Missouri State University CSC 450 Team 1

BIRDBOARD (GOOGLE CARDBOARD APP) QUALITY ASSURANCE REPORT

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Submitted to
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Introduction

1.1 Objectives

Birdboard is an application that was developed using Google Cardboard. The application will provide an immersive, 3D interactive diorama experience for the user. The user will be able to utilize VR technology to switch between menus and experiences in the mobile application. The user will be able to choose a GIS point and when the point is clicked, the user will be transported to the point in order to view various information about the birds that can be found in the area. While at the point, the user can switch between bird information in order to view other information about the birds that may appear in the area they have been virtually transported to. Our main goal is to have the product be able to work on devices that run on the iOS operating system in addition to Android devices.

1.2 Team Members

Resource Name	Role
Darren Williams	Project Manager/Developer/Tester
Leonard Museau	Co-Developer/Tester
Ryan Bagby	Documentation/Tester
Chad Brewer	Developer/Tester

2 Scope/Test Areas

The final phase of the Summer Demo application will include all ‘must have’ requirements. These and any other requirements that get included must all be tested. At the end of the Summer semester, a tester must be able to:

1. Run all the menu buttons and make sure they work to our full intentions.
2. See the immersive 3D environment when opening the Table View and World View.
3. Hear the added ambient environment sounds while in both views.
4. Be able to achieve the core functionality of going from Table View to World View.
5. Achieve the main goal of running the application through iOS devices.

Rewriting, moving or porting existing test cases from the existing Word documents is not considered part of this project.

3 Test Cases

Test Case ID: BB01
Test Scenario: Check User Start Button
Test Steps: Click on the Start Button
Expected Results: User should be directed to the Menu Screen
Actual Results: Expected Results
Pass/Fail: Pass (OK)

Test Case ID: BB02
Test Scenario: Check View Table Button
Test Steps: Click on the View Table Button
Expected Results: User should be directed to the Table View
Actual Results: Expected Results
Pass/Fail: Pass (OK)

Test Case ID: BB03
Test Scenario: Check Instructions Button
Test Steps: Click on the Instructions Button
Expected Results: User should be directed to the Instructions Screen
Actual Results: Expected Results
Pass/Fail: Pass (OK)

Test Case ID: BB04
Test Scenario: Check Credits Button
Test Steps: Click on the Credits Button
Expected Results: User should be directed to the Credits Screen
Actual Results: Expected Results
Pass/Fail: Pass (OK)

Test Case ID: BB05
Test Scenario: Check Exit Button
Test Steps: Click on the Exit Button
Expected Results: The application will stop running
Actual Results: Expected Results
Pass/Fail: Pass (OK)

Test Case ID: BB06
Test Scenario: Test Sound on Software
Test Steps: 1.) Enter Table View from the Menu Screen
2.) Check if ambient sound is playing in the background and looping accordingly
3.) Enter a point from the Table View to enter World View
4.) Check if ambient sound is playing in the background and looping accordingly
Expected Results: The sound is playing, looping each time
Actual Results: Expected Results
Pass/Fail: Pass (OK)

Test Case ID: BB07
Test Scenario: Have the software run on iOS devices
Test Steps: 1.) Have an iOS device ready to be used
2.) Insert the device into the VR headset
3.) Run the program
Expected Results: The program runs on iOS devices
Actual Results: Expected Results
Pass/Fail: Pass (OK)

Test Case ID: BBO8
Test Scenario: User can pick a location from the table
Test Steps: 1.) From the Main Menu, choose View Table
2.) From the Table View, choose a location point
3.) From the World View, choose the “Back” option
4.) Repeat and test for each point
Expected Results: We can access all of the points.
Actual Results: We can access all of the points on Android, but only some don’t work on iOS devices.
Pass/Fail: Fail (Partial OK)

