

TTEK
TECHNOLOGIES

Blue Lakes Project

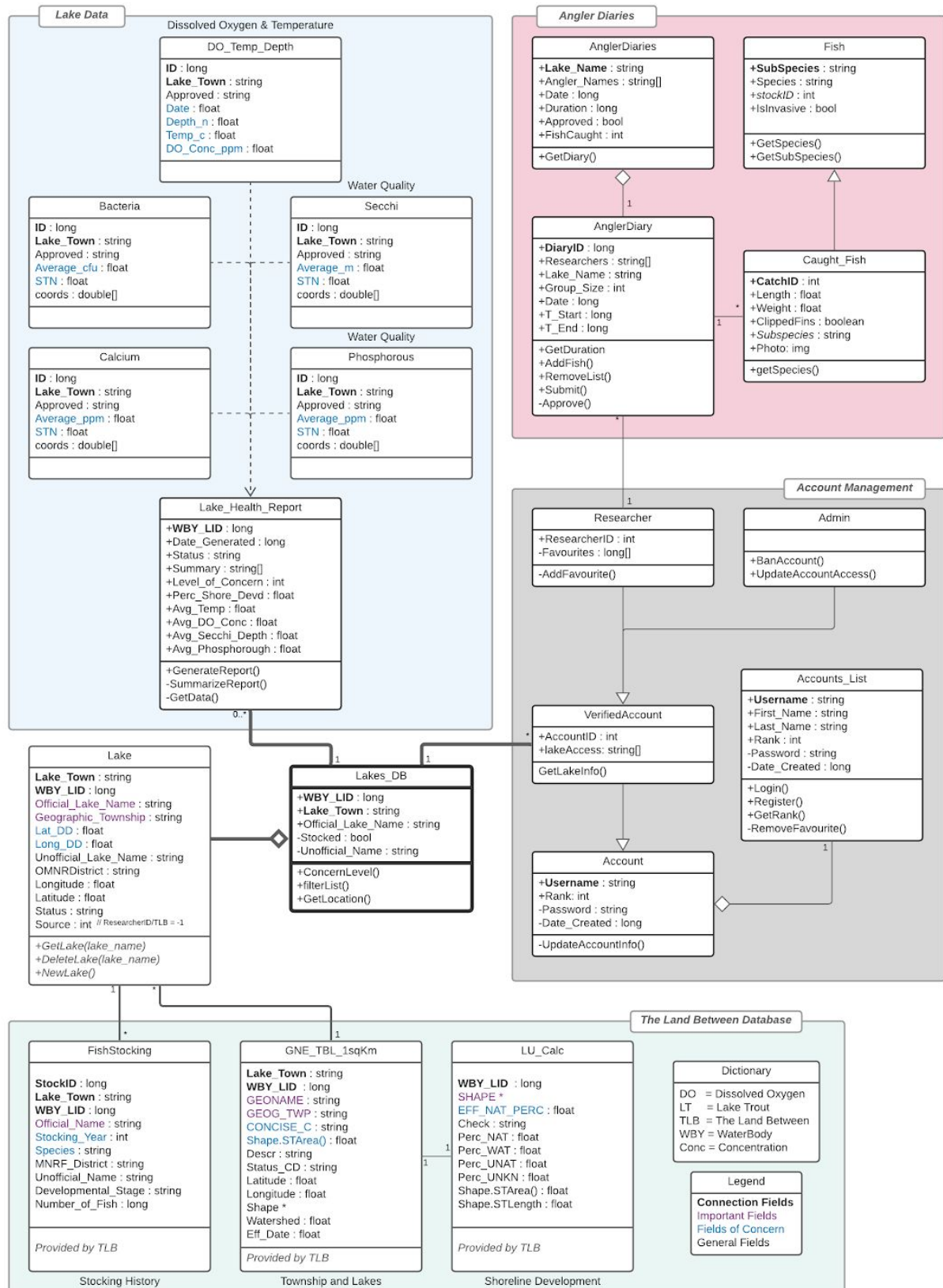
Final Design

<https://github.com/mtdnichol/BlueLakesProject>

Contents

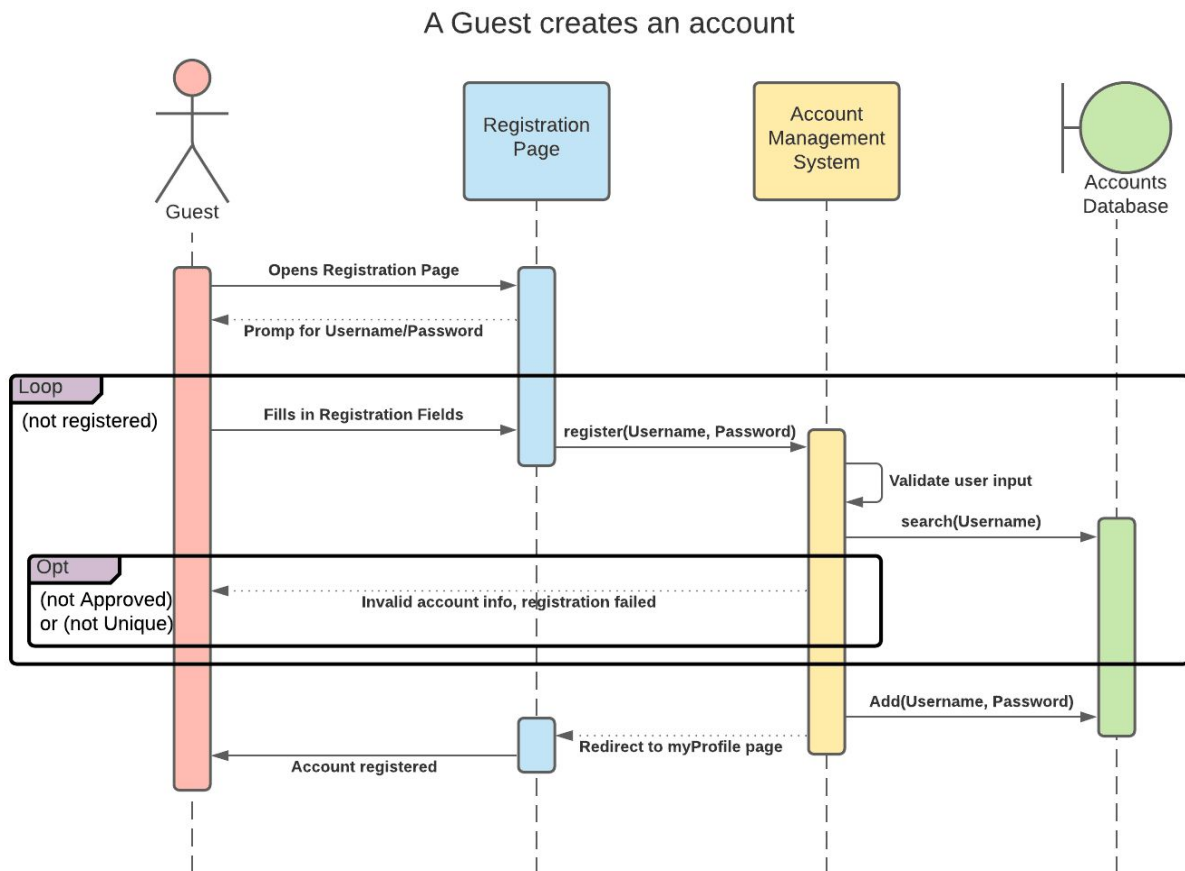
Contents	2
Class Diagram	3
Sequence Diagrams	4
Functionality 1: Creating a User Account	4
Functionality 2: User Views a Submitted Lake Health Report	4
Functionality 3: Logging In to a User Account	5
Functionality 4: Submitting an Angler Report	5
Functionality 5: Admin Approves User-Submitted Data	6
APIs and Off the Shelf Components	7
APIs	7
Google Maps API	7
Off the Shelf Components	7
Database Design Diagram	8
UI Design	9
Web App / Desktop Internet Browser	9
Homepage – (Not Logged In)	9
Homepage – (Logged In)	9
Submitting a Lake Health Report	10
Submitting an Angler Diary	10
Viewing a Lake's Profile	11
Mobile App / Mobile Internet Browser	12
Login Screen	12
Registration Screen	13
Guest Splash Page	14
User Splash Page	15
Lake Report Page	16
Modify Lake Health Report Splash	17
Edit Lake Health Report	18
Angling Report Page	19
Lake Health Splash Page	20

