FACULDADE DE CIÊNCIAS E TECNOLOGIA
UNIVERSIDADE NOVA DE LISBOA

DeKoi: Koi Index App

Stage 1: Project Proposal

Written by:

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

Lab class: P4

Group No.: 32

Professor:
Teresa Romão

October 8, 2020

Problem Description

Two guys meet at a Koi Carp show:

      - Hey! My name is John Milk, I really like Koi Carp and I actually have some of my own! Recently I heard that there are actually a lot of types of them but I don't have a clue of which type mine are, I don't even know how to properly take care of them! I wish I could have an easy way to specify the characteristics of my Koi and it just pops up which type it is and it would also be really cool if it could teach me how to properly take care of them. I've been giving them fried chicken, I don't think they really like it…

      - Hello John! I'm John Dry. I'm actually an expert in Koi and giving them fried chicken might not be the best road to go… A simple app might help you, but for me I would actually need something more complex, maybe a way to catalogue the ones that I already have and some of the ones I spotted in Aquariums and in competitions, maybe even give me extra information about each one of them or a little bit of history behind it. Locations of where they are selling would be pretty great too actually!

      - That would be really nice… Oh well if something like that existed it would make our life much easier! Nice to meet you Dry, I'm going to talk with my IT friends, maybe they can cook something up!

Target Users

Users that would benefit from some or all features of the app.
- Koi Carp owners / buyers;
  - People that already own Koi fish, and want to catalogue, index and learn more about their fish, etc.
  - Buyers that want to learn about their options when choosing a pet.
- Koi breeders;
  - Have an interest in knowing about their competition, current fads, etc. .
- Koi sellers;
  - Have an interest in knowing about their competition, current fads, etc. .
  - Want to know about who the best breeders are and where they are.
- People interested in Koi;
  - People that are interested in this type of decorative fish. Be it a hobbyist or someone starting to learn about Koi.
- Visitors of places that have Koi;
  - People that usually, rarely or commonly visit aquariums, lakes and other places that may have koi fish or that purposely go for that reason.
- "Koi shows" attendees, organizers and participants;
  - Have an interest in knowing about new types of Koi that they are exposed to.
  - Would like to have an easy way of informing participants and guests about Koi.
- Fishermen;
  - People who fish other types of fish usually may be interested in every type of fish, including, therefore, Koi fish.
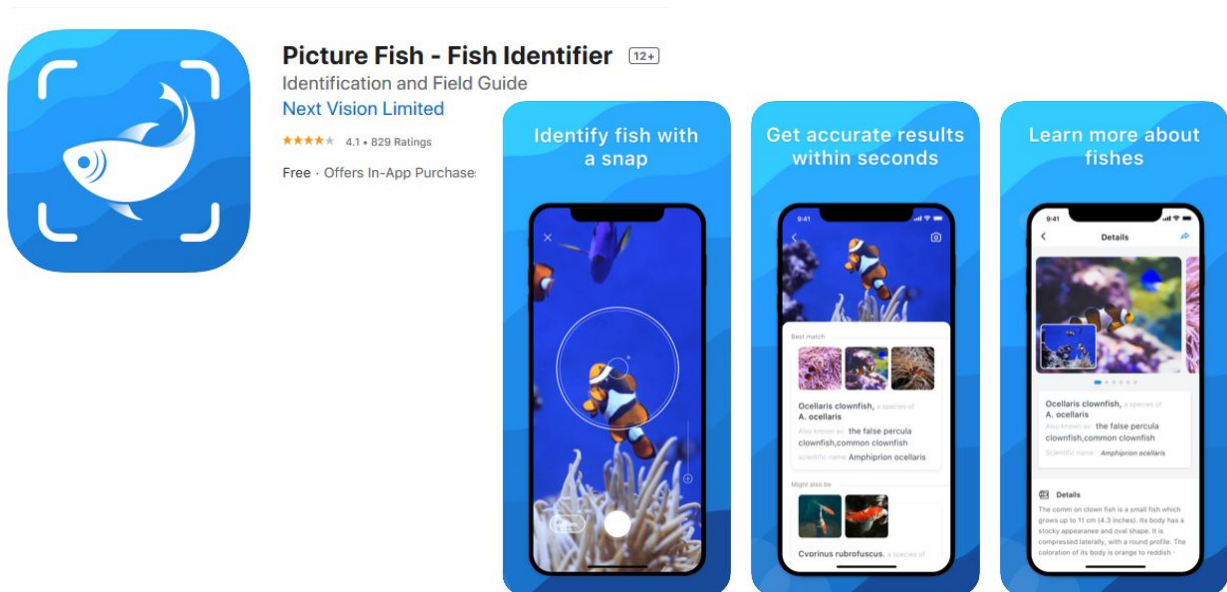
- Cataloguers and collectors
  - People who like to collect or like applications that are based on the cataloging of specimens or other types of living beings, objects, etc.
- Professors and students of natural sciences
  - People in the educational field that are interested in using material to help with their lectures.

Project Goal

The main goal of our project is to create an app with a simple and interactive user interface where the target users can learn to take care, create and catalogue koi fish with a minimalist tutorial, an "input your own Koi" graphical interface and a simplistic and educational catalogue type database. Extra functionality will be added but it's still in a brainstorming phase and are not yet main functionalities. Online data synchronization and map integration should also be included.

Already existing app

There are a couple of fish identifier apps, per example:

The positive aspects about the design are the base idea itself, where one can identify a fish and it returns some information regarding the animal in a simple manner, so generally speaking it has a good usability.

The negative aspects of it are that it relies on perfectly steady pictures (that's why we want to do a "create your own" type of interface), and that it presents information in a cluttered way, while we want to be as minimalistic and as simplistic as possible, for a better ease of use.

In the end, an important distinction is to be made: our app indexes different types of Koi Carp, not different species. The distinctions between Koi are often so subtle that only an expert can tell them apart. That is what we aim to change.