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BAINISTEOIR BEAG MOBILE APPLICATION
FUNCTIONAL SPECIFICATION
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Introduction

The purpose of this document is to discuss the purpose and target of the product, as well as the features and functionality of both the Bainisteoir Beag mobile application and the accompanying web application for admin use. It will include the updated use case diagrams along with detailed use cases, and an outline of the mobile application's requirements using the FURPS method.

Purpose and Target of Product

The purpose of the Bainisteoir Beag mobile application is to exist as a conversion of, and alternative to, its previously used paper-based version.

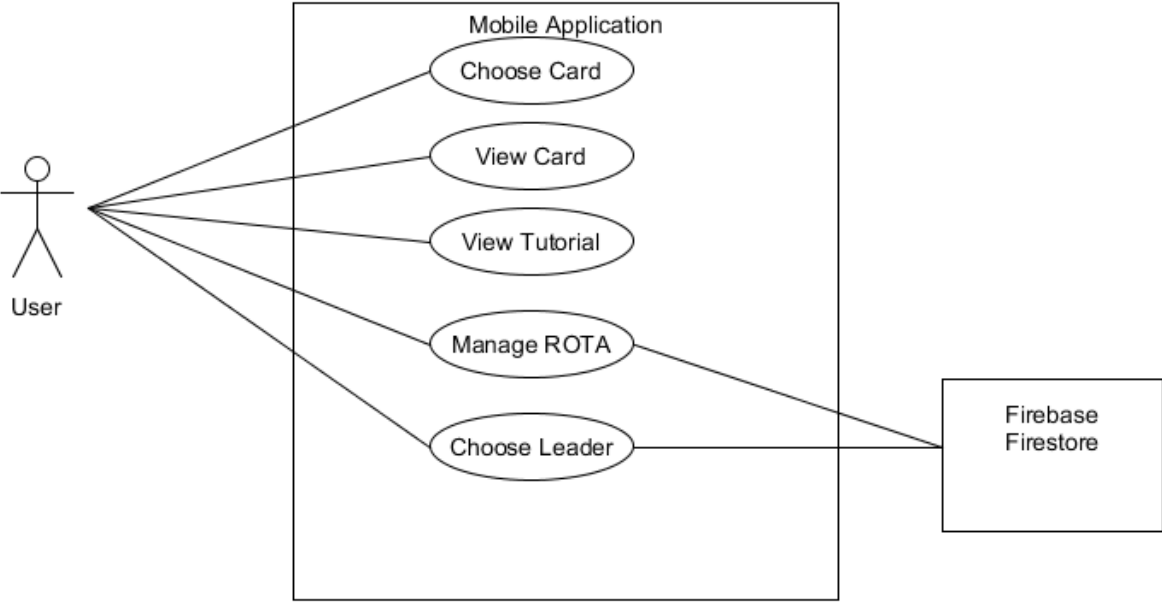
The aim of the product as a whole is to provide a pupil-led activity programme to primary schools. The programme is intended to encourage leadership and fitness principles in a fun and practical way via a set of activity and exercise cards with set-up instructions and other useful information.

The intended target for the product is, primarily, primary schools. The product will come in the form of a mobile application for both Android and iOS and is intended to be run on school-issued tablets. The target user for the mobile application are the primary school students. Students handling the application and organizing the games are known as Leaders and are expected to be in the older classes ie. Fourth, fifth or sixth class.

