Loveland Living Planet Aquarium App

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DGM 2240: Interaction Design

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Problem / Requirements

The Living Planet Aquarium want to create an app to increase engagement outside the aquarium. They want people to be motivated and return to the aquarium. This will be accomplished by creating an app that will engage users in the aquarium and outside the aquarium.

The purpose of the app is to give the user the ability to create their own fish. They will select various body parts including: fins, head, tail, body, size, and color. Once they create a fish they will be able to add it to a virtual aquarium. In the aquarium, the user will be able to observe how the fish interacts within the virtual aquarium.

Requirements

1. Login
2. Create your fish
3. Guide the user
4. None quantifiable/visual feedback
5. Pinch & Zoom (close-ups)
6. Selecting elements within an environment
7. Share results

8. See the Leader board on-line (lifetime)
9. Have 1 User be able to create multiple fish
10. Be able to see the virtual aquarium on the app
11. Be able to name the fish
12. Be able to save the fish
13. Be able to delete the fish
14. Reset the aquarium

Target Users

There are three dominant users. They are a school teacher, Parent, and a elementary student. These are the type of people that visit the aquarium regularly. Many teachers attend the aquarium through school field trips. During the day, many stay at home mothers attend the aquarium with their younger children. The following is a few characteristics and goals for each group of target users:
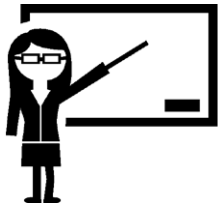
Elementary School Teacher

Characteristics:

- Teaching for 10 years
- Always looking for improvement
- Adapts the curriculum to meet needs of the classroom.

Goals:

- Educate the class
- Can't make things too experimental.

Parent

Characteristics:

- Watches kids all day
- Frequently on social media
- Stay at home mom

Goals:

- Needs to get kids occupied
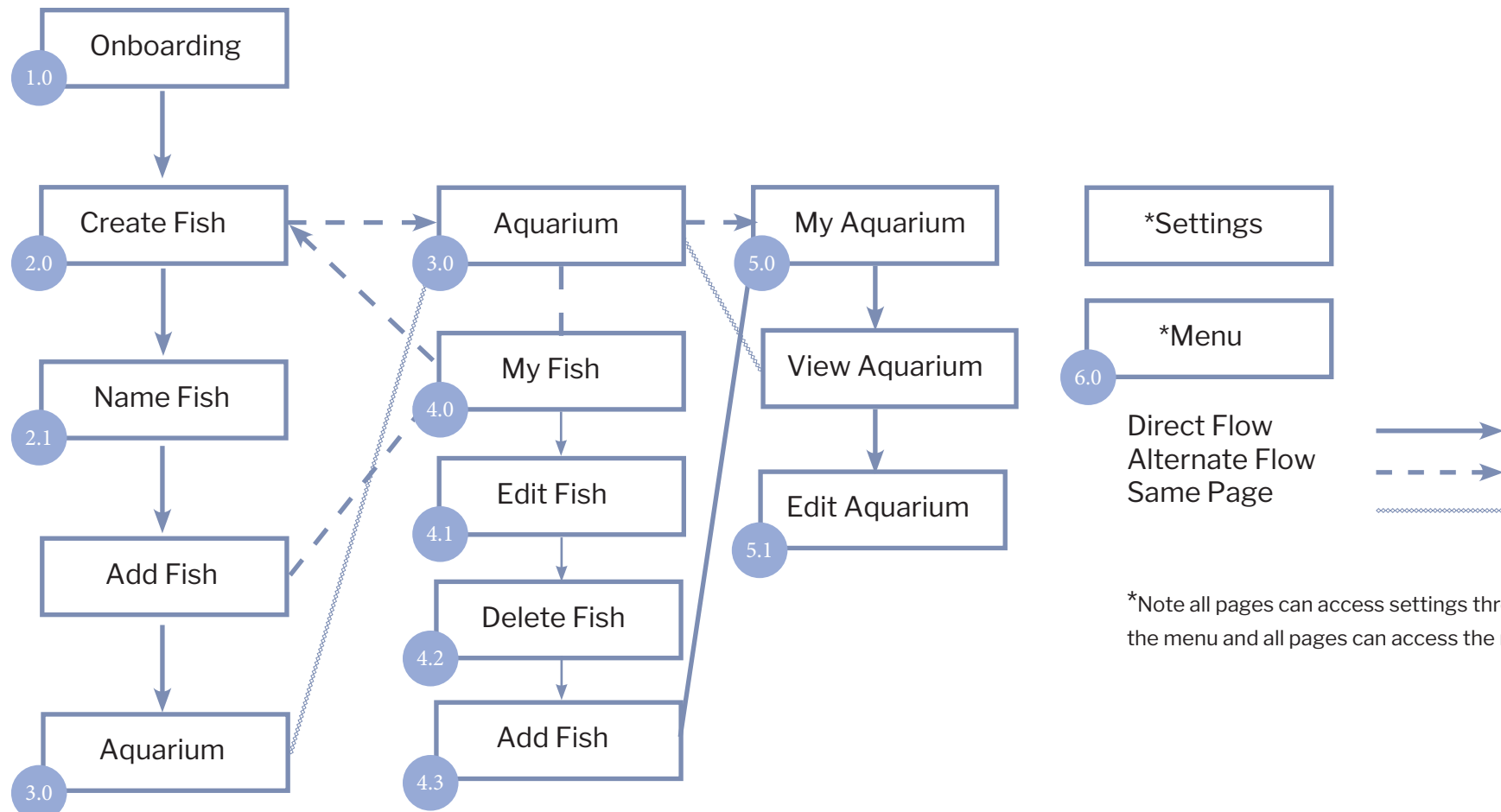- Kids get an education

