


## ASSIGNMENT 1 FRONT SHEET

<b>Qualification</b>	<b>BTEC Level 5 HND Diploma in Computing</b>		
<b>Unit number and title</b>	Unit 06: Managing a Successful Computing Project		
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<b>Student declaration</b> <p>I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.</p>			
		<b>Student's signature</b>	

### Grading grid

P1	P2	P3	P4	M1	M2	D1

**⚙ Summative Feedback:****⚙ Resubmission Feedback:****Grade:****Assessor Signature:****Date:****IV Signature:**



## Contents

Part 1: Project Management.....	4
I.    Introduction.....	4
II.   Project initialization .....	4
III.  Project Management Plan .....	4
IV.  Planning.....	7
Part 2: Research .....	8
I.    Primary Research.....	8
II.   Secondary research.....	11



# Part 1: Project Management

## I. Introduction

We are a member of Research and Development department under ACE company. Our company currently publishes the popular "Rich Simulator" game. Our company is looking to develop the "AI defend" project with the trend of Digital wellbeing to increase the income for users. This article is a report on the study of the impact of digital technology on human life and the effects of applying the current digital wellbeing trend on games to improve health and wellbeing.

## II. Project initialization

### 1. Main aim of the project

- Development orientation for the game in the future.
- Increase the friendliness of the game to the user.
- Show interest from the manufacturer to the gamer thereby supporting them more.
- Increase the competition of the game in the current market.

### 2. List of Objectives to achieve the aim

- Find out if digital technologies have improved our lives or distracted us from our lives, thus finding ways to overcome the weaknesses of the system.
- To explore the efficiency of the specially designed feature tends to Digital wellbeing to improve user health.
- Confirm the requirements users want the game to have.
- Find the right features to support users.

## III. Project Management Plan

### Scope:

The project "AI defend" will be completed within 1 month from the start of the project. Within the first week, it will be time to create a project and plan a project, and learn about the theory related to digital wellbeing. In the second week, it will be time to conduct key research related to current user habits and desires to guide game and project development. In the third week, we will collect the data from the second week of income from which to analyze the data for evaluation. In the remaining time, we will spend time on presentation and reflection.



### Time:

Activity	Estimated duration
1. Planning	5 days
1.1. Project planning	2 days
1.2. Risk planning	2 days
1.3. Research planning	1 days
2. Gather and analysis of the theory	2 days
2.1. Gather theory of digital wellbeing	1 days
2.2. Analysis theory of digital wellbeing	1 days
3. Primary Search	7 days
3.1. User interview	3 days
3.2. User survey	3 days
3.3. Focus group	1 days
4. Secondary searching	7 days
4.1. Collect data	2 days
4.2. Analysis the data of research	5 days
5. Presentation	5 days
6. Reflection	5 days

### Communication:

During the project implementation, our team used software like "google meet" and "Gmail". We use google meet to have an online chat so we can communicate more easily and to discuss ideas for the project. When you have large files, you must use Gmail to transfer to team members.

Date	Method	Type	Description	Responsible Team Member
31/3/2020	Google meeting	Project	Initialize project charter vs project plan	Manager
2/4/2020	Google meeting	Project	Gather and analysis theory	Manager
7/4/2020	Google meeting	Project	Create questions for the interview	Manager
9/4/2020	Google meeting	Project	Create survey question	Manager
14/4/2020	Google meeting	Project	Research data analysis	Manager
16/4/2020	Gmail	Report	Submit the first report	Manager
21/4/2020	Google meeting	Project	Second research	Manager
23/4/2020	Google meeting	Project	Summary of research data	Manager



28/4/2020	Google meeting	Project	Data analysis	Manager
30/4/2020	Gmail	Report	Submit the second report	Manager

### Risks:

Risks are what can happen when we develop a project. When they happen, they will bring havoc and adversely affect future plans. If any risks affect the budget, time, resources / manpower, quality and technology, it can cause a failure for the project.

