

**2013**

Project Team 11

Qichao Hua  
Ethan Johanson  
Steve King  
MengTing Yang  
Yujie Zeng

# Feature Tracking Document

**July 14, 2013**

**PhyloDex**

## Table of Contents

Revision history.....	2
1. Introduction .....	3
2. Description of Features.....	4
Tab Bar for application.....	4
Web Search Mode .....	4
XML Parsing Function.....	4
Core Database User Database Function .....	4
Share Mode.....	4
Capture Mode .....	5
Detail view for Phylodex Entries .....	5
3. Work Assignment for Features.....	6

## Revision history

Revision	Status	Publication/Revision Date	By
1.0	Created	July 14, 2013	Steve King
1.1	Revised for Version 3 of assignment	July 28, 2013	Ethan Johanson

## **1. Introduction**

This document lists the work assignment for the Phylodex application. Each of the features is outlined below in point form. Following the description of each of the features, a table lists data for each feature which includes what version that feature was started at, a completion date if that feature is fully implemented, and the person in charge of development of that feature.

## 2. Description of Features

### Tab Bar for application

- Design and layout of basic application architecture.
- Main navigation for application.
- Setting up the container for the different application modes of operation.

### Web Search Mode

- Taking user input from keyboard for search queries.
- Managing multiple network connections asynchronously.
- Sending http GET requests to Natureserve.org web service.
- Informing the user in the form of activity indicators that the downloads are progressing.
- Not blocking the user from using other parts of the application while the downloads are taking place.
- Handling downloads of different data types as file streams.
- Receiving downloads using the XML parsing functionality (below) to populate the results in the user interface.

### XML Parsing Function

- Sending the first query gets the “Global Species List my Name” searching result.
- Get the XML file from the server, which include unique animal identification.
- Parsing XML file and get the unique animal identification for each result animal.
- Sending the second query using the unique animal identification to “Global Species Comprehensive Search” which include the specific results for each result animal
- Parsing the XML file and get specific results for animals. Creating each entry for animals and send the third query using unique identification to “Species Images”. This returns the image XML file.
- Parsing the last XML file gets the image for each animals searched, and show it on the screen.
- Putting all returned data into a dictionary with key-value pairs, so that it can be used to populate the fields in the user interface.

### Core Database User Database Function

- Basic user model for the application.
- Methods for CRUD operations (Create, Retrieve, Update, Delete).

### Share Mode

- Dynamic display of database contents in collection view format with customized cells
- Selection and deselection of items in the collection view
- Activation of iOS eMail widget from navigation bar
- Export of selected item’s database details to message body of eMail widget
- Attachment of selected item’s associated images to eMail widget’s message composition

## Capture Mode

- Take photos and save photos
- After taking a photo, user can choose to retake the photo or use the photo. If users tap retake button, they will be brought to camera view again; if users tap use, they be led to root view by tapping use button, and photos are stored in core data.
- New photos will be given the initial value and stored in user core data.
- Current date will be created automatically along with the photo created.

## Detail view for Phylodex Entries

- In detail view, load the image from the root view, and information from the phylodex mode into table.
- Crop image function: Users are able to crop image by tapping crop image button allocated in detail view. Cropped image will be applied to thumbnail in the phylodex mode and image in the detail View.
- Edit information function: Tapping edit button allocated in detail view, users can be led to edit view; The current information will be loaded into the information edit view first; Any changes can be saved by click the save button. Then all information will be reloaded to root view and detail view. At the same time, information will be stored in core data.

### 3. Work Assignment for Features

Feature	Version 1		Version 2		Original Plan	Delivered On	Responsible By
	Original plan	Delivered On	Original plan	Delivered On			
Tab Bar for application	X	June 19, 2013					Steve King
Phylodex Interface	X	June 24, 2013					Steve King, Ethan Johanson
Web Search Mode	X					July 27, 2013	Steve King
XML Parsing Function			X	July 9, 2013			Daniel Hua
Core Data User Database Function			X	July 7, 2013			Steve King
Share Mode			X		July 21, 2013		Ethan Johanson
Capture Mode			X			July 26, 2013	MengTing Yang
Detail View for Phylodex Entries			X			July 27, 2013	Yujie Zeng + <i>Ethan Johanson [v3]</i>
User Mode					X	July 28, 2013	Steve King