Birdry

User Interface Design Document

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4/5/17

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1 Introduction

1.1 Purpose of This Document

The purpose of this document is to outline the user interface for the software Birdry by showcasing the look and feel of the product. Furthermore, it will portray in detail how the user can interact with the graphical user interface of the Birdry application. This document is primarily designed for the end users of the software Birdry to get a full grasp of all of the available features that the application has to offer.

1.2 References

Throughout this document references will be made to the Birdry System Requirements Document

2 User Interface Standards

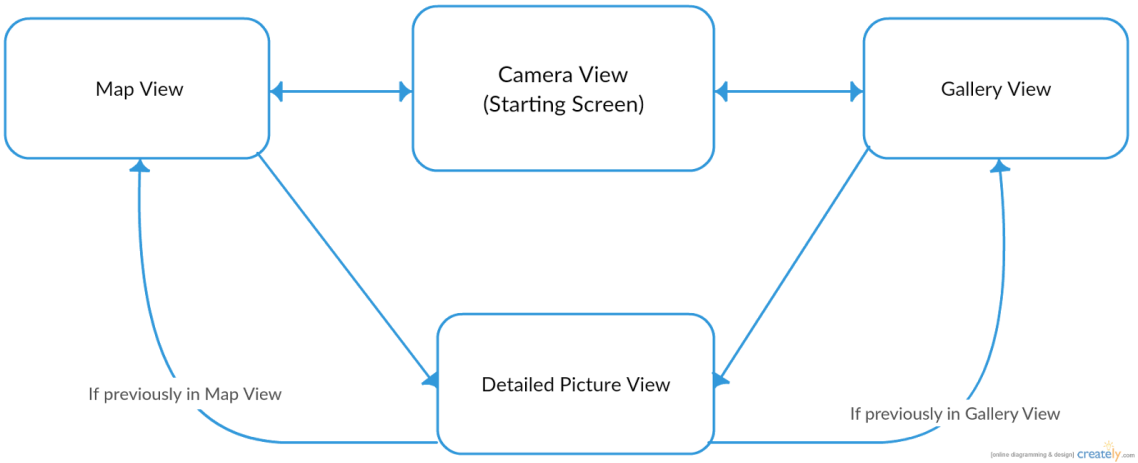
Each view (map, camera, gallery, and detailed) is substantially different, so there are few over-arching interface standards. However, there are some elements which will be consistent across views:

1. The filter interface available from the map and gallery views will be identical.
2. The designation of whether a picture is of a bird or not will be consistent between the gallery view and the detailed view.
3. The title bar for the map, gallery, and detailed views will be formatted identically. That is, the height, coloration, and style will be the same. The labels for the views will likewise follow a consistent formatting scheme.
4. Most navigation between views is done by swiping left or right (see Section 3.1 for more details on user navigation through the system). However, some buttons are still used and these will be of the same size and coloration so users can easily identify buttons.

3 User Interface Walkthrough

3.1 Birdry Navigation Diagram

The following navigation diagram explains possible user flow through the application.



3.2 Birdry Walkthrough

Camera View:

This view allows users to take pictures using their phone.

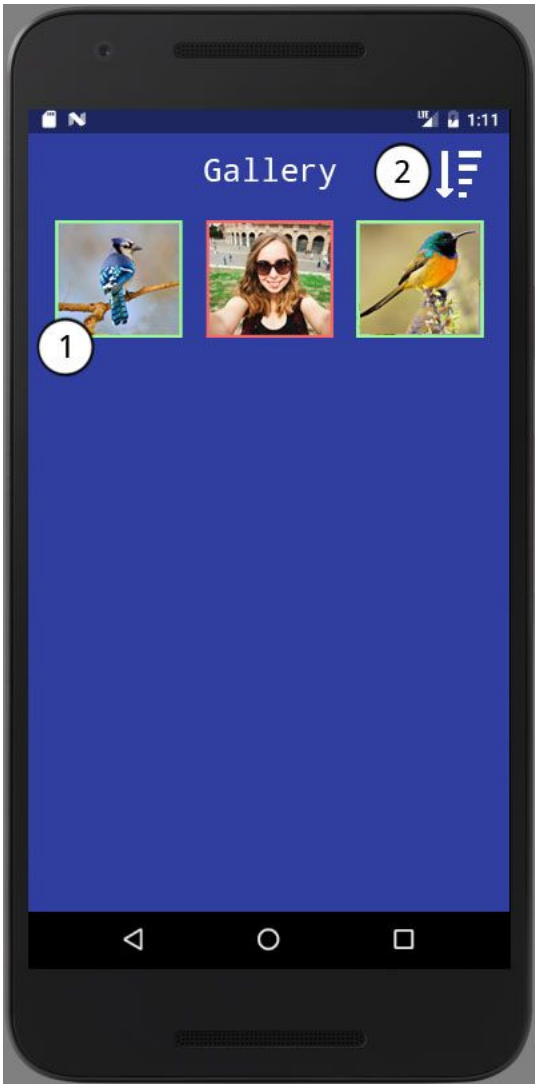
1. When this button is clicked the phone captures the image displayed on the screen and saves it to the phone's file system.