Class Diagram

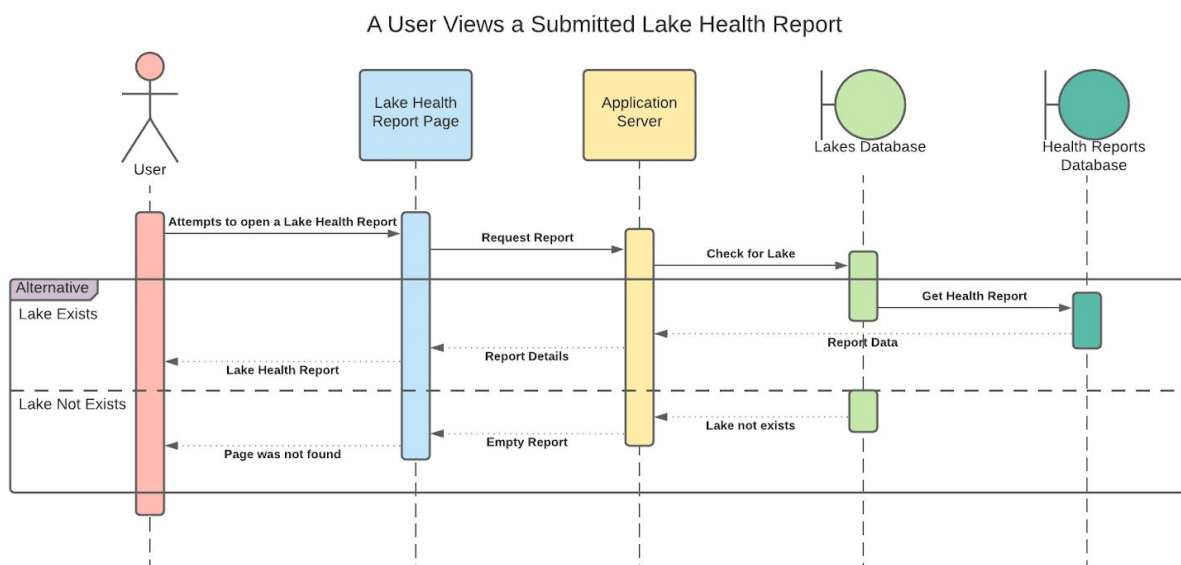


Sequence Diagrams

Functionality 1: Creating a User Account

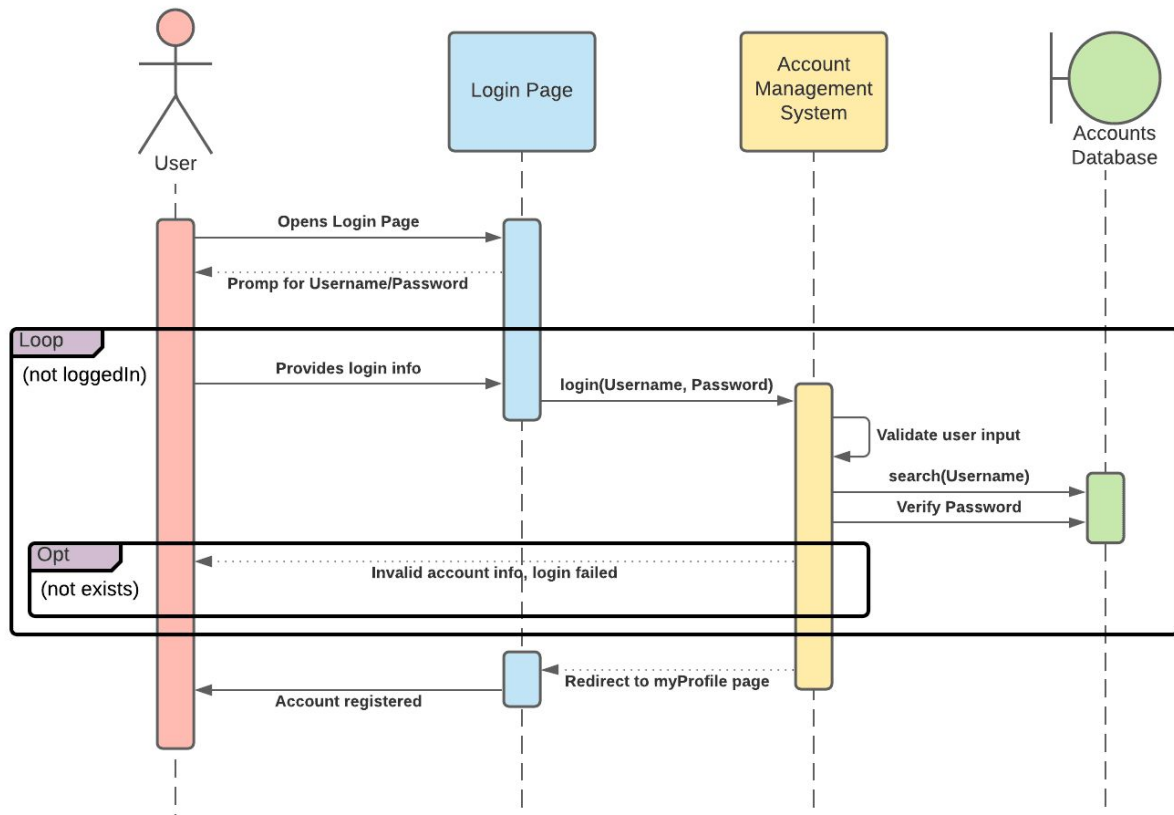


Functionality 2: User Views a Submitted Lake Health Report



Functionality 3: Logging In to a User Account

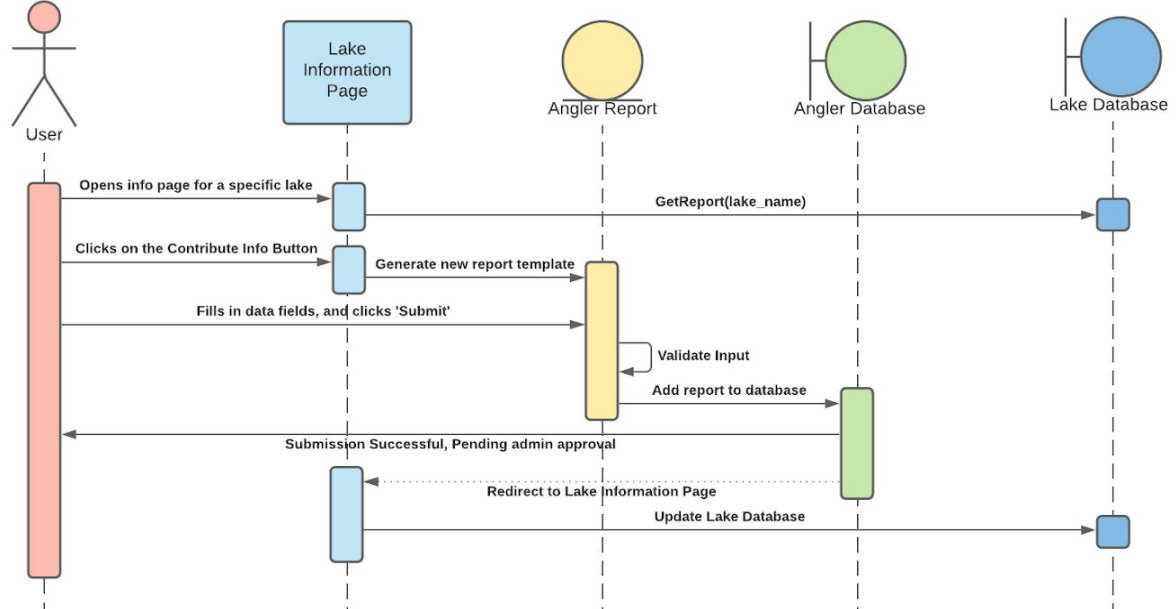
A User logs in to an account