#### 1. Project funding goes beyond budget estimates

Type of risk: Financial risk

Description: This risk occurs when the project manager has used up all the capital available to the project. This makes the remaining funds no longer enough for the project to continue.

Probability: Medium

Suggestions: Bring together project management team members to discuss possible reductions, to minimize the cost of unnecessary sideline activities to focus on the project. May apply for additional investment capital from the investor or project owner.

#### 2. The project is prolonged and slow progress

Type of risk: Human risk

Description: One or several steps in the project implementation process is behind schedule leading to the project being delayed.

Probability: High

Suggestions: To avoid this risk, managers need to create a specific schedule for the tasks to be performed in the project. In case of encountering, managers need more manpower to be able to increase the progress of completing tasks for other tasks to ensure project progress. When the schedule is delayed, the manager should notify the investor to negotiate the solution.

## Resources:

In this project, I have used some tools such as:

- Google form
- Excel
- Word

In this project I am the one who will perform under the supervision of the supervisor.

## Cost estimation:

In this project, we estimate the cost as follows:

Type of cost	Budget
Cost for risk	10,000\$
Cost for salary	750\$/hours*30day=180,000\$
Cost for tools	1000\$
Total	191,000\$

## IV. Planning

### WBS (Work breakdown structure)

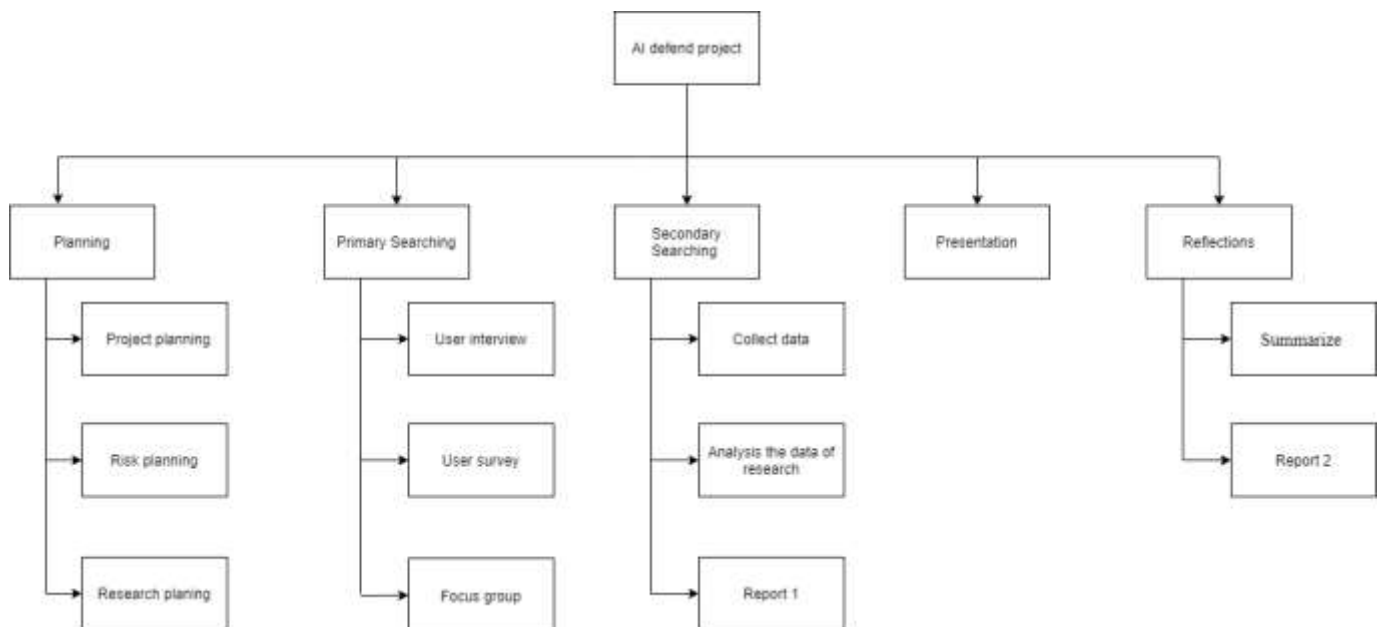


Figure 1: work breakdown structure

## Gantt Chart



Figure 2: Gantt Chart

## Part 2: Research

### I. Primary Research

#### Overview about Interview/Survey (Who, What, Why, When, Where)

In the interview we asked a person who is using our current game about their play habits and their ideas for future game development. From there give the opinions and questions needed in the survey and analyze the wishes of the user. We will interview that person at the company's headquarters from April 7, 2020 or April 8, 2020.

The purpose of the survey is to collect user reviews and daily gaming habits, opinions about possible changes in the next version, user reviews of new ideas, and reviews. User rating for the game at the moment. The survey results are based on the answers of 31 survey participants from which to evaluate the project. We will conduct the survey from April 8, 2020 to April 12, 2020 on the game's official website.



**a. List of interview questions (include opened and closed questions)**

1. What is your name?
  - I'm Tran Quoc Anh
2. How old are you?
  - I'm 20 years old.
3. Where do you live?
  - I'm living in Hanoi City.
4. When did you start playing the game?
  - I was start playing the game when I was 17 years old.
5. Are you playing "Rich simulator"?
  - Yes, I am.
6. How much time do you spend playing games every day?
  - I usually spend more than 180 minutes a day playing games.
7. How do you feel when playing the game for too long time?
  - I feel sore eyes and my body feels tired.
8. What do you think we should develop to improve the current game?
  - I think the game can improve the content and income for the players.
9. Should we add functions to protect your health?
  - You should have additional functions to ensure the health of the player.
10. In your opinion, what should we have in future game?
  - In my opinion should add to the game continuous warning function, the function automatically switches the brightness in real time to reduce harm to the player.

**b. Summary about interview**

Through the interview we can understand a part of the current gaming habits. Today's gamers tend to play games for extended periods without rest, so they often suffer from health effects. That's why they quite like the systems that can bring them health benefits. Players often want to increase the gifts received in the game and have to punish those who do bad behavior. That will increase the user experience in the game.

**c. List of survey questions**

The survey consists of 13 answers that need participants to answer. From the user 's answer, we will give an assessment of the user' s opinion and their wishes about the development of the game in the future. The survey was conducted on google form with the content as below link:

<https://forms.gle/wPJw31keRiBSFGDb7>



## d. Summary about survey

In the survey, there are 13 questions. Based on the answers of 30 survey participants to get information about user habits when playing games such as game time of day, game age. Along with that learn about the harmful effects of long-term gaming affects the health of players. From there, it offers a number of measures to help players get used to the game time and ask users about those solutions. Lastly, please ask users about how to play the current game, about strengths and weaknesses to help us improve the game in the future. We list the responses of the survey participants in the data table below:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Timestamp	How old were you	How long	How long	Do you exercise	Would you exercise	Do you walk	Do you like	Do you walk	How would you think	Do you think	Do you think	What do you think is good about the current game?	Please rate the game at the present time?			
2	2020/04/0 >08	1 year -5	60 - 180 min	Yes	Yes	Yes	Yes	Yes	Yes	1	3	2	Interested in user benefits.	3			
3	2020/04/0 10-18	1 year -5	60 - 180 min	Yes	Yes	Yes	Yes	Yes	Yes	3	3	3	The support of the publisher;Nice game graphics;The game is well optimized;interested in user benefits.;G	3			
4	2020/04/0 10-18	>5 years	>180 min	Yes	No	Yes	Yes	Yes	Yes	3	4	4	Good game content	4			
5	2020/04/0 10-18	>5 years	60 - 180 min	Yes	No	No	No	Yes	Yes	1	5	5	The support of the publisher;Nice game graphics;The game is well optimized;Good game content	3			
6	2020/04/0 >08	>5 years	>180 min	No	Yes	Yes	Yes	Yes	Yes	3	3	3	Nice game graphics	3			
7	2020/04/0 10-18	1 year -5	>180 min	Yes	Yes	Yes	Yes	No	Yes	5	5	5	Nice game graphics	5			
8	2020/04/0 >08	>5 years	>180 min	Yes	Yes	Yes	Yes	Yes	Yes	2	4	4	The support of the publisher;Nice game graphics;Good game content	5			
9	2020/04/0 >08	1 year -5	60 - 180 min	Yes	Yes	Yes	Yes	Yes	Yes	4	3	4	Nice game graphics;The game is well optimized;interested in user benefits.	4			
10	2020/04/0 3-10	3 year <	<80 min	Yes	Yes	Yes	No	Yes	Yes	5	5	5	The support of the publisher;Nice game graphics;The game is well optimized;interested in user benefits.;G	3			
11	2020/04/0 >08	3 year <	60 - 180 min	Yes	Yes	No	No	No	No	3	3	3	Good game content	3			
12	2020/04/0 3-10	3 year <	<80 min	No	Yes	Yes	Yes	Yes	Yes	4	4	4	Nice game graphics	4			
13	2020/04/0 3-10	>5 years	>180 min	Yes	No	Yes	Yes	Yes	Yes	1	5	4	The support of the publisher;Nice game graphics;Good game content	5			