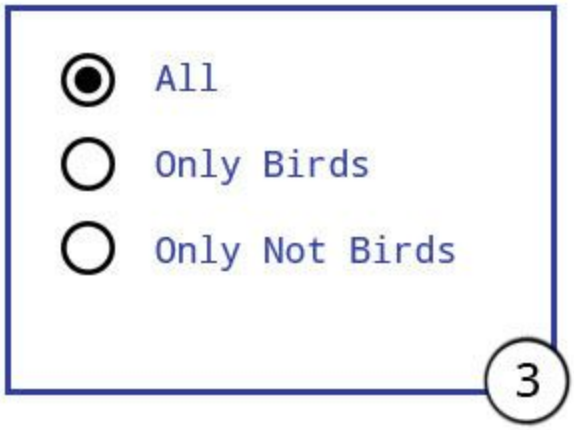
2. This portion of the screen displays whatever is currently being viewed by the phone's camera.

3. This text informs the user of the cumulative amount of bird points he/she has earned.

Navigation:
The user can navigate to the Map View by swiping left or the Gallery View by swiping right.

Gallery View:





This view allows users a convenient way to browse pictures taken previously on their phone. Additionally, each image has a border which informs the user whether it is a bird or not. The images can be filtered using the sorting button located on the top right.

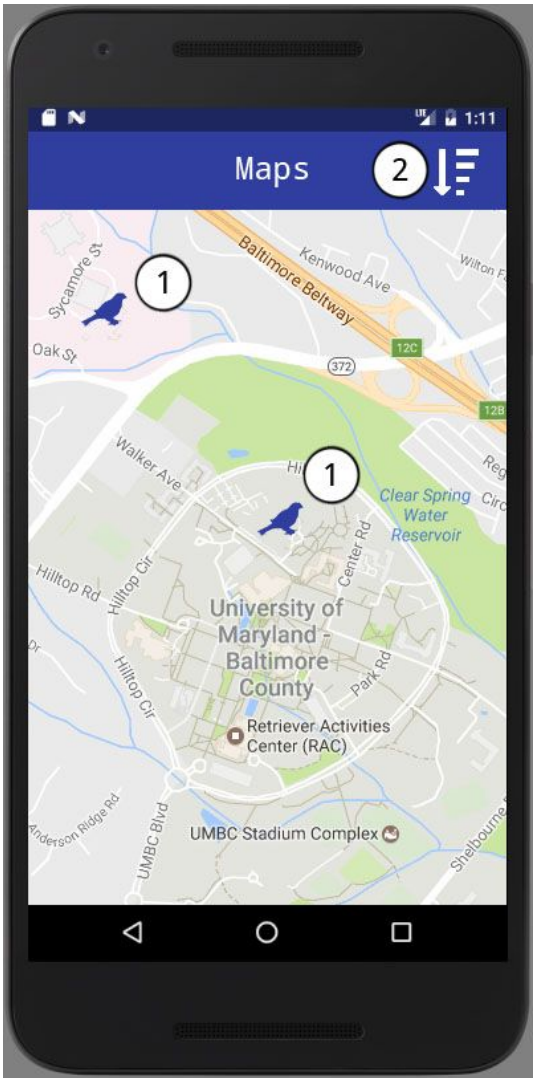
1. This is an image previously taken on the phone. The green border indicates that the picture is of a bird; the red border on the second image indicates that the photo is not of a bird.