Student

Characteristics:

- Very curious
- Physically active
- Elementary school student

Goals:

- Have fun
- Be occupied with hands on learning.

Design - Flow Chart

Flow Chart

1.0 Onboarding	
2.0 Create Fish	**3.0** Aquarium
2.1 Name Fish	**4.0** My Fish
3.0 Add Fish	**4.1** Edit Fish
3.0 Aquarium	**4.2** Delete Fish
	4.3 Add Fish

5.0 My Aquarium

5.1 View Aquarium

Edit Aquarium

*Settings

6.0 *Menu

Direct Flow
Alternate Flow
Same Page

*Note all pages can access settings through
the menu and all pages can access the menu.

Design 1.0

① Go to **1.1 Sign Up**

② Go to **2.0 Create a Fish**

③ Can sign in using other existing accounts

④ Back to **1.0 Sign In**

⑤ Quick and simple sign up screen

1.0 Sign In Version 2

New User? Sign Up! ①

Sign In

Sign In with:

Email:

③ Facebook

Twitter

or

Password:

Instagram

② Sign In

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AQUARIUM

1.1 Sign Up Version 2

④ ← Back

New Profile Information

⑤ Name:

Email:

Confirm Email:

Password:

② Sign Up

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Design 2.0

① Shows the Guide

② Tabs to choose different parts

③ Can slide left and right with touch

④ Go to **2.1 Name Fish**

⑤ Go to **3.0 Aquarium**

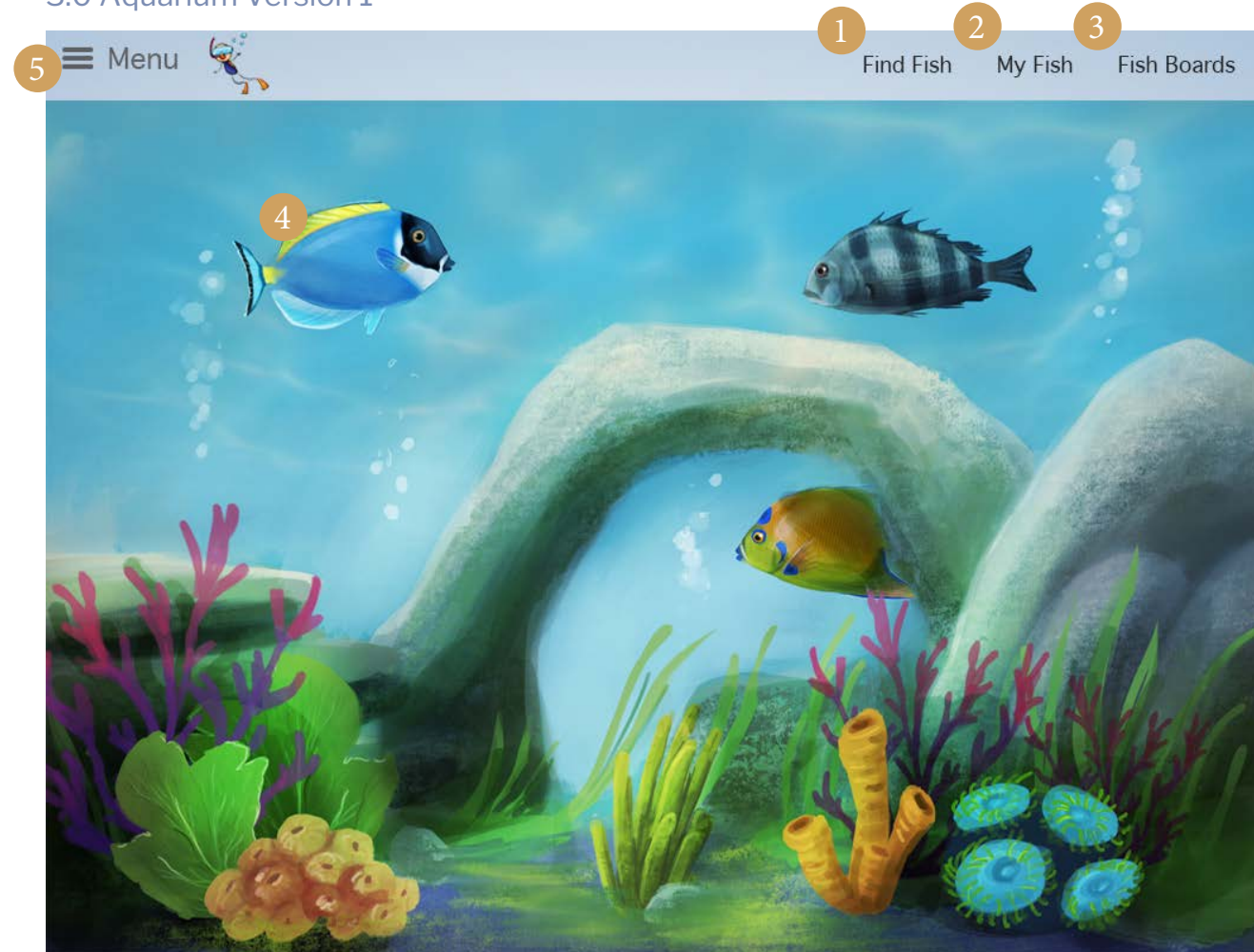⑥ Go to **4.0 My Fish**

2.0 Create a Fish Version 1
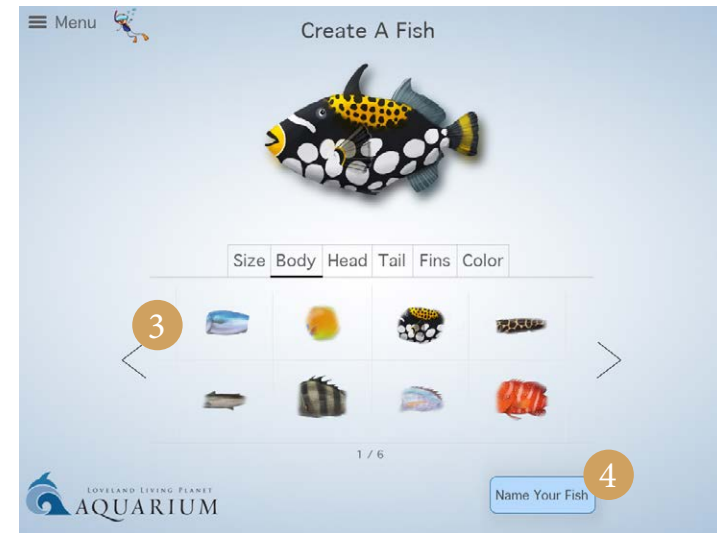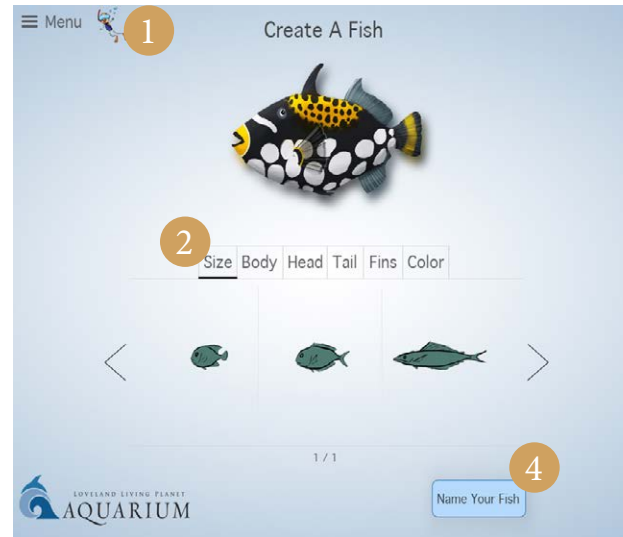
2.1 Name Fish Version 1