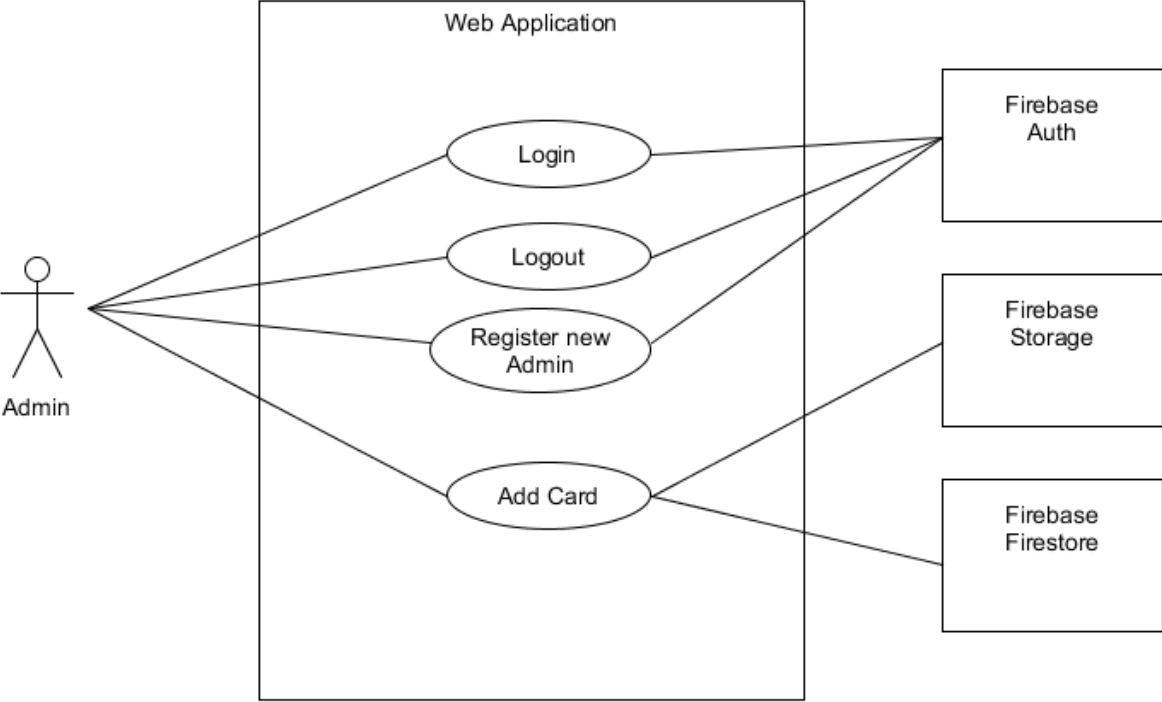
An accompanying web application has also been developed to aid the Administrator of the programme in adding new cards to the digital set. This web application requires authentication and is intended only for the primary administrator and any new administrators registered via the web application.

Use Case Diagrams

Mobile Application



Web Application



Detailed Use Cases

Mobile Application

Choose Card

Use Case Name	Choose Card
Actor	User
Pre-Conditions	<ol style="list-style-type: none">1. The user has selected one of the card menus from the Main Menu screen
Main Success Scenario	<ol style="list-style-type: none">1. The user is presented with a list of available cards to choose from and view.2. The user taps the card which they wish to select
Post-Condition	The user has selected a card and may now view the chosen card

View Card

Use Case Name	View Card
Actor	User
Pre-Conditions	<ol style="list-style-type: none">1. The user has selected a card from one of the card menus
Main Success Scenario	<ol style="list-style-type: none">1. The front of the card is displayed to the user upon choosing the card.2. The user may tap the image to reveal the back of the card and flip between them
Post-Condition	The user has viewed a card

Manage ROTA

Use Case Name	Manage ROTA
Actor	User
Pre-Conditions	<ol style="list-style-type: none">1. The user has tapped the Manage ROTA button in the Main Menu
Main Success Scenario	<ol style="list-style-type: none">1. The ROTA management screen is displayed to the user.2. The user may add a name by entering a name into the text field and tapping on the "Add Name" button.3. Any added names will be displayed in a list on this screen.4. The user may remove a name from the list by tapping the delete icon next to a name.
Post-Condition	

Choose Leader

Use Case Name	Choose Leader
Actor	User
Pre-Conditions	<ol style="list-style-type: none">1. The user has used the Manage ROTA screen to add at least one name to the ROTA2. The user has selected one of the card menus from the Main Menu
Main Success Scenario	<ol style="list-style-type: none">1. The User taps the "Choose Leader" button in the card menu2. A random name from the ROTA will be displayed on screen. This will indicate the chosen Leader
Post-Condition	A Leader has been successfully chosen for the user