Functionality 4: Submitting an Angler Report

A User Submits an Angler Report

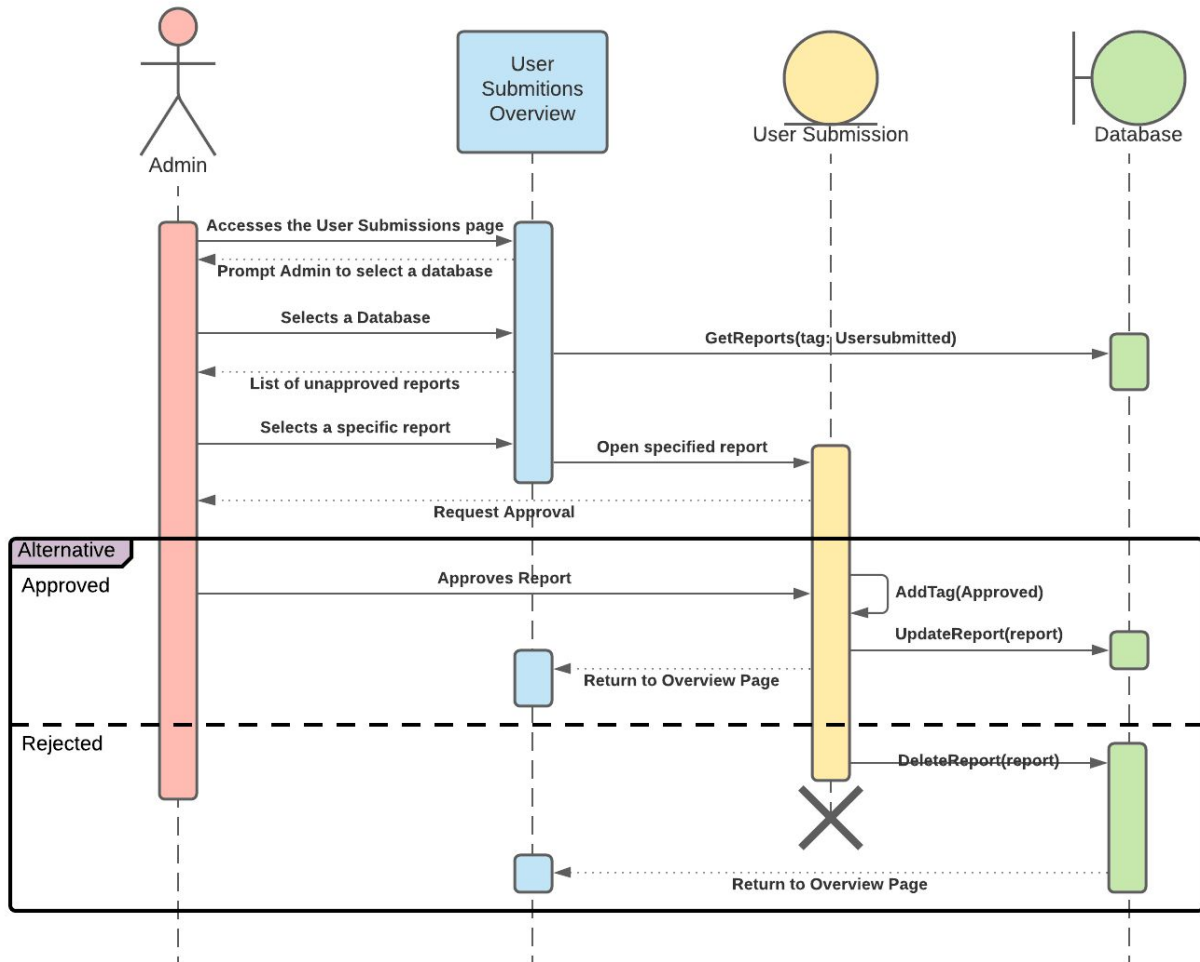
(Assumes User is has permissions to contribute angling data)



Functionality 5: Admin Approves User-Submitted Data

An Admin Approves User-Submitted Data

(This process looks functionally identical for each database)