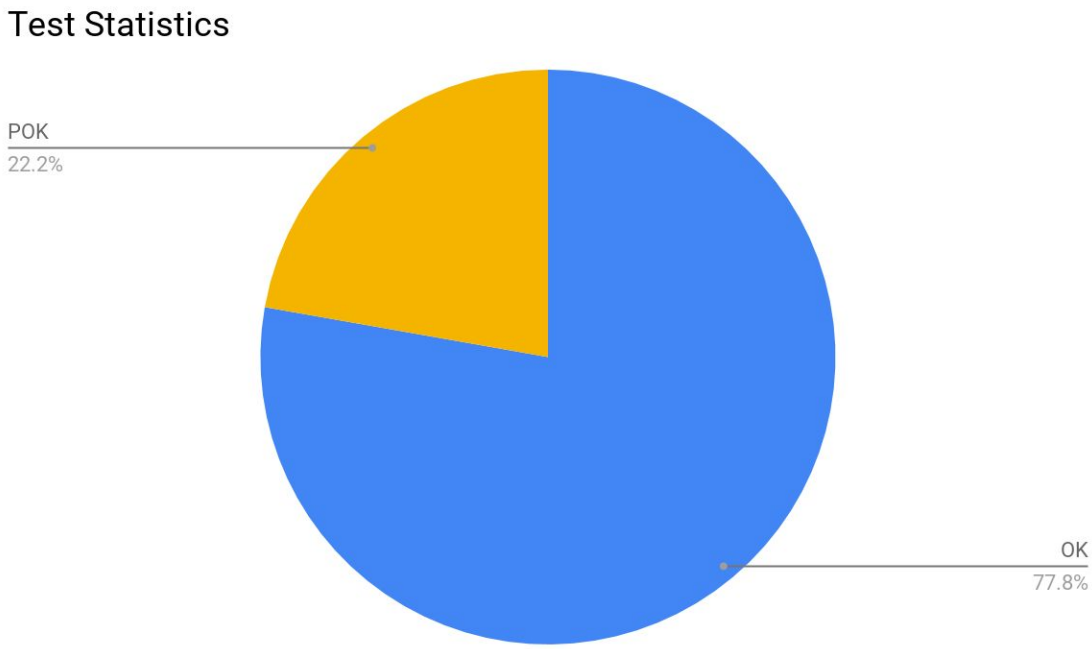
Test Case ID: BBO9
Test Scenario: User can navigate through the Wiki Pages
Test Steps: 1.) From the Main Menu, choose View Table
2.) From the Table View, choose a location point
3.) From the World View, hit either the “next” or “prev” options on the provided Wiki Page
Expected Results: User should be able to navigate to various pages.
Actual Results: The “next” and “prev” buttons don’t work on iOS devices, but it does on Android devices.
Pass/Fail: Fail (Partial OK)

4 Test Approach and Environment

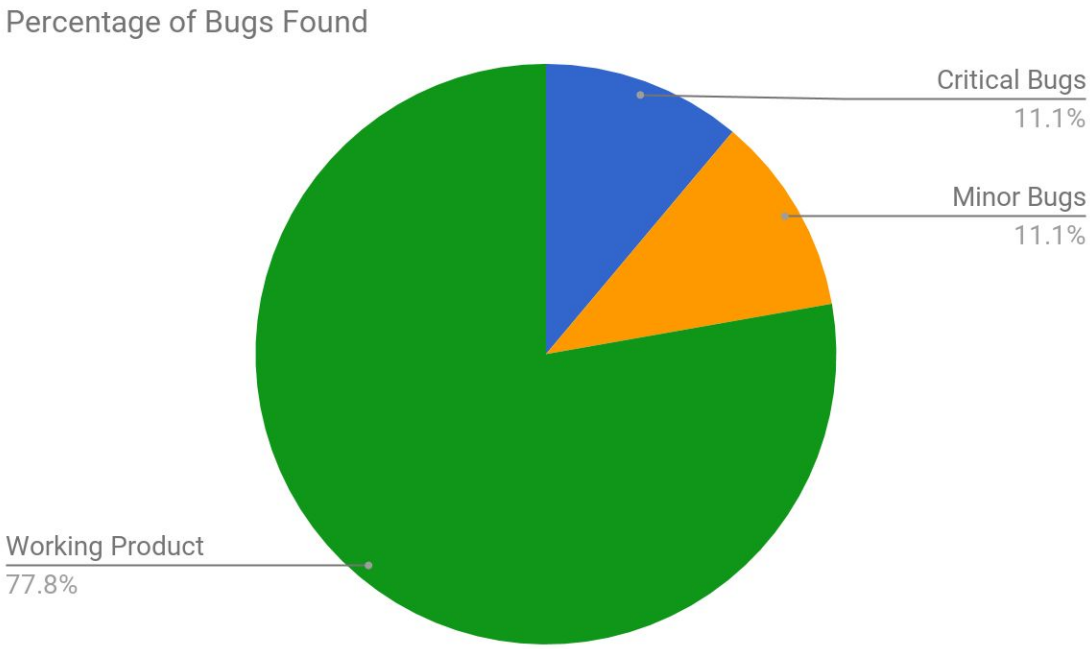
The project is using an agile approach, with weekly iterations. At the end of each week the requirements identified for that iteration was delivered to the team and had been tested. Exploratory testing played a large part of the testing as most of the team has never used this type of tool for developing this software and had to learn as they go.

As far as the location of testing goes, we can test our software anywhere that has access to data, so we could retrieve the bird data needed to record and analyze.

5 Graphical Representation of Results from Tests



6 Graphical Representation of Bugs found



7 Final Overall Assessment of Test Execution and the Delivered Product

Overall the product does all of its basic functionalities. We've achieved our core goal of porting the application to iOS devices. With all of our tests that we have ran, we had made sure that the product is ready for deployment. There are some bugs still in the final product that we released, but fixing those will come with time and maintenance due to the fact that we concluded that there is a core functionality with iOS devices that disables us from using those functions. We are proud as a team of what we have accomplished in our short development time. I hope for that for future teams, they can accomplish more with the product as terms of immersion. For example, having actual 3D rendering of real places and having unique bird calls to each location point.