MINI PROJECT

SC32103

REAL-TIME GRAPHICS

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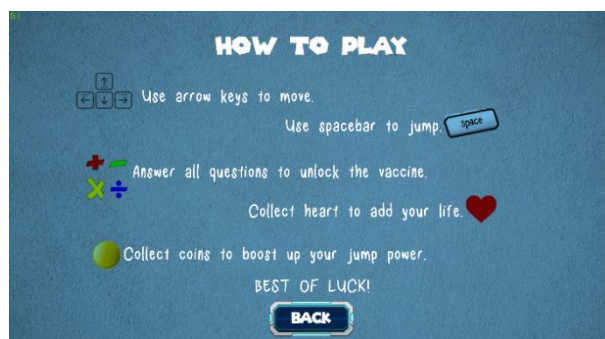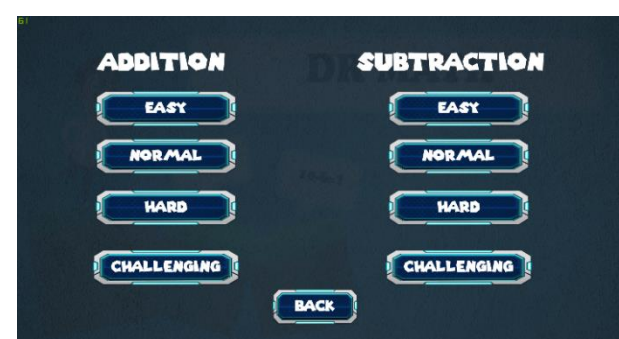| NO.	Content	Page
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1.0 Game Design and Output

Game Menu

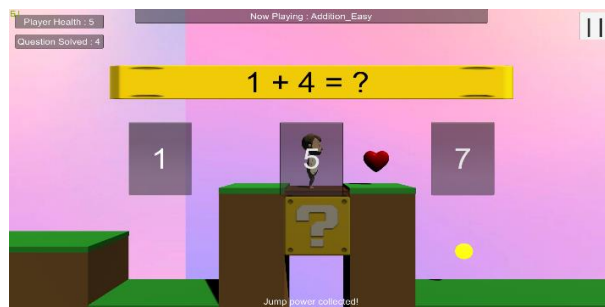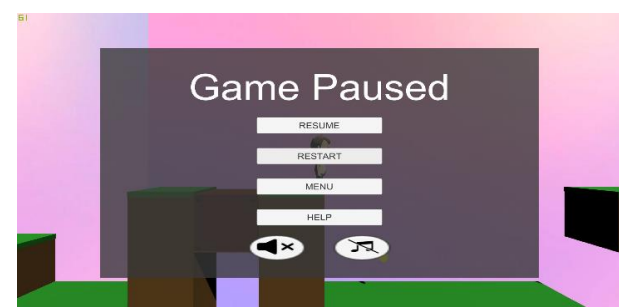**Credits- Developers and Lecturer**

Help menu – Guide to play the game

Difficulty Menu

Question

Game pause Menu

HOW TO PLAY

1. Press LEFT or RIGHT key for character movement.
2. Press SPACEBAR for jumping action.
3. Collect COIN for SUPER JUMP.
4. Collect HEART to inscrease your HEALTH.
5. Finding 5 QUESTION MARK BOX and solve the question.
6. Wrong answer selected will deducted one LIFE.
7. LIFE is deducted as well if you accidentally fall from the ground.
8. VACINE will only appear when you have break all 5 QUESTION MARK BOX.
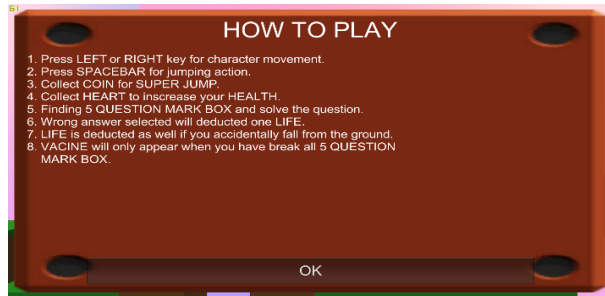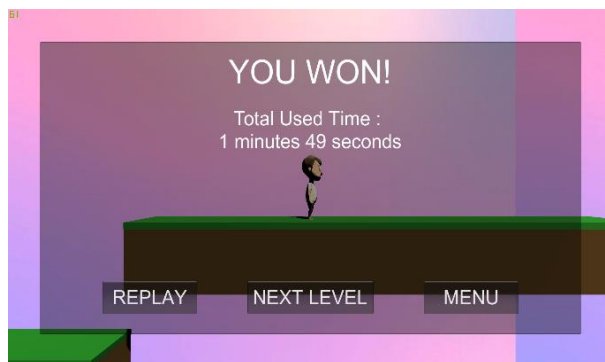
OK

