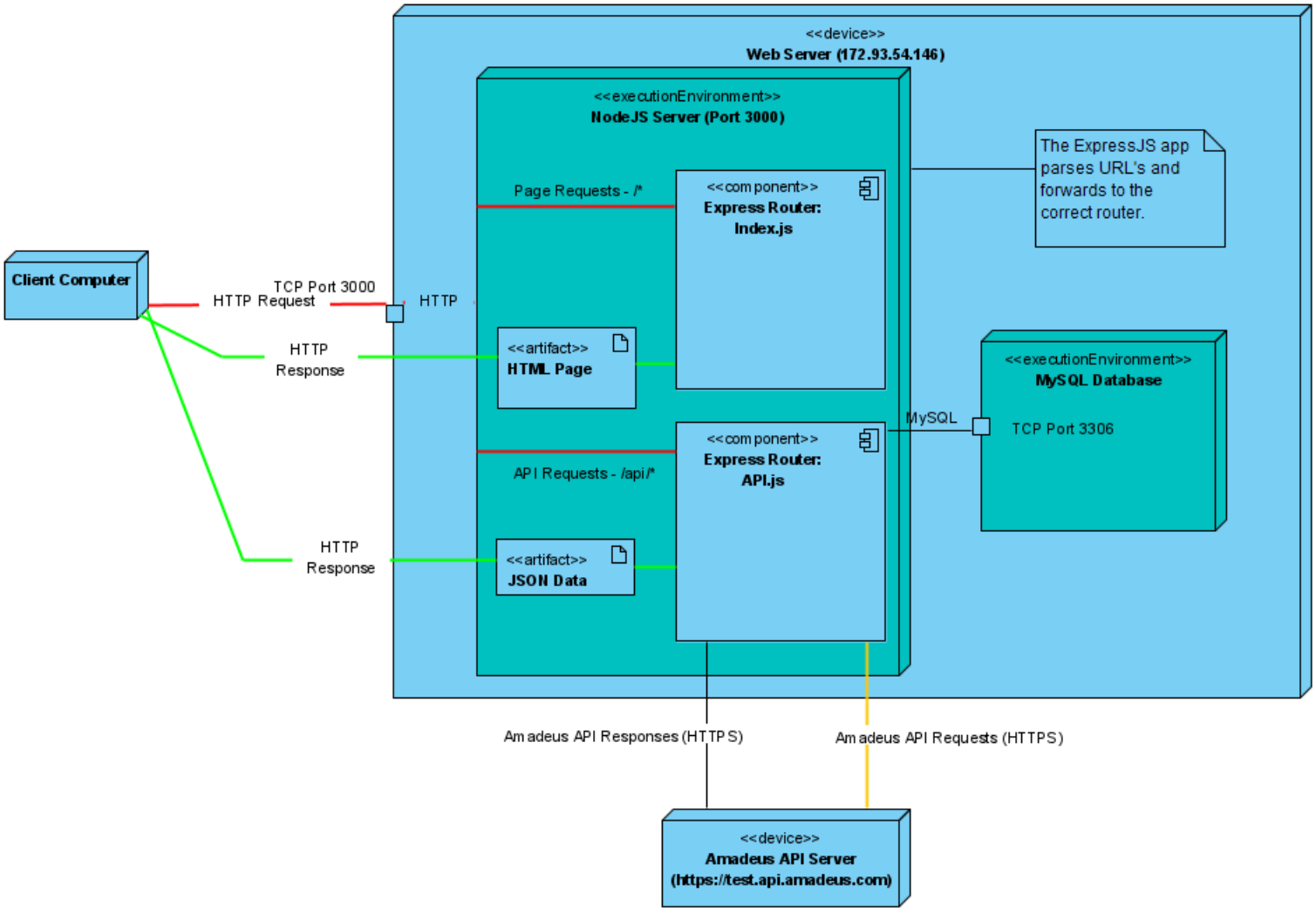
5. UML Diagrams



Network Diagram



Deployment Diagram



6. Contributions

- Ruza
    - Wireframes: Login, Registration, Home, Landing, Flights Results, Saved Flights, Review Flights Detailed, Travelers Info
    - Prototype Implementation: Previous Trips, Registration
- Jesus
    - Wireframes: Photo Gallery, Reset Password, Individual About Page
    - Prototype Implementation: Home, Photo Gallery, Reset Password
- Yi
    - Wireframes: Home, Login, Reset Password, Account Management, Route Planner
    - Prototype Implementation: Login, Account Management
    - Joined all wireframes into master wireframe document
- Kajeme
    - Helped with Implementing ‘Account Management’
    - Helped with ‘Data Definitions’
- Robin
    - Wireframes: Checkout, Saved Trips
    - Prototype Implementation: Checkout, Saved Trips
- Luis
    - Database Architecture
    - Entity Relationship Diagrams
- Taylor
    - Data Definitions
    - UML diagrams