DeKoi: Koi Index App

Stage 2: User and task analysis

Written by:

André Rodrigues, 50712
Diogo Coelho, 49837
Pedro Almeida, 50490

Lab class: P4

Group No.: 32

Professora:

Teresa Romão

October 15, 2020

Description

DeKoi is meant to be an easy and simple to use application for people of all ages and all places, that are somewhat or very interested in Koi Carp, a decorative type of fish, and would like a way to catalogue, search and learn more about them. It serves hobbyists, casual users, and experts.

User Analysis

For now, the app won't be disabled friendly. It can be used by people of any ethnicity. The application will take in consideration low general computer experienced users, so it will be as intuitive and user friendly as possible.

In phase 1 of the project we identified the users who would be benefiting from using the app. In this phase we are going to present a more coarse grained user class by dividing them based on their characteristics. This will guide the design and clarify the most important requirements that our application will need to fulfill in order to give their users the best experience. The **user classes** that we identified were: **People unfamiliar with Koi** and **Experts in Koi**.

User characteristics	DeKoi user characteristics by group	
	People unfamiliar with Koi	Experts in Koi
Age	All ages	
Sex	Male and female	
Training	No training, open and use	
Knowledge	Little to no knowledge about Koi fish.	Deep Knowledge about Koi fish
Educational Background	Only reading and simple comprehension necessary	
Computer/IT use	Only the most basic knowledge of mobile devices needed. (touch to select button, per example)	
Motivation	Motivated to use the application to learn about the Koi carps & discover which type of Koi they saw.	Motivated to use the application to create a catalogue to track their Kois.

Task Analysis

Here we cover some high-level tasks from our project. If it applies, we compare them with the actions that are usually done to achieve them.

In every task no tools are needed, there are no time constraints, no resource constraints. No one else is involved in the task besides the user and all tasks can be performed anywhere since the app uses local databases by default.

Task 1 - Create a Koi from the "builder"

What do users usually do?

They catalogue Koi fish, whether it is theirs or whether they have spotted it somewhere.

They seek to learn information and details about Koi fish they may not know.

Why do they do it?

They want to catalogue their fish or simply learn about the types of Koi they saw.

How do they do it, and what tool do they use?

They usually create a handwritten catalogue with glued pictures.

They search online, in videos, web-forums, books, or even ask an expert, in order to learn about the specific Koi types.

What can this project do to solve that?

Create their Koi fish in an app catalogue using a "builder" tool.

What must they know?

They must know how the fish looks like, as well as its colors and its pattern. The knowledge of Koi-specific technical terms is not necessary as it is a visual process. If, however, the user wants to go into more detail, one can also add that information.

What steps are involved in doing the task?

Preconditions:

- There are no preconditions.

Action steps:

- Create a Koi fish
    1. Select whether it's an owned koi fish or a koi spotted somewhere else;
    2. Pick the base color of the Koi fish;
    3. Pick the type of pattern from a list of patterns (Single step, double step, tancho, etc.), and it's position on the body;
    4. Pick the color of the pattern, from a color table;
    5. (Optional) Return to step 2 and repeat while needed;
    6. (Optional) Add additional data about the Koi fish:
        a. (Optional) Insert the carp length;
        b. (Optional) Insert the carp weight;
        c. (Optional) Insert the age of the carp;
        d. (Optional) Write the name of the koi fish;
        e. (Optional) Add photo(s) of the koi;
        f. If it is a spotted fish:
            i. (Optional) Set the location of the fish on a map.
    7. Save the inserted data, when the user feels it is satisfactory, to add the koi fish to the collection.

How often is the task performed?

Only once per Koi. It can be performed as many times as the user desires. Every time the user spots or owns a new fish, they can manually add it to their collection whenever they wish to do it.

How is the task learned?

There is going to be a demo at the beginning of the app explaining how the task can be done, however the user should still be able to perform the task without completing the demo.

What are the exceptions?

There are no exceptions. Every possible characterization of the fish will give a specific type that is present in the types database, if else, the app will return an automatically "made up" type which would best match the described fish.

This is due to the nature of the Koi hobby, where, similarly to dog breeds, it is impossible to know of every single type, as more are invented regularly from new genetic mixtures.

Task 2 - Check "Basics for taking care of a Koi" Tutorial

What do users usually do?

Users seek information on how to take care of a koi.

Why do they do it?

The users want to know the necessary information for being able to take care of their Koi, such as water quality, food, temperature, etc.

How do they do it, and what tool do they use?

They search online, in videos, web-forums, books, or even ask an expert, in order to learn about how to take care of a koi.

What can this project do to solve that?

Follow a tutorial in the app to learn about the basics of Koi-keeping.

What must they know?

No prior knowledge is needed.

What steps are involved in doing the task?

Preconditions:
- There are no preconditions.