APIs and Off the Shelf Components

APIs

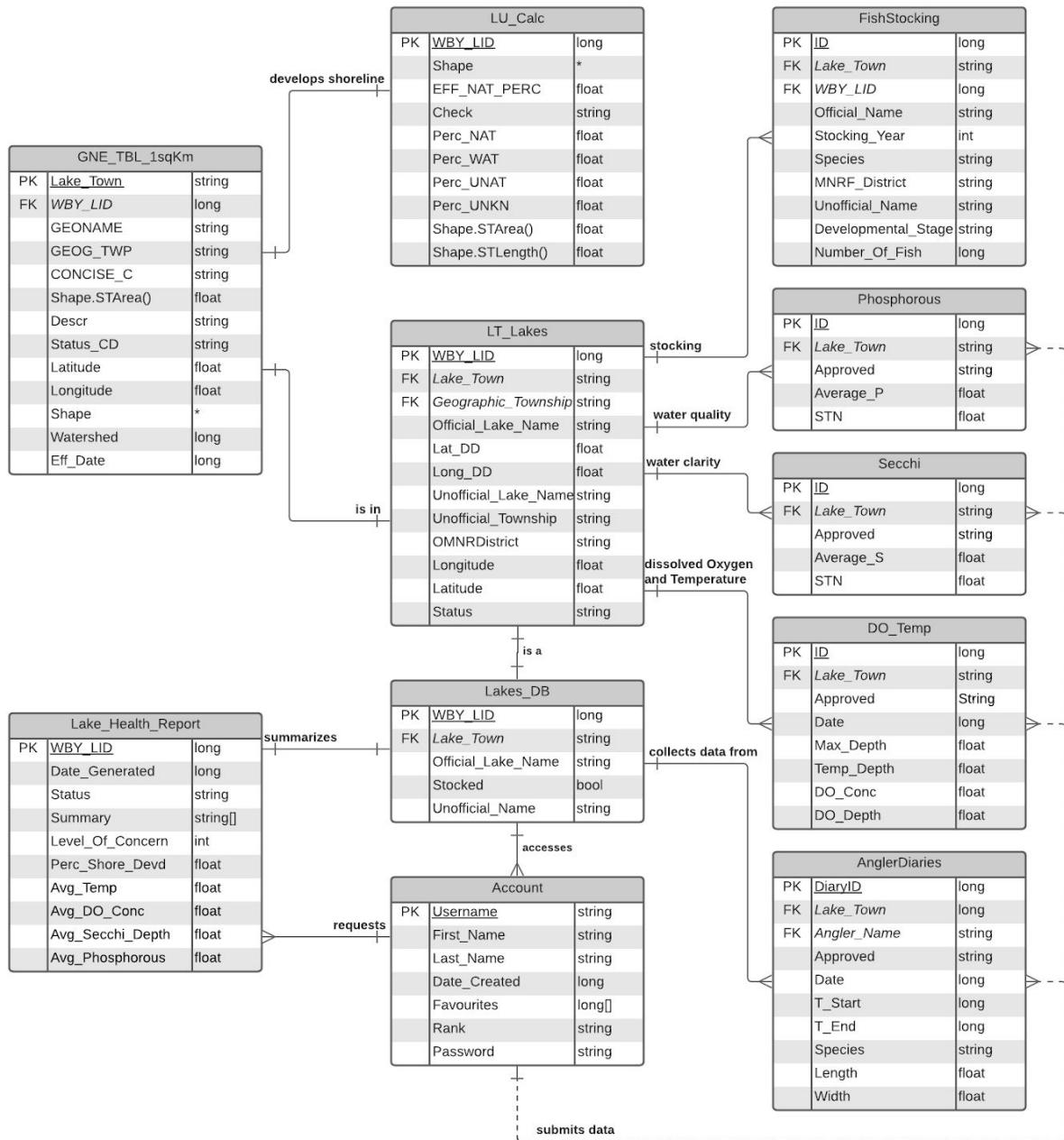
- Google Maps API

Purpose: Allow users to view the location of lake results on a map, as well as allow them to mark locations without having to manually input latitude and longitude

Off the Shelf Components

- N/A

Database Design Diagram



UI Design

Web App / Desktop Internet Browser

Homepage – (Not Logged In)

Submit Report	Angler Diaries	Login
-------------------------------	-----------------------	-----------------------

Angler Diary Title

Description about what this all is Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed molestie malesuada ante, sit amet vestibulum turpis scelerisque in. Aenean lacinia urna id lacus aliquam, non maximus lorem interdum. Nunc feugiat porttitor enim id varius. Integer tristique massa sit amet tellus imperdiet, non interdum leo pulvinar. Cras in vehicula tortor. Nunc interdum pellentesque nisi eget imperdiet. Phasellus id sodales tortor, eu scelerisque quam.

Aliquam sed ultricies dui. Vivamus id mauris enim. In at metus nibh. Phasellus nec iaculis neque. Nunc faucibus vel neque et finibus. Donec neque neque, aliquet sed est nec, varius cursus neque. Aliquam erat volutpat. Donec quis volutpat felis. Pellentesque nec scelerisque odio. Mauris tempor elit lacinia dapibus congue. Mauris ut nisi nec velit egestas laoreet. Vivamus et nulla tellus. Vivamus posuere nisi nisi, vitae interdum lacus tincidunt nec.