Design 3.0

① Go to **3.1 Aquarium Find Fish**

② Go to **3.2 Aquarium My Fish**

③ Go to **3.3 Aquarium Fish Boards**

④ Pinch to zoom. Go to **3.4 Aquarium Close Up**

⑤ Opens the menu. The menu is available on all screens. Go to **6.0 Menu**
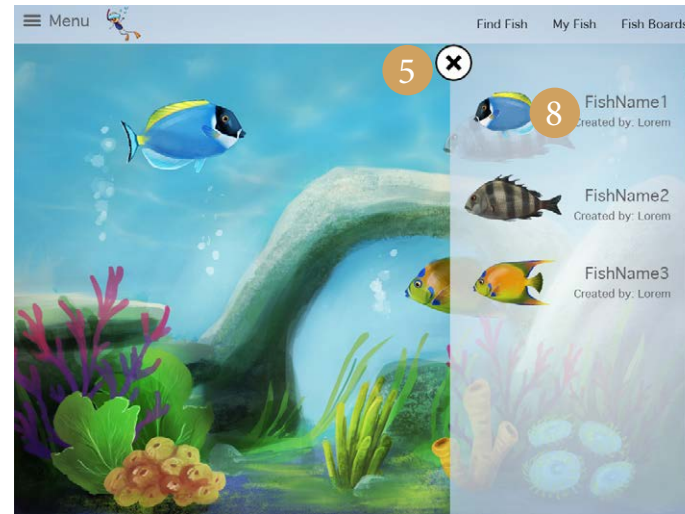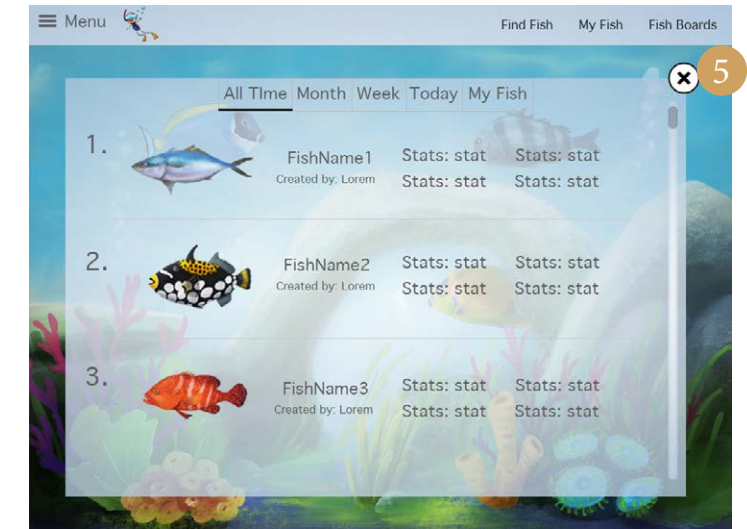
6.0 Menu Version 1

