

**COLLEGE OF SCIENCE & HEALTH**

***School of Computing***

**Bachelor of Science (Honours) in Computer Science (Infrastructure)**

**Programme Code: DT211C**

**YEAR 3**

**Mobile Software Development**

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# DECLARATION

I hereby certify that the material, which is submitted in this assignment/project, is entirely my own work and has not been submitted for any academic assessment other than as part fulfilment of the assessment procedures for the programme DT211C - BSc. Computer Science (Infrastructure).

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**Students Signature:**

**Date: 07 November 2016**

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# App Description

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| SqulBox App My application, named SqulBox, will be a basic but useful app that will Allow a student:   * Keep track of personal related academic information (i.e. Student Number, email, GPA, best grade etc) * Add grades throughout their academic studies.   Rather than logging into various apps to check grades or other personal information that may sometimes be forgotten, especially as a fresher, SqulBox will be a one stop location for students to store and access these basic academic data about themselves. Special features/functionality  1. Interaction with the user’s device photo gallery and camera to enable the user to add a profile picture. | Fig. 1 - SqulBox App Logo |

# Design Prototype & Screen Flow

## Screens & Dialog Boxes

* Home (MainActivity)
* Profile
  + Add or Edit Info
* Grades
  + Add or Edit Grade
* Settings

|  |  |
| --- | --- |
| Home (MainActivity) | C:\Users\ADMIN-owner\Google Drive\DT211C - YEAR 3 - [2016 - 2017]\3 - Mobile Software Developement\#ASSIGNMENTS\SqulBox\PENCIL\MainActivity.png  Fig. 2 - Home Screen |
| The home screen will be the main activity for my app. The main functionality of the home screen is to categorise links to **Profile, Grades & Settings** activities in one location using icon images that are more appealing to the user. The home screen will also display a welcome message specific to the user’s profile. |
|  |

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| --- | --- |
| Profile | C:\Users\ADMIN-owner\Google Drive\DT211C - YEAR 3 - [2016 - 2017]\3 - Mobile Software Developement\#ASSIGNMENTS\SqulBox\PENCIL\Profile.png  Fig. 3 - Profile Screen |
| The screen will display the user’s personal student academic information in a list view and a profile image. New information can be added to the list by tapping the plus icon, which will then prompt the [AddEditInfo](#_Add_or_Edit) dialog box for the user to enter a **Title & Description.** The user can edit the profile picture or a list by long pressing the particular item, this will then prompt the [AddEditInfo](#_Add_or_Edit) dialog box, or the device’s photo gallery or camera if editing the profile picture. |
| The Name and GPA title are already predefined to the App. Anything else will be added by the user. |
| Add or Edit Info | C:\Users\ADMIN-owner\Google Drive\DT211C - YEAR 3 - [2016 - 2017]\3 - Mobile Software Developement\#ASSIGNMENTS\SqulBox\PENCIL\AddEditInfo.png  Fig. 4 - Add or Edit Profile Dialog Box |
| A dialog box to add or edit profile information. If the user taps the plus button, then a default input will show in the input field. If the user long presses a list item in order to edit it, then the information from the list item will show in the input field. |
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| --- | --- |
| Grades | C:\Users\ADMIN-owner\Google Drive\DT211C - YEAR 3 - [2016 - 2017]\3 - Mobile Software Developement\#ASSIGNMENTS\SqulBox\PENCIL\Grades.png  Fig. 5 - Grades Screen |
| This screen will display the user’s subject, percentage scored and a marks badge will automatically generate depending on the percentage mark. To add a grade, the user must tap the plus button. |
|  |
| Add or Edit Grades | C:\Users\ADMIN-owner\Google Drive\DT211C - YEAR 3 - [2016 - 2017]\3 - Mobile Software Developement\#ASSIGNMENTS\SqulBox\PENCIL\AddEditGrades.png  Fig. 6 - Add or Edit Grades Dialog Box |
| A dialog box to add or edit Grades information. If the user taps the plus button, then a default input will show in the input field. If the user long presses a list item in order to edit it, then the information from the list item will show in the input field. |
|  |

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| --- | --- |
| Settings | C:\Users\ADMIN-owner\Google Drive\DT211C - YEAR 3 - [2016 - 2017]\3 - Mobile Software Developement\#ASSIGNMENTS\SqulBox\PENCIL\Settings.png |
| The settings screen will allow the user to delete all information in the database. The user must first check the radio button for confirmation and then click the reset button. The user cannot delete all information unless the radio button is checked. The user will be returned to the home screen if the reset is successful |
|  |

# Database Description

## Tables & Fields

|  |  |  |
| --- | --- | --- |
| **Table name:** | PROFILE | The [Profile](#_Profile) screen will use this table in the SqulBox database to store a student’s profile information. |
| **Attributes:** | Title  Description |
| **Primary Key:** | **\*Title** |

|  |  |  |
| --- | --- | --- |
| **Table name:** | Grades | The [Grades](#_Grades) screen will use this table in the SqulBox database to store a student’s grades information. |
| **Attributes:** | Subject  Percent\_Score |
| **Primary Key:** | **\*Subject** |