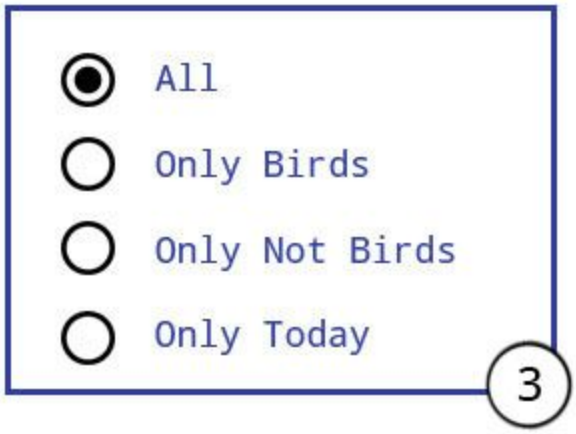
2. This button allows users to filter the images displayed based on a choice from a drop-down of radio buttons.

3. This menu appears when the user hits the filter button. It allows the user to select what filter he wants to use. Some example filters have been included.

Navigation:
The user can swipe left to return to the Camera View. If the user selects an image, the Detailed Picture View will be displayed for that image.

Map View:





This view allows users to interact with a map and view places they have previously seen birds.

1. This is a button which will transport the user to the Detailed Photo View of the corresponding image.

2. This button allows the user to filter which pins appear on the map based on a choice from a drop-down of radio buttons.

3. This menu appears when the user hits the filter button. It allows the user to select what filter he/she wants to use. Some example filters have been included.

Navigation:
The user can return to the Camera View by swiping right. If the user selects one of

the bird outlines, the Detailed Picture View will be displayed for the corresponding image.

Detailed Photo View:

This view allows the user to inspect the details of a particular photo. The user can also choose to delete the photo or have the photo re-inspected by the App.

1. This is the image for the corresponding photo. The border color indicates whether the image is of a bird or not.

2. This portion of the view displays the date and time the photo was taken, as well as the number of bird points the picture is worth.

3. This button will return the user to the previous view.

4. This button will toggle the classification of the image (bird or not bird) and send this information to the backend for reinspection.

5. This button will delete the photo.

Navigation:
The only navigation the user can perform on this view is to hit the return button. This returns the user to the map or gallery view (whichever preceded the detailed view).

4 Data Validation

The majority of user interaction occurs through button presses. For button presses, no data validation must be done since there is only a single input (button is pressed) which is immediately processed. Remaining inputs are in the form of selecting items and swiping between screens. As a result, the user is restricted from entering free-format inputs. The specifics of allowable inputs, their data type, and their limits are in Section 4.1.

4.1 Data Validation Table

Entry Location	**Data Type**	**Limits**
[map view - select pin]	String	selected from current photo IDs (16 characters, set by application)
[gallery view - select image]	String	selected from current photo IDs (16 characters, set by application)
[map view - select filter]	Enum	selected from possible filter options (restricted by application)
[gallery view- select filter]	Enum	selected from possible filter options (restricted by application)
[camera view - swipe]	Enum	selected from possible transition options (restricted by application)

Appendix A – Agreement Between Customer and Contractor

We, the clients and members of the development team, undersign here to indicate our agreement that the Birdry user interface will be developed and delivered as shown/stated in this design document.

If future changes are necessary, a revised hard copy will be presented to the client. Once approved by the client and signed off by all team members, the revisions will come into effect.

Clients

Name: _____ Signature: _____ Date: _____

Comments:

_____

_____

Name: _____ Signature: _____ Date: _____

Comments:

_____

_____

Team

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Name: _____ Signature: _____ Date: _____

Appendix B – Team Review Sign-off

We, the members of the development team, undersign here to indicate that every member of the team has reviewed and approved the contents and format of this User Interface Design Document, and that their comments and/or concerns (if any) are listed here.

Name: _____ Signature: _____ Date: _____

Comments:

_____

_____

Name: _____ Signature: _____ Date: _____

Comments:

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Name: _____ Signature: _____ Date: _____

Comments:

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Name: _____ Signature: _____ Date: _____

Comments:

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Name: _____ Signature: _____ Date: _____

Comments:

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Appendix C – Document Contributions

Below is an estimate of the contribution from each team member, including specific work done and percentage of total document completed.

Kyle Fritz
Contributions:
- Appendix A, B, C
- Section 1.1-1.2
- Section 3.1 and creation of the navigation diagram
- Formatting
- Document Review

Est. Contribution: 27%

Laras Istiqomah
Contributions:
- Formatting
- Document review

Est. Contribution: 7%

David Leiberg
Contributions:
- Document review

Est. Contribution: 7%

Julian Sniffen
Contributions:
- Section 3.2 text
- Creation of the different views of the app in photoshop
- Grammar check

Est. Contribution: 32%

Nicholay Topin
Contributions:
- Section 2
- Section 4
- Review with Client

Est. Contribution: 27%