14	2020/04/1 10-18	1 year -5	>180 min	Yes	Yes	Yes	Yes	Yes	Yes	4	4	4	Nice game graphics;The game is well optimized;interested in user benefits.;Good game content	4			
15	2020/04/1 10-18	1 year -5	>180 min	Yes	Yes	Yes	Yes	Yes	Yes	4	4	4	Nice game graphics;The game is well optimized;interested in user benefits.;Good game content	4			
16	2020/04/1 >08	>5 years	<80 min	Yes	Yes	No	No	No	No	1	1	1	The support of the publisher;Nice game graphics;The game is well optimized;interested in user benefits.	5			
17	2020/04/1 >08	>5 years	>180 min	Yes	Yes	Yes	No	No	No	4	3	4	The support of the publisher;Nice game graphics;The game is well optimized;interested in user benefits.;G	5			
18	2020/04/1 >08	>5 years	>180 min	Yes	No	Yes	No	Yes	Yes	4	5	5	The support of the publisher;Nice game graphics;The game is well optimized;interested in user benefits.;G	5			
19	2020/04/1 >08	3 year <	<80 min	Yes	Yes	Yes	No	No	No	5	1	5	The support of the publisher;Nice game graphics;interested in user benefits.;Good game content	4			
20	2020/04/1 >08	1 year -5	>180 min	Yes	No	Yes	Yes	Yes	Yes	5	4	3	Good game content	4			
21	2020/04/1 10-18	3 year <	60 - 180 min	Yes	Yes	Yes	Yes	Yes	Yes	5	3	5	The support of the publisher;Nice game graphics;The game is well optimized;interested in user benefits.;G	5			
22	2020/04/1 10-18	1 year -5	>180 min	Yes	No	Yes	Yes	Yes	Yes	2	2	2	Nice game graphics;interested in user benefits.;Good game content	4			
23	2020/04/1 10-18	1 year -5	>180 min	Yes	No	Yes	Yes	Yes	Yes	2	2	2	The support of the publisher;Good game content	2			
24	2020/04/1 10-18	1 year -5	>180 min	Yes	No	Yes	No	No	No	2	2	2	The game is well optimized;Good game content	1			
25	2020/04/1 10-18	>5 years	<80 min	Yes	No	Yes	Yes	Yes	Yes	2	2	2	The game is well optimized	2			
26	2020/04/1 >08	>5 years	>180 min	No	Yes	Yes	No	No	No	3	5	3	The support of the publisher;interested in user benefits.	5			
27	2020/04/1 >08	>5 years	>180 min	Yes	Yes	Yes	Yes	Yes	Yes	3	3	3	The game is well optimized;Good game content	4			
28	2020/04/1 >08	>5 years	60 - 180 min	Yes	Yes	Yes	Yes	Yes	Yes	3	3	3	Good game content	3			
29	2020/04/1 >08	3 year <	<80 min	No	Yes	Yes	No	Yes	Yes	4	4	4	Nice game graphics	4			
30	2020/04/1 >08	1 year -5	60 - 180 min	Yes	Yes	No	Yes	Yes	Yes	3	3	3	Nice game graphics;interested in user benefits.	5			
31	2020/04/1 >08	1 year -5	60 - 180 min	Yes	No	Yes	Yes	Yes	Yes	3	3	3	The game is well optimized	3			
32	2020/04/1 >08	1 year -5	60 - 180 min	Yes	No	Yes	Yes	Yes	Yes	3	3	3	The support of the publisher;Good game content	3			