In Game Help Menu
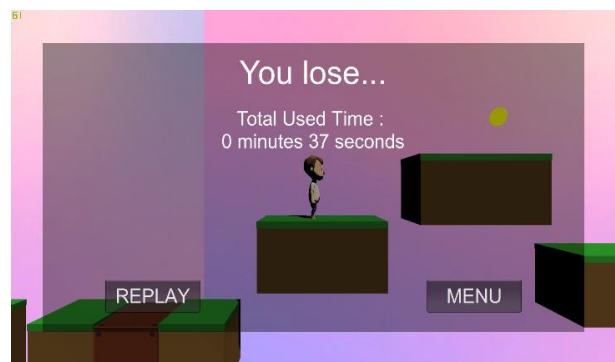
Coin- Super jump

Vaccine-Game objective

Heart- Player life

"You Won" - massage after vaccine collected

"You lose" – massage after player lose all life

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2.0 Testing Plan

Gender: Male

Age: 7

Race: Dusun

Game usability: Since the text is in English and they have little experience using Laptop, the user cannot understand it very well and how the game works. So I explained to the user the game instruction in Malay so he can understand it better and some guide what to click or what to do.

Before I explain it to the user which name is Kevin, I let him go through the game without any help. Kevin seems to know how to interact only the main menu by randomly pressing the mouse button. Maybe it is because he sees some people who is using laptop or mouse. After I explain him how the game works, he kind of into it.

After I introduce him how the game works and all things, he started pressing the mouse to play and selecting random difficulty. At first, he having trouble by pressing and finding the key to move and jump on the keyboard but after trying few times he kind of used to it. So, after that I guide him what he needs to do and how to play the game. At first he fails as always falling from ground and get wrong answer ha-ha. Second attempt still fail, but start from third attempt he getting used to it and success for the first time by time recorded in 5 minutes 03 seconds and 2 life remaining. Table below show the time used user play in each level.

Time attempt Game mode		1st	2nd	3rd	4th	other
Addition	Easy	5 min 03 sec	4 min 35 sec	2 min 57 sec	1 min 36 sec	Not recorded
	Normal	4 min 51 sec	3 min 27 sec	2 min 41 sec	2 min 53 sec	Not recorded
	Hard	4 min 37 sec	3 min 51 sec	5 min 27 sec	4 min 54 sec	7 min 32 sec
	Challenge	1 min 40 sec	1 min 40 sec	1 min 40 sec	1 min 40 sec	1 min 40 sec

	Easy	7 min 56 sec	6 min 32 sec	-	-	-
Subtraction	Normal	3 min 44 sec	4 min 42 sec	-	-	-
	Hard	4 min 57 sec	5 min 37 sec	-	-	-
	Challenge	-	-	-	-	-

*red color – fail, green color – best play

I notice the user(Kevin) spend time alone playing the game, and get easy for him to get frustrated and bored. So, some of my nephew 10+ age, 3 of them go to him and I notice that the amount of time Kevin spend playing on the game is longer when he has friends. He spends 1 hour ++ on the game and of course the time when playing the game also improve. The hard mode also completed after some attempt.

The user(Kevin) stay focus on the gameplay for like 7 attempts on easy, normal, hard mode and 5 attempts on challenge mode of additional game play. Most all the time Kevin pick the additional part but not the subtraction part. Maybe for him it is hard and he does not like it.

Based on the results:

A. Factors influence the results:

1. Time where the user plays the game which is at evening.

2. Before play this game he also plays other game on phone which is not an educational game.

3. The time got better as he gets used how to control the character and know how to answer the question.

4. Have friends around him makes him more enjoy playing the game.

B. Suggest future improvement:

1. Improve the game by targeting older student or kids.

2. Better reward.

3. User gets gift after get best results.

4. Design the difficulty level easier.

5. Add multi language support.

3.0 Rubrics

ASSESSMENT RUBRIC : PRESENTATION (10%)								
N o	**ITEM ASSESSED**		**LEVEL OF APPLICABILITY**					
	Attribute	**Subattribute**	**Very Weak 1 - 2**	**Weak 3 - 4**	**Fair 5 - 6**	**Good 7 - 8**	**Very Good 9 - 10**	**Marks 10**
1	Information Retrieval and Management/Inquisitive Mind/Autonomous learning	Initiative	No initiative to complete a task	Demonstrate limited initiative to complete a task	Demonstrate moderate initiative to complete a task	Demonstrate good initiative to complete a task	Demonstrate excellent initiative to complete a task	10%
2		Curation	Not able to curate for the required information	Limited curation for the required information	Satisfactory curation for the required information	Good curation for the required information	Excellent curation for the required information	10%
3		New Idea	No new idea to solve problems	Able to solve problems with weak new idea	Able to solve problems with moderate new idea	Able to solve problems with good new idea	Able to solve problems with excellent new idea	10%