

Computer Games Development CW208

Technical Design Document

Year IV

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| Sean Abner Nash de Andrade |
| C00217019 |
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**Faculty of Science**

**Open-Book and Remote Assessment Cover Page**

**Student Name: Seán A’bner Nash De Andrade**

**Student Number: C00217019**

**Lecturer Name: Martin Harrigan**

**Module: Project II (Fyp)**

**Stage/Year: Fourth Year**

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# UML

## Class Diagram: App Organization

# Features

## Feature: Result Block

Tasks:

* Create a React component to display results.
* Have the component take in data to display as props.
* Have the component display different icons depending on the result type.
* Have the component display inconclusive if the Accuracy is too low.

## Feature: React Frontend

Tasks:

* Set up the basic React dependencies
* Set up a basic Home Screen
* Set up a basic Result Screen
* Set up a basic Camera Screen
* Set up a Stack Navigator
* Contain the App inside a container.

## Feature: Camera Screen

Tasks:

* Have the app request Camera Permission from the user.
* Have a button bind the function to capture an image with the camera.
* Create the Async function to send the captured picture to a server.
* Have the screen transition to the Result screen when finished with the server connection.

## Feature: Result Screen

Tasks:

* Have the screen create a ResultBlock component for each element in its state array.
* Have the screen pass in each ResultBlock its own data block as a prop.
* Update the state from AsyncStorage to draw all the results on the screen.
* Have the screen scroll enabled when the result list surpasses the screen size.

## Feature: Home Screen

Tasks:

* Display the App Logo
* Have a button to navigate to the Result Screen
* Have a button to navigate to the Camera Screen

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# CRC Cards

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| --- | --- |
| Class Name : Camera Screen | |
| Superclasses : React Component | |
| Responsibilities | Collaborators |
| Captures images of GIP Tests | Result Screen |
| Sends Images to Server |  |
| Receives data from server and saves to memory |  |
| Navigates to Result screen when done |  |

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| --- | --- |
| Class Name : Home Screen | |
| Superclasses : React Component | |
| Responsibilities | Collaborators |
| Allows user to Navigate to Result Screen | Result Screen |
| Allows user to Navigate to Camera Screen | Camera Screen |
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| --- | --- |
| Class Name : Result Screen | |
| Superclasses : React Component | |
| Responsibilities | Collaborators |
| Displays all Results from Memory using Result Blocks. | Result Block |
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| --- | --- |
| Class Name : Result Block | |
| Superclasses : React Component | |
| Responsibilities | Collaborators |
| Take in result data and display it. |  |
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# References

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| --- | --- | --- |
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