Figure 3 Original statistics table

We encode the data from the original by changing the names of the questions into a series of questions from q1 to q13. Replace Yes with 1 and No with 2. Replace the answers of the respondents with the number in the order of the answers. For the multiple choice question, we divide the question into several parts, the respondent chooses which part we replace as 1 and does not choose alternative as 2. The data sheet after coding is shown below:



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Timestamp	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12a	q12b	q12c	q12d	q12e	q13
2	4/9/2020 17:58:41	3	2	2	1	1	1	1	1	1	3	2	2	2	2	1	2	3
3	4/9/2020 17:58:50	2	2	2	1	1	1	1	1	3	3	3	1	1	1	1	1	3
4	4/9/2020 17:59:37	2	3	3	1	2	1	1	1	3	4	4	2	2	2	2	1	4
5	4/9/2020 18:14:09	2	3	2	1	2	2	2	1	1	5	5	1	1	1	1	1	3
6	4/9/2020 18:30:12	3	3	3	2	1	1	1	1	3	3	3	2	1	2	2	2	3
7	4/9/2020 19:23:13	2	2	3	1	1	1	1	2	5	5	5	2	1	2	2	2	5
8	4/9/2020 19:36:26	3	3	3	1	1	1	1	1	2	4	4	1	1	2	2	1	5
9	4/9/2020 19:38:56	3	2	2	1	1	1	1	1	4	3	4	2	1	1	1	2	4
10	4/9/2020 19:39:33	1	1	1	1	1	1	2	1	5	5	5	1	1	1	1	1	3
11	4/9/2020 19:39:56	3	1	2	1	1	2	2	2	3	3	3	2	2	2	2	1	3
12	4/9/2020 19:55:29	1	1	1	2	1	1	1	1	4	4	4	2	1	2	2	2	4
13	4/9/2020 21:28:01	1	3	3	1	2	1	1	1	1	5	4	1	1	2	2	1	5
14	4/10/2020 9:39:29	2	2	3	1	1	1	1	1	4	4	4	2	1	1	1	1	4
15	4/10/2020 9:39:31	2	2	3	1	1	1	1	1	4	4	4	2	1	1	1	1	4
16	4/10/2020 9:39:52	3	3	1	1	1	2	2	2	1	1	1	1	1	1	1	2	5
17	4/10/2020 9:40:14	3	3	3	1	1	1	2	2	4	3	4	1	1	1	1	1	5
18	4/10/2020 9:40:40	3	3	3	1	2	1	2	1	4	5	5	1	1	1	1	1	5
19	4/10/2020 9:41:03	3	1	1	1	1	1	2	2	5	1	5	1	1	2	1	1	4
20	4/10/2020 9:41:33	3	2	3	1	2	1	1	1	5	4	3	2	2	2	2	1	4
21	4/10/2020 9:42:04	2	1	2	1	1	1	1	1	5	3	5	1	1	1	1	1	5
22	4/10/2020 9:44:47	2	2	3	1	2	1	1	1	2	2	2	2	1	2	1	1	4
23	4/10/2020 9:45:17	2	2	3	1	2	1	1	1	2	2	2	1	2	2	2	1	2
24	4/10/2020 9:45:43	2	2	3	1	2	1	2	2	2	2	2	2	2	1	2	1	1
25	4/10/2020 9:46:06	2	3	1	1	2	1	1	1	2	2	2	2	2	1	2	2	2
26	4/10/2020 9:47:20	3	3	3	2	1	1	2	2	3	5	3	1	2	2	1	2	5
27	4/10/2020 9:47:57	3	3	3	1	1	1	1	1	3	3	3	2	2	1	2	1	4
28	4/10/2020 9:48:15	3	3	2	1	1	1	1	1	3	3	3	2	2	2	2	1	3
29	4/10/2020 9:48:49	3	1	1	2	1	1	2	1	4	4	4	2	1	2	2	2	4
30	4/10/2020 9:49:34	3	1	2	1	1	2	1	2	4	2	2	2	1	2	1	2	5
31	4/10/2020 9:50:07	3	2	2	1	2	1	1	1	3	3	3	2	2	1	2	2	3
32	4/10/2020 9:50:38	3	2	2	1	2	1	1	1	3	3	3	1	2	2	2	1	3

