**Card Game**

*Student A Candidate Number: 014485*

*Student B Candidate Number: 054530*

*(Marks to be allocated 50:50)*

**Table of Contents**

[Development Log 3](#_Toc54484895)

[Design Analysis 4](#_Toc54484896)

[Test Design 5](#_Toc54484897)

# Development Log

## 23/10/2020 – 12:45pm

Started with A as driver and B as navigator. Created *CardGame.java*, and added input for number of players and location of pack to load. Added exceptions for non-integer inputs, non-existing file inputs, and packs with invalid values or the wrong number of cards. Swapped roles (B as driver, A as navigator), then added a method to deal cards to the players, and a check to see if the pack of cards is winnable. Created *Card.java* with setter and getter methods for card values and holders. *Signed: 014485 054530*

## 25/10/2020 – 12:30pm

Started with B as driver and A as navigator. Created threaded class *Player.java*, and created method *identical()* to check if the player has four cards of the same value to win the game. Swapped roles (A as driver, B as navigator). Student A optimised *Player.java* by creating method *play()* for players to continually draw and discard cards until a winner is found. A new method *isWinner(player)* was created in *CardGame.java,* replacing *identical()*, to perform checks for a win condition and declare the winner of the game. *Signed: 014485 054530*

## 28/10/2020 – 12:30pm

Started with A as driver and B as navigator, with the goal of optimising *Player.java*. Student A created a new method *random(len)* to randomise the index of which card from the deck to take from, and end the game if there are no cards left. The *play()* method was updated to utilise this new random method. *Signed: 014485 054530*

# Design Analysis

# Test Design