Action steps:
- Basics for taking care of Koi
    1. The user is reads the essential information about a certain aspect (Koi history, water quality, food type, etc.) about Koi-keeping:
        a. The user chooses to learn more about the aspect:
            i. User returns to the tutorial when satisfied.
        b. The user chooses to advance to the next step of the tutorial;
    2. The user ends the tutorial.

How often is the task performed?

However many times the user wishes to.

How is the task learned?

The task's steps are sequential and do not require any learning to follow, given basic smartphone usage knowledge.

What are the exceptions?

There are no exceptions.

Task 3 - Search for Koi in the catalogue

What do users usually do?

Users search for a specific Koi by trait or name.

Why do they do it?

Users want to find a Koi carp or a group of Kois on its collection to know more information about said Koi, so they can find it by doing a search by type, owned/spotted, alphabetical order, age, weight, picture and location.

How do they do it, and what tool do they use?

They either eye-scan a book catalogue of all the Koi they have, or they have their collection in a tool such as Excel and need to use unintuitive methods of searching.

What can this project do to solve that?

Allow for an intuitive and easy way to perform this type of searching.

What must they know?

They must know the information they want to filter by, be it the name of a specific fish, the name of a type of Koi, etc.

What steps are involved in doing the task?

Preconditions:
- There must already be Koi in the app Koi collection / catalogue.

Action steps:
- Search for Koi in the catalogue
    1. Insert one or many search details
        a. Insert the name of a Koi to search;
        b. Select a characteristic(s) to filter the catalogue by;
    2. The user interacts with the search results.

How often is the task performed?

However many times the used wishes to.

How is the task learned?

The task's steps are sequential and do not require any learning to follow, given basic smartphone usage knowledge.

What are the exceptions?

There are no exceptions.

Scenarios

As soon as John Milk told his IT friends about the application, they went to work on the idea as quickly as possible, because they found there's actually a pretty good market for it. So they told John Milk to test it out and say what he thinks of it. So, he went to "Koi Park" with his new friend John Dry.

All names and characters are fictitious. Any resemblance to real people or events is purely coincidental.

Scenario 1 - John Milk creates a Koi from the "builder":

- "Hey Dry, how are you doing?"

- "Hey Milk, I'm pretty good, how are you?"
- "Amazing! I have to show you the app that my new friends made, let's add Koi fishes to our collection!"
- "The app by James Bunny, Peter, and Andrew? Awesome! Let's go!"
- "So here is a cool Koi, it's white with a red circle on top of his head. I'm going to add it in the app, I've done the tutorials already so I kind of know how to do it… Okay, so, I have an option on the main menu called "Create your Koi", it's probably there! Okay, nice! It's a spotted Koi, as it's not mine, so I'll check that. Now I have to pick a base color, which is white. I also have to pick a pattern, there's one here that is pretty much what I was looking for! Aaaaand its color is red! I don't know the age or size of it and it's optional, so I'm going to pass it…"
- "Wait I can help you with that! Remember I'm a pro and all! From the looks of it it looks to be 1 year old and it's probably 20 centimeters"
- "Terrific, I've added those! What should we call it? Maybe… Arthur Days! Since it's really young and all. I'll snap a picture and add it here so we can remember it the next time we come here.
Aaaaaand saaaave. Done! It says here we have a "Tancho Kohaku", sounds cool!"
- "Wow… it's that simple?! I have to use that, looks pretty cool! DeKoi you called it?"
It was a great afternoon for John Dry and John Milk.

Scenario 2 - John Milk checks the "Basics for taking care of a Koi" Tutorial:

- "Man! I'm tired of killing my Koi!"
- "Don't worry Milk! I checked the app and there's actually a pretty good tutorial to teach how to take care of your carps."
- "Oh really?! I have to check that! Let's see... Oh here it is! This is actually pretty good. I have to give them this food? Really?? I was giving them McNuggets, who would have guessed they would eat this! Even them fish are fancy, nowadays! What in the hell is a "pH"? Oh... That's why they never really like to be in the bathtub, oops! Let me check more information on this."
After a good 20 minutes of good reading
- "I'm now an expert on Koi Carps. Let me go back to the tutorial and finish it... Done! Thank you a lot Dry, this app is truly educational."
- "It sure is buddy!"
J. Milk never killed a Koi fish again.

Scenario 3 - Dry & Milk Search for Koi in the catalogue:

- "Hey Milk, I have a favour to ask you, buddy."
- "Say it, Dry!"
- "Can you show me the picture of the Koi we found the other day? I really liked that fish!"
- "Humm, I think so, but I added some 200 Koi since then… Oh, I can search for it! I remember it was a "Tancho Kohaku", let's see!"
- "Oh, so many results! Did you go to a Koi convention and add them all?"
- "Yes I did haha! But I remember the Koi was named Arthur... Something. Let's add that to the search filter!"
- "It has to be that one right there! It's the only result."
- "Man, these filters are awesome! I wish I was as smart as the guys who programmed this. It's this picture here right? I'll send it to your Whatsapp right away!"
It was that picture. The end.