Figure 4 Encrypted data sheet

From the data obtained after the survey, we will use a number of methods to process data such as descriptive statistics(univariate), correlation analysis(bivariate) and from the representation chart to find out the rules of variables.

## II. Secondary research

### - Overview: Explain what you will do in the secondary research

In this secondary research, we will look at researches that have been done before so we can find out what information we need. From general information of books and readable articles. We need to understand users' habits when playing games today and the health issues they are experiencing today. Learn about the positive of digital wellbeing-driven features. From that given the feasibility of the project. We searched the available research on the internet with some keywords such as: "Articles or research about spend time for games", "digital wellbeing in game", "advantages digital wellbeing in game", "Harm of the game".

### - List of articles /books (at least 3 books/2 articles and other internet sources)

Anna T. Prescott, J. D. S. a. J. G. H., 2018. *pnas.org*. [Online]

Available at: <https://www.pnas.org/content/115/40/9882>

[Accessed 15 4 2020].



Dodgson, L., 2018. *businessinsider.com*. [Online]

Available at: <https://www.businessinsider.com/video-games-make-children-violent-according-to-study-2018-10>  
[Accessed 15 4 2020].

Limelight Networks., 2019. *limelight.com/*. [Online]

Available at: <https://www.limelight.com/resources/white-paper/state-of-online-gaming-2019/>  
[Accessed 15 4 2020].

Limelight Networks, 2020. *limelight.com*. [Online]

Available at: <https://www.limelight.com/resources/white-paper/state-of-online-gaming-2020/>  
[Accessed 15 4 2020].

Marco Gui, M. F. a. R. C., 2017. *researchgate.net*. [Online]

Available at: [https://www.researchgate.net/publication/317958620\\_Digital\\_Well-Being\\_Developing\\_a\\_New\\_Theoretical\\_Tool\\_For\\_Media\\_Literacy\\_Research](https://www.researchgate.net/publication/317958620_Digital_Well-Being_Developing_a_New_Theoretical_Tool_For_Media_Literacy_Research)  
[Accessed 15 4 2020].

Naomi Stoll, K. C., 2014. *shiftdesign.org*. [Online]

Available at: [https://shiftdesign.org/content/uploads/2014/09/Shift\\_videogamesandwellbeing\\_final.pdf](https://shiftdesign.org/content/uploads/2014/09/Shift_videogamesandwellbeing_final.pdf)  
[Accessed 15 4 2020].