View Tutorial

Use Case Name	View Tutorial
Actor	User
Pre-Conditions	<ol style="list-style-type: none">1. The user has tapped the "Tutorial" button in the Main Menu
Main Success Scenario	<ol style="list-style-type: none">1. A simple video player is displayed to the user.2. The user may tap the play button to view the tutorial on how to use the application3. The user may also pause or restart the video by tapping the corresponding buttons
Post-Condition	

Web Application

Login

Use Case Name	Login
Actor	Admin
Pre-Conditions	<ol style="list-style-type: none">1. The Admin has accessed the Web Application via a web browser
Main Success Scenario	<ol style="list-style-type: none">1. The Admin is prompted to enter their login credentials, ie. Email and password.2. The admin enters their credentials into the text input fields3. The admin clicks the login button
Post-Condition	<ol style="list-style-type: none">1. The admin has been successfully authenticated and may access restricted pages of the web app

Logout

Use Case Name	Logout
Actor	Admin
Pre-Conditions	<ol style="list-style-type: none">1. The admin has logged into the web application
Main Success Scenario	<ol style="list-style-type: none">1. The admin clicks the log out button in the navigation bar
Post-Condition	<ol style="list-style-type: none">1. The user is successfully logged out and redirected to the login page

Register New Admin

Use Case Name	Register New Admin
Actor	Admin
Pre-Conditions	<ol style="list-style-type: none">1. The admin has logged into the web application2. The admin has selected the "Add New User" page in the navigation bar
Main Success Scenario	<ol style="list-style-type: none">1. The user is prompted to enter credentials for the new user, ie. Email and password2. The user enters credentials for the new user3. The user clicks the register button
Post-Condition	A new user has been created and may now sign in with their new credentials

Add Card

Use Case Name	Add Card
Actor	Admin
Pre-Conditions	<ol style="list-style-type: none"><li data-bbox="873 317 1338 380">1. The admin has logged into the web application<li data-bbox="873 386 1386 449">2. The admin has selected the “Add Card” page from the navigation bar
Main Success Scenario	<ol style="list-style-type: none"><li data-bbox="873 459 1414 632">1. The admin is prompted to upload two images via the file upload buttons (These buttons represent an upload for the front and back image of a card) and the title of the card being uploaded<li data-bbox="873 638 1357 701">2. The admin adds both images and the card title into the fields as prompted<li data-bbox="873 707 1395 770">3. The admin clicks the Save button to add the new card
Post-condition	The admin has successfully added a new card via the web application that may be viewed from the mobile application.

Requirements (FURPS)

Functionality

- The application should provide the base set of Bainisteoir Beag Activity and Exercise cards to the user
- The application should provide a way to view any new cards added by a Bainisteoir Beag admin in the future
- The application should provide a helpful tutorial on how Bainisteoir Beag activities are organized as well as how to use the application
- The application should provide a useful ROTA system which will ensure that each pupil entered into the list will have a turn to be a Leader for an activity

Usability

- The user should be able to easily navigate the application via the main menu
- The application should be quick to respond to tap gestures during navigation of the features

Reliability

- The application should be able to access any data stored on the cloud when offline via cached data
- The application should behave predictably

Performance

- When viewing a card from the base sets (stored locally), the image should be displayed no longer than 2 seconds after being chosen
- When viewing a card from the “New Cards” set (stored via cloud), the images should be displayed no longer than 5 seconds after being chosen

Supportability

- The system should allow for more features to be added in the future
- The system should allow for more cards to be added to the existing set
- The application should be able to run on both Android and iOS devices, specifically school tablets

Declaration

- I declare that all material in this submission e.g. thesis/essay/project/assignment is entirely my/our own work except where duly acknowledged.
- I have cited the sources of all quotations, paraphrases, summaries of information, tables, diagrams or other material; including software and other electronic media in which intellectual property rights may reside.
- I have provided a complete bibliography of all works and sources used in the preparation of this submission.
- I understand that failure to comply with the Institute's regulations governing plagiarism constitutes a serious offense.

Student Name: Francis Hall

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Signature:

A handwritten signature in black ink that reads "Francis Hall". The signature is written in a cursive style with a large initial 'F' and 'H'.

Date: 20/04/2020