Sign Up Now

EMAIL

PASSWORD

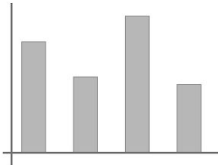
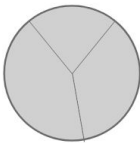
RE-TYPE PASSWORD

SIGNUP

Homepage – (Logged In)

Submit Report	Angler Diaries	Profile
-------------------------------	-----------------------	-------------------------

General Statistic Summary



Your Favourite Lakes

Submitting a Lake Health Report

Submit Report	Angler Diaries	Profile
----------------------	-----------------------	----------------

Lake Health Report Submission

LAKE NAME

TOWN

TOWNSHIP

DISSOLVED OXYGEN

DISSOLVED OXYGEN DEPTH

WATER CLARITY

PHOSPHEROUS

CALCIUM

TEMPERATURE

STN

SUBMIT

Submitting an Angler Diary

Submit Report	Angler Diaries	Profile
----------------------	-----------------------	----------------

Angling Report Submission

LAKE NAME

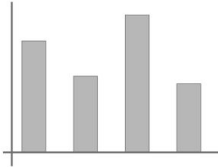
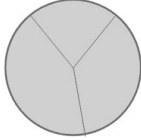
TOWN

TOWNSHIP

SPECIES <input type="text"/>	LENGTH <input type="text"/>	WEIGHT <input type="text"/>
SPECIES <input type="text"/>	LENGTH <input type="text"/>	WEIGHT <input type="text"/>
SPECIES <input type="text"/>	LENGTH <input type="text"/>	WEIGHT <input type="text"/>

SUBMIT

Viewing a Lake's Profile

Submit Report	Angler Diaries	Profile				
<div><h3>Specific Statistic Summary</h3><div></div></div> <h3>Recent Reports</h3> <table border="1"><tbody><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr></tbody></table>						

Mobile App / Mobile Internet Browser

Login Screen

The image shows a mobile app login screen for 'Angler Diaries'. The screen has a dark background. At the top, the status bar shows the time '9:41', signal strength, Wi-Fi, and battery level. The app title 'Angler Diaries' is centered. Below it are two input fields: 'Email' with a character count '24' and 'Password' with an eye icon for toggling visibility. A yellow 'Login' button is centered below the fields. At the bottom, there are links for 'Register' and 'Guest'.