3.0 Aquarium Version 1

Design 3.1 - 3.4

5 Closes the menu. Return to **3.0 Aquarium**

6 Pinch out. Back to **3.0 Aquarium**

7 Go to **3.0 Aquarium**

8 Go to **3.4 Aquarium Close Up**

9 Go to **2.0 Create a fish**
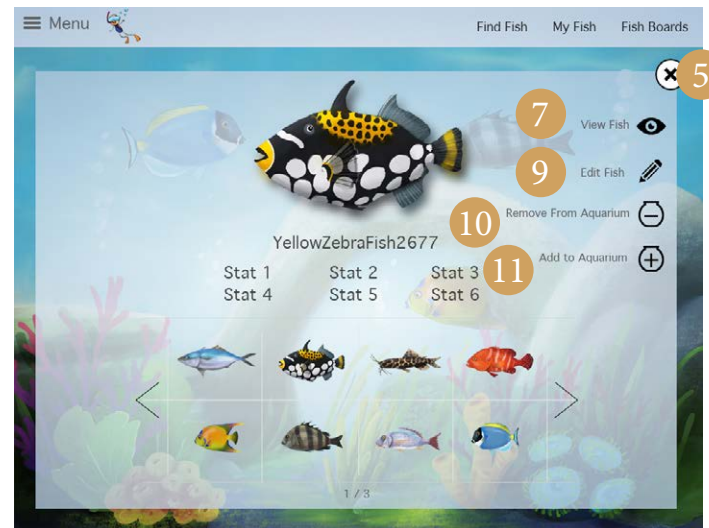
10 Removes fish from aquarium.

11 Adds fish to aquarium
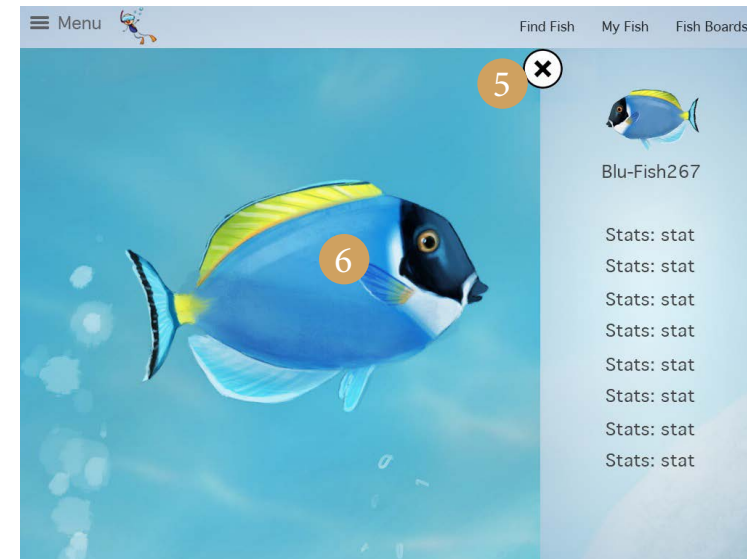
3.1 Aquarium Find Fish Version 1

3.3 Aquarium Fish Boards Version 1

3.2 Aquarium My Fish Version 1

3.4 Aquarium Close Up Version 1

Design 4.0

1. Go to **2.0 Create a fish**

2. Go to **2.0 Create a fish**

3. Add to aquarium

4. Delete fish. You get a prompt before deleting.

4.0 My Fish Version 1

Design 5.0

This is the My Aquarium screen. The difference between the Aquarium and My Aquarium is that My Aquarium is the users own personal aquarium they can customize. My aquarium is accessed through the menu screen.

1. Go to **3.0 Aquarium**

2. Go to **5.1 Edit My Aquarium**

3. Displays the number of fish in the aquarium

4. Saves any changes made

5.0 My Aquarium Version 1

5.1 Edit My Aquarium Version 1
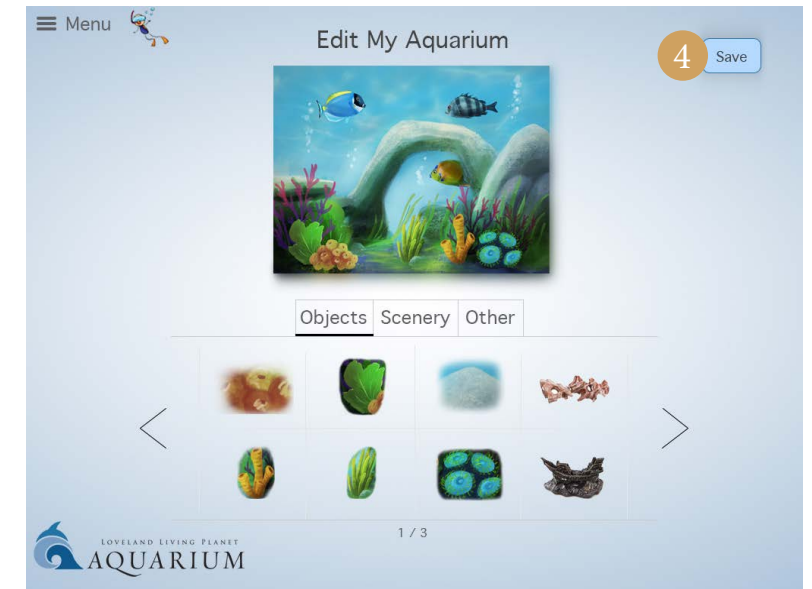
Test

A prototype was made using invision. The prototype was tested on a 5 people. The target users I selected were parents and their children. I wanted to test how fast it takes to create a fish and add it to the aquarium. I used a tablet for the prototype test.

Results

Relatively the results were pretty close. I wanted to make it as fast as possible to sign in, make a fish and add it to the aquarium. I believe I did accomplish that. I think users will take their time to create a fish but people want content first and start using the app.

Recommendations

I notice that some of the testers tried sliding on the options for creating a fish. This feature wasn't included in the prototype but that is what I wanted to imply. The design has affordance to using touch screen gestures.

Other critical testing would include the aquarium itself, knowing the difference between my aquarium and the LLPA aquarium, and managing the fish list.

Time for creating a fish and adding it to the aquarium.

| 12 year old Male | 10 year old Male | 8 year old Female | Parent Male | Parent Female |
| 120 secs | 130 secs | 143 secs | 175 secs | 132 secs |