**Hong Kong Institute of Vocational Education**

**Department of Information Technology**

**Higher Diploma in Software Engineering**

**ITE3902 Smartphone Apps Fundamentals**

Mini Games

Proposal

|  |  |  |
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Table of Contents

[1. Introduction 3](#_Toc507147833)

[A. Game 3](#_Toc507147834)

[B. Game Rules Instructions 3](#_Toc507147835)

[a. AB Number Guessing 3](#_Toc507147836)

[b. Breakout 3](#_Toc507147837)

[c. Tic-Tac-Toe 4](#_Toc507147838)

[d. Balloon Game 4](#_Toc507147839)

[2. User Interface 5](#_Toc507147840)

[3. Functions 5](#_Toc507147841)

[A. Search function 5](#_Toc507147842)

[B. Score ranking function 5](#_Toc507147843)

[C. Menu function 5](#_Toc507147844)

[D. Reset function 5](#_Toc507147845)

[4. Technology 5](#_Toc507147846)

[A. App inventor 5](#_Toc507147847)

[B. Firebase 5](#_Toc507147848)

[C. Accelerometer Sensor 5](#_Toc507147849)

[5. Project Management 6](#_Toc507147850)

[A. Member Responsibility 6](#_Toc507147851)

[B. Project Schedule 7](#_Toc507147852)

[C. Gantt Chat 7](#_Toc507147853)

# Introduction

The Mini Games are designed for player to have a short relax time after busy day. We design Four mini game.

## Game

The Following table will show the game:

|  |  |
| --- | --- |
| No. | Game |
| 1 | AB Number Guessing |
| 2 | Breakout |
| 3 | Tic-Tac-Toe |
| 4 | Balloon Game |

## Game Rules Instructions

### AB Number Guessing

The answer is non-repetitive four digits, guess four numbers, the number in front of A is the correct number of positions and numbers, the number in front of B is the number of correct but incorrect positions.

### Breakout

Breakout begins with eight rows of bricks, with each two rows a different colour. The colour order from the bottom up is yellow, green, orange and red. Using a single ball, the player must knock down as many bricks as possible by using the walls and/or the paddle below to ricochet the ball against the bricks and eliminate them. If the player's paddle misses the ball's rebound, he or she will lose a turn. The player has three turns to try to clear two screens of bricks. Yellow bricks earn one point each, green bricks earn three points, orange bricks earn five points and the top-level red bricks score seven points each.

### Tic-Tac-Toe

Tic-tac-toe is a game for two players, X and O, who take turns marking the spaces in a 3×3 grid. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row wins the game.

### Balloon Game

The direction of the sensor as a control balloon drift speed, the balloon cannot touch the obstacles, otherwise it will be broken. With the increase of the screen to join the multi-screen mode, make two game levels, the game balloon hit obstacles will have a balloon broken sound effect, reach the destination to reach the destination will have clearance effect, in order to increase the fun of the game

# User Interface

# Functions

## Search function

## Score ranking function

## Menu function

## Reset function

## Go back function

# Technology

## App inventor

## Firebase

## Accelerometer Sensor

# Project Management

## Member Responsibility

|  |  |
| --- | --- |
| Participant | Role |
| TAM Chi Ho | * Project Management * Documentation * System Design * Program Implementation * Testing and Debugging * User Interface Design |
| CHU King Yin Ken | * Project Management * Documentation * Application Design * Program Implementation * Testing and Debugging * User Interface Design |
| WONG Lok Man | * Project Management * Documentation * System Design * Program Implementation * Testing and Debugging * User Interface Design |
| CHEUNG Shing Hong | * Project Management * Documentation * System Design * Program Implementation * Testing and Debugging * User Interface Design |

## Project Schedule

## Gantt Chat