9:41

Angler Diaries

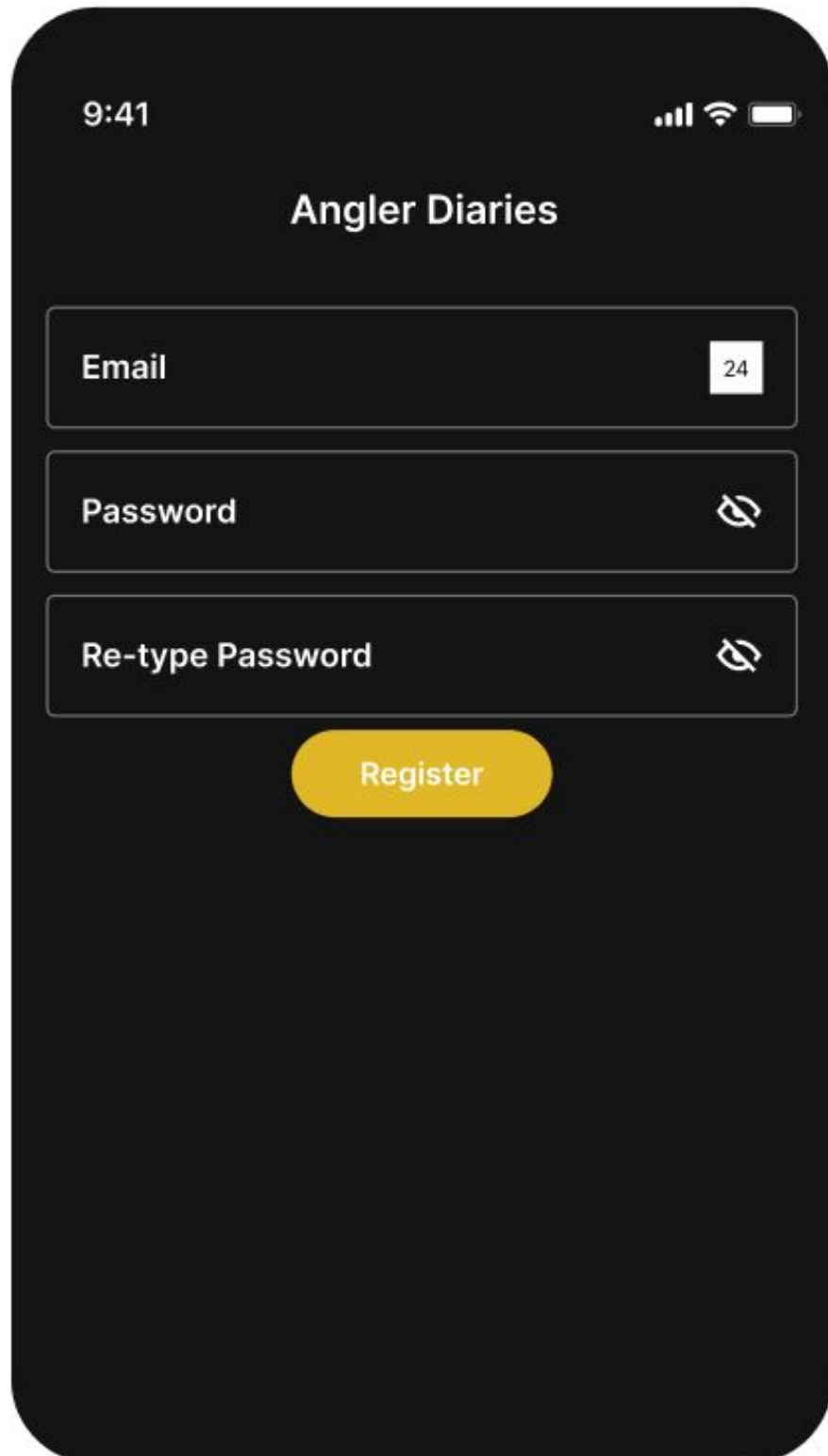
Email 24

Password

Login

Register Guest

Registration Screen



The image shows a mobile app registration screen for 'Angler Diaries'. The screen has a dark background. At the top, the status bar shows the time 9:41, signal strength, Wi-Fi, and battery. The app title 'Angler Diaries' is centered. Below it are three input fields: 'Email' with a character count of 24, 'Password', and 'Re-type Password', each with a toggle icon. A yellow 'Register' button is at the bottom.