### - Summarize about articles/Books

THE STATE OF ONLINE GAMING - 2019 and THE STATE OF ONLINE GAMING - 2020 are two research reports from website limelight.com. The research report highlights the latest findings in a series of consumer surveys about online gaming habits and opinions. This report is based on feedback from 4500 people in France, Germany, India, Italy, Japan, Singapore, South Korea, the United Kingdom, and the United States age 18 and older who play video games at least once a week. Respondents were asked questions on a variety of topics to determine the types of games they play and how often, the devices they use, how they access content, and what they believe is important for a successful gaming experience. (Limelight Networks., 2019) (Limelight Networks, 2020)

According to Business Insider, playing games has caused harm to children. In Lindsay Dodgson's article mentioned there's even more evidence that video games could be making children violent. One of the main arguments against allowing children to play them for too long is the idea they can become more aggressive as a result. A new study, published in the journal the Proceedings of the National Academy of Sciences (Anna T. Prescott, 2018), supports this theory. Researchers at Dartmouth University examined the results of 24 studies between 2010 and 2017, including over 17,000 participants from nine to 19 years old. Participants in the study will be followed from three months to four years. And they have confirmed that playing violent games for a long time will affect the real world. It makes children prone to normal violence. (Dodgson, 2018)



In "Developing a New Theoretical Tool For Media Literacy Research" from researchgate.net they show that a new problem is arising for users of digital media, people deal with an overabundant flow of information and social relationship options throughout the day. They increasingly need specific skills to channel digital stimuli towards personal goals and benefit, increasing excessive multi-tasking, fragmentation of daily time and overconsumption of new media. they argue that these side effects are starting to represent a menace for people's well-being. They show that existing frameworks of digital skills do not explicitly consider abilities to cope with communication overabundance. They also recognize that this question is not merely one of individual skills since the use of digital media is framed within social norms and expectations about what is "good" in the digital environment. (Marco Gui, 2017)

With the "Video games and wellbeing" material created by Shift (formerly known as We Are What We Do), we know some of the benefits of games for young people. In the literature, the mention of technology in our lives goes hand in hand with almost every game that will be used everywhere. Young people often play games a lot over a period of 1 week. Since then, the ability to apply digital wellbeing in the game will be able to develop welfare development techniques. Other studies have suggested that games will have a negative impact on young people, but recent research has shown that a moderate number of games can have a positive impact on young people. Studies have found that playing games can regulate their emotions or relax, and some young people use the game to strengthen and strengthen relationships in society. (Naomi Stoll, 2014)

### **- Evaluation about yours understand**

After researching and researching the research materials available on the internet, we came to understand some of the issues that may affect the development of the game in the future and some of the effects or harms the game might have. bring to users. I have known the harmful effects of playing games for a long time that will affect the mentality and propensity of children to action in real life. However, with a reasonable time to play the game, the player can have benefits such as reducing stress and developing social relationships online. This proves that the application of digital wellbeing in the game is a must, it should be a development direction for the game in the future.

Besides the issues that have been clarified, we still have some ambiguities such as the application of digital welfare in games as a therapy for the spirit of young people. The use of games as a way to treat children with mental illness is unclear, so we do not understand. This issue we need time to clarify. In addition, in the literature we have just learned that long game play will have an adverse effect but they do not mention how long playing time and how long playing time is bad.

From the above documents we have obtained information about the user's habits of using time to play games, along with the effects of the game on their bodies. We further know that developing a digital wellbeing system will help increase health and wellbeing for users. If we have more time to implement this project, we will learn more about some of the benefits of applying digital wellbeing in the game and



at the same time find ways to develop the current game in the trend. good direction. We will learn more about the game reports that adversely affect the players from which to give the necessary assessment for the appropriate playing time for users. Also learn about the digital wellbeing-driven cementing functions that today's games should and need.