GROUP ASSESSMENT ITEM COVER SHEET Student Numbers: Emails: **FIRST NAMES FAMILY / LAST NAMES** 32.7966 Bayon et 3179234Dunedua Course Code Course Title W MOBILE APPS & CHOOLS (Example) (Example) В C D 2 Intro to University Campus of Study: RIMBAH (eg Callaghan, Ourimbah, Port Macquarie) Due Date/Time: 22 / 5 / 2017 Assessment Item Title: 1521610 WENT Tutorial Group (If applicable): Word Count (If applicable): 453 Simon Lecturer/Tutor Name: Extension Granted: Granted Until: Yes Please attach a copy of your extension approval NB: STUDENTS MAY EXPECT THAT THIS ASSIGNMENT WILL BE RETURNED WITHIN 3 WEEKS OF THE DUE DATE OF SUBMISSION Please tick box if applicable Students within the Faculty of Business and Law, Faculty of Science, Faculty of Engineering and Built Environment and the School of Nursing and Midwifery: We verify that we have completed the online Academic Integrity Module and adhered to its principles. Students within the School of Education: We understand that a minimum standard of correct referencing and academic literacy is required to pass all written assignments in the School of Education; and we have read and understood the School of Education Course Outline Policy Supplement, which includes important information related to assessment policies and procedures. We declare that this assessment item is our own work unless otherwise acknowledged and is in accordance with the University's Student Academic Integrity Policy (http://www.newcastle.edu.au/about-uon/governance-and-leadership/policylibrary/document?RecordNumber=D09/1899P) We certify that this assessment item has not been submitted previously for academic credit in this or any other course. We certify that we have not given a copy or have shown a copy of this assessment item to another student enrolled in the course, other than We acknowledge that the assessor of this assignment may, for the purpose of assessing this assignment: Reproduce this assessment item and provide a copy to another member of the Faculty; and/or · Communicate a copy of this assessment item to a plagiarism checking service (which may then retain a copy of the item on its database for the purpose of future plagiarism checking). · Submit the assessment item to other forms of plagiarism checking. We certify that any electronic version of this assessment item that we have submitted or will submit is identical to this paper version. Turnitin ID: (if applicable) Signature: DATE STAMP Signature: HERE Signature: Date: Signature: Date: Signature: Date:

SCaR Arcade

By Ryan Cunneen, Martin O'Connor

What is SCaR Arcade?

SCaR_Arcade is a Library Game Application Manager (LGAM) designed, and built for the Android OS.

Features of SCaR Arcade:

- Supplies multiple game applications to the user.
- Places game applications into a simple list.
- An extensible base for games to modify.
- A simple layout that works for multiple games.
- Tracks high scores of the user for each game.
- Can contain many diverse types of games.

How it works:

The main menu of SCaR Arcade is a list of games that are on the device. The list, displays a title and a logo for each game. When a user selects the game, they want to play, it sends the users choice to the game menu.

The game menu is the hub where a user can access the game, its description and the leaderboards for the game. The background image of the game menu is a custom image for each game. The user can also affect the games difficulty, by increasing or decreasing the difficulty, within the minimum and maximum difficulty parameters, wherein the minimum and maximum values are set by the game independently.

The leaderboard hub is the place where the user can see the top 20 local high scores and see how good they are at the game.

Towers of Hanoi is one of the games preinstalled, it is a game that implements a drag and drop feature to allow the player to interact with discs. Where the user tries to move the displayed number of disc from one side of the screen to the other in the least amount of time and moves. Without placing a bigger disc (in size and displayed number) onto a smaller disc. The difficulty effects the number of discs to be moved across the three poles, where increasing the difficulty increases the number of discs.

Dice Rolls is the other preinstalled game. It uses the accelerometer sensor to determine if the phone has been shaken well enough, so that the displayed number of dice can be rolled and given new face values. Where the user tries to get the highest score possible. The users score is increased by the sum of all the face values that have been rolled. If the player was to roll two or more dice with equal face values, they would be given the chance to roll again. The difficulty effects the number of dice available to be rolled, where increasing the difficulty decreases the number of dice.

What real world problem it solves?

- It declutters the "All apps drawer" by removing what could be standalone apps into one application.
- It can handle high scores for multiple games, in app.

It can sort the games into a scrollable list, along with showing a sizable logo and title for simple reading in comparison with the "All apps drawer".					