9:41

Angler Diaries

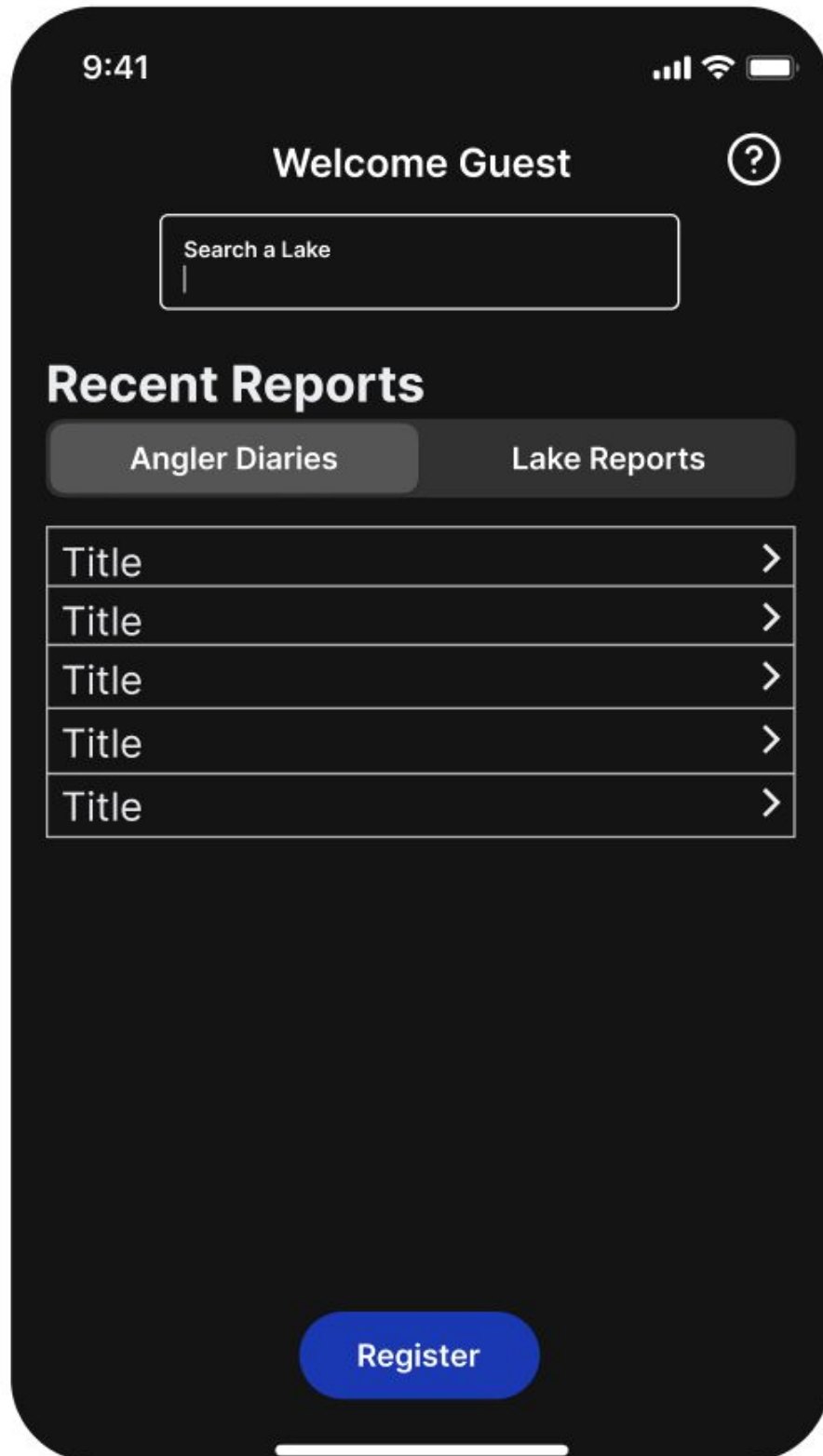
Email 24

Password

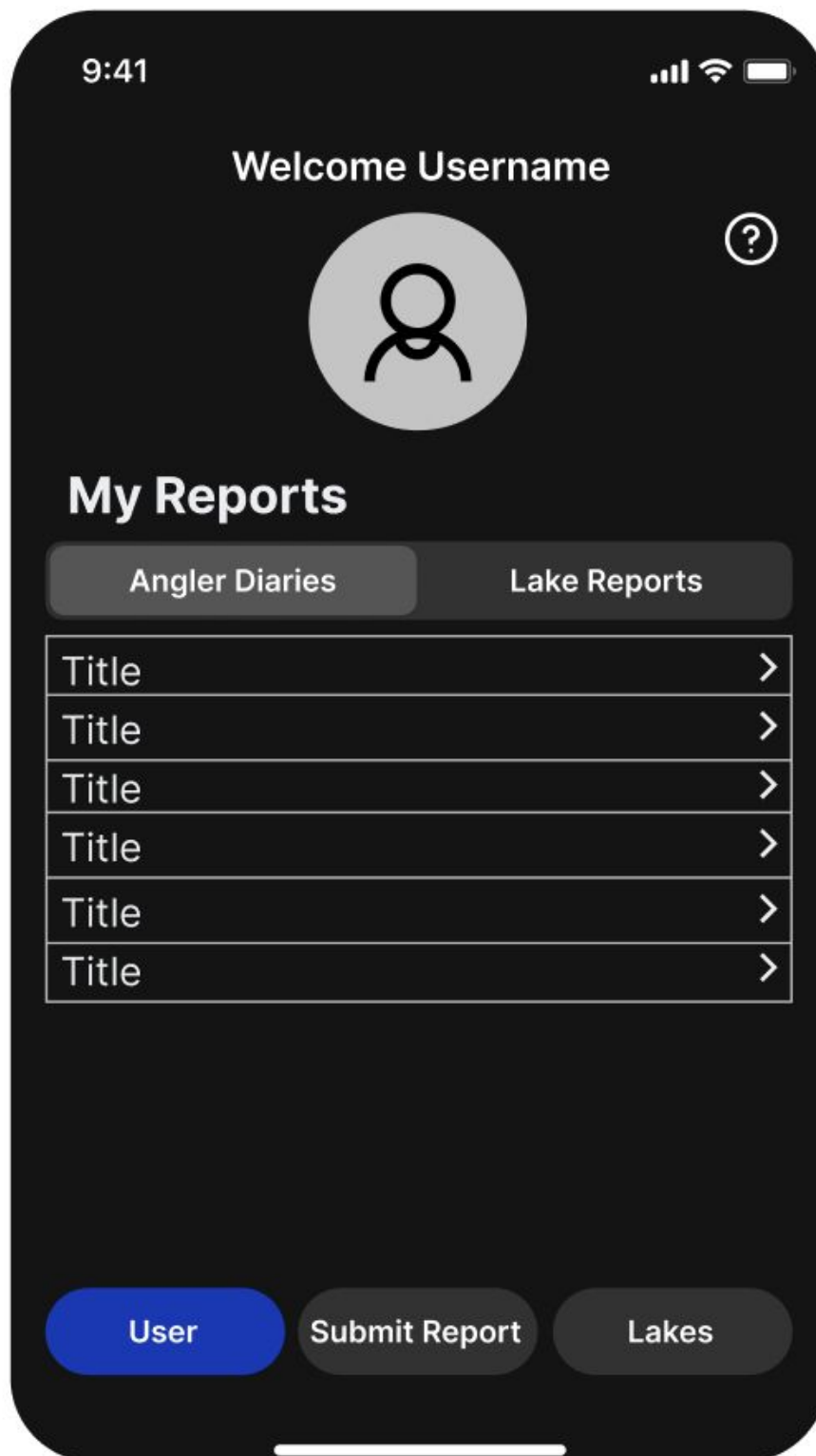
Re-type Password

Register

Guest Splash Page



User Splash Page



Lake Report Page

9:41

< **Your Lake Health Report**

Lake Name ▾


Town Township

Dissolved Oxygen Dissolved Oxygen Depth

Water Clarity (Secchi) Phosphorous

Calcium Temperature

STN C ● F ○


Google Maps

Add to Report

Submit Report

Modify Lake Health Report Splash

9:41

< Modify Report # _____

Report Entries

Entry 1	>
Entry 2	>
Entry 3	>
Entry 4	>
Entry 5	>
Entry 6	>

Save Changes

Edit Lake Health Report

9:41 📶 🔋

< **Modify Report #** _____

Lake Name ▼

Town

Township

Dissolved Oxygen

Dissolved Oxygen Depth

Water Clarity (Secchi)


Phosphorous

Calcium

Temperature

STN

C ☒ F ☐


Google Maps

Save Changes

Angling Report Page

The image shows a mobile application interface for 'Your Angler Report'. At the top, the status bar displays the time 9:41, signal strength, Wi-Fi, and battery icons. Below the status bar is a navigation bar with a back arrow and the title 'Your Angler Report'. The main form consists of several input fields: a 'Lake Name' dropdown menu, 'Town' and 'Township' text input fields, a 'Species Value' dropdown menu, 'Length' and 'Weight' text input fields, and a 'Time Spent' dropdown menu. An orange 'Add to Report' button is positioned below the 'Length' and 'Weight' fields. Below the 'Time Spent' dropdown is a white rectangular box containing the Google Maps logo and the text 'Google Maps'. At the bottom of the form is a blue 'Submit Report' button. The entire interface is set against a dark background.

9:41

< Your Angler Report

Lake Name

Town

Township

Species Value

Length

Weight

Add to Report

Time Spent

Google Maps

Submit Report

Lake Health Splash Page

