

**Department of Computing**

**Graduate Diploma in Information and Communication Technologies**

**Bachelor of Information and Communication Technologies**

**Diploma in Information and Communications Technology**

**BCPR280– Software Engineering 2**

# **Assignment 2**

Semester Two 2018

Due date: Friday 2 November 2018

Time: 5.00 pm

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Submissions received late will be subject to a penalty of 10% of the student's mark per working day.

This assignment is worth 25% of the total marks for BCSE102.

This paper has three (3) pages including the cover sheet.



# REQUIREMENTS

## MUST HAVE

- A variant of the Eloquent JavaScript canvas version platform game
- An altered avatar
- A goal (target position, traverse a path, collect 'stuff', arrange/move 'stuff')
- Opposition (ONE OF: barriers, obstacles, dangerous objects, moving objects, following objects, traps)
- 4 way movement driven by the arrow keys
- Fits on the screen of a standard and common mobile device
- Uses coloured blocks as images
- Plays in less than 180 seconds
- Not be offensive!

## SHOULD HAVE

- A theme for the game relevant to the Christchurch rebuild. (a saying, a person, an identifiable place)
- Static images
- Opposition (TWO OF: barriers, obstacles, dangerous objects, moving objects, following objects, traps)
- Uses images derived from the Christchurch Rebuild.

## COULD HAVE

- Opposition (THREE OF: barriers, obstacles, dangerous objects, moving objects, following objects, traps)
- Incorporates Kiwi language
- Character(s) animation
- Background animation
- Lives
- Animated opposition
- 8 way movement
- Introductory screen/animation
- End of level screen/animation

## WOULD LIKE TO HAVE

- Opposition (MORE THAN THREE OF: barriers, obstacles, dangerous objects, moving objects, following objects, traps)
- Touch screen movement suitable for a phone

# MARKING GUIDE

NOTE: An iteration should be 2-4 hours of work

## 1. WHERE?

- ☐ UML Class Diagram(s) of the starting platform game system which is available from <http://www.lessmilk.com/game/dark-blue/>
- ☐ <http://eloquentjavascript.net/code/chapter/16> [2 marks]

OR

- ☐ A UML class diagram of the 'before' and the 'after' parts of the system that you work on in an iteration [2 marks]

## 2. WHAT?

- ☐ A plan for the work of an iteration. This must state:
  - The goal of the iteration
  - The planned tasks in sequence [planning, analysis, design, coding, testing]
  - A time estimate for each task [30 minute blocks]
  - The planned 'product' of each task
  - A record of the actual time each task took [3 marks]

## 3. HOW?

- ☐ A 'Planning A Complex Algorithm' worksheet for the iteration [5 marks]
- ☐ A plan for how the program feature you are working on will work [UML dynamic diagram, story-boards, wireframe, pseudocode] [5 marks]

## 4. EVALUATION!



- ☐ A screen shot of s standardjs report showing nil style defects in your code. [1 mark]
- ☐ **Mistakes were made!** A description and analysis of the mistakes made in the iteration [2 marks]
- ☐ **Lessons were learned?** A plan for doing ONE thing differently in the next iteration. [2 marks]