ASSIGNMENT 1

COSC2625 BUILDING IT SYSTEMS 2018
KING KONG AND FRIENDS 2.0
KURIOUS KINGKONG
12.08.2018

MEET OUR TEAM

"King Kong and Friends is made up of RMIT students with diverse culture, characters and personalities, which can maximise our outputs with creativity and various perspectives. We have teamed up together to translate dreams into reality.



Kyongsub Kong Supreme Leader s3634359

Kyongsub Kong is from Seoul, South Korea. He came to Melbourne in 2017 to study Information Technology at RMIT. He has an experience working as a computer maintenance in Korea.

Kyong is a well-organised member and good at managing the whole process of a project. Moreover, not only can Kyong lead the whole project, but also he can care about the details.

English is a big weaker point for Kyong because it is his second language. Also, Kyong has problems with design work such as layout, colouring and drawing.

As a leader of KingKong and Friends 2.0, Kyong is expected to derive members' strengths and potential, as well as bring members together.



Ming Jie Guan UI Designer s3723009

Profile Website:

Ming Guan was born in Putian, China however moved to Melbourne when he was 11 months old. He has been interested in IT ever since his parents bought a computer when he was young.

Ming can complete set work when he is given it and on time. He enjoys designing things such as websites and programs.

Ming's weakest area is in programming which he finds a bit confusing however he hopes his group members can support him in this area.

Ming hopes to design the interface of the project and support others while doing so.



Kyongsub KongProgrammer / Designer
s3668469

Ty Ty Chau was born in Vietnam, and arrived to Melbourne in 2010. He interested in the Information Technology field because he finds coding and design as well as develop a program or specifically, a game is very interesting.

Ty self-taught some of the language himself back in high school. He is capable of design a webpage using a combination of PHP, HTML and CSS. He is also familiar with Java and Java Scripts.

Profile Website: Ty's weal need to w

Ty's weak point is motivation and time management and is a need to work on it as for this project, time management is a need to make the project a success.

The role of Ty is expecting to perform in is the game design and development progress.

Matthew was born in Australia and has lived in Victoria his whole life. He is interested in the IT field as at a young age he was exposed to some minor aspects in relation to the IT field and has since been interested.

Matthew McCarthy

Graphic Desinger s3718180

Matthew is good at getting work done before the due date, and has also done some minor work with HTML/CSS previously. He is also able to assist in any graphical design.

Profile Website: Fmail to:

Matthew's weakest point would be motivation and programming. Although he can do a bit of programming he is not the most confident in doing so.

Matthew hopes to be able to help out with the interface and design while also assisting others in doing all of their work.



Huanghao Li Programmer / Video Maker s3669467

Huanghao Li is from WuHan, China. He arrived in Melbourne in 2017 and studied information technology. Although he is a newcomer in the field of information technology, his enthusiasm for information technology is strong because he believes this will be the main trend in the future.

Huanghao is good at logical reasoning and writing. He has a high interest in website design and hopes to use network design as the main development direction.

Profile Website: 6 Email to:

English as a second language takes more time to improve, and at the same time, it requires more practice for the use of various tools. There are many things that newcomers need to learn.

Huanghao wants to play a role in designing the interface and doing what he is best at in the summary and writing part.

PROJECT DESCRIPTION

Describe the IT system you intend to build and include details of the functionality it will provide. Pitch your description so that someone with moderate technical knowledge will understand the project outcomes without ambiguity. Categorise your project. This section should also identify the type of project this is; a mobile app, web app, a game or something else. It should also contain description of the functionality of the product.

PROJECT MOTIVATION

Our group originally had trouble deciding on a project idea, however after sharing common interests in developing a game rather than an application we decided to create a game. The idea of creating an educational game came from our group member Ty as he believes educating children would create a useful project idea. The group as a whole have thrown in some project ideas, but this idea was our choice in the end as we believed it would educate others with the game and educate ourselves during the development of the game.

DEMONSTRABLE OUTCOMES

Minimum Viable Features

1. Feature

Implementation of a point system where users are awarded points for correctly answering a question. Users' can use this feature to compete with others adding a competitive feature to the game.



Description of Validation Test

The game shows visual feedback of the points being earned by correctly which all adds up every time a question is answered correctly and the total points will be shown when its game over.

2. Feature

Adding a difficulty setting so that users can choose the difficulty of the game to meet their needs either to challenge themselves or to just practice.



Description of Validation Test

The game will feature the 'easy' and 'hard' difficulties which will be shown to the user when they choose which game mode they want to play, this will be implemented successfully when the game becomes easier to play and answer when on 'easy' mode and harder when on 'hard' mode.

3. Feature

The first game mode involves randomly generated addition and subtraction equations that users need to answer.



Description of Validation Test

On 'easy' difficulty the equations will always be adding and subtracting 1 digit numbers while on the 'hard difficulty, the game will generate harder 2 digit numbers which the users need to answer.

4. Feature

The second game mode involves multiplying randomly generated equations that users need to answer.



Description of Validation Test

On 'easy' difficulty the equations will involve numbers between 0-7 however on the 'hard' difficulty, the game will generate numbers between 0-13.

5. Feature

The third game involves finding a spelling mistake in a generated word and correcting it.



Description of Validation Test

On 'easy' difficulty, only words with 2-5 letters will be generated while on 'hard' difficulty, words with 4-8 letters will be generated.

Extended Features

1. Feature

The addition of profile customisation where avatars can be customised with clothing and hats which are purchasable with points.



Description of Validation Test

Implementation of a store section where users can buy clothing and hats with their points earned through the game, purchased items can then be equipped to the users' avatar.

2. Feature

An account creation feature where users can create an account which they can store their account data with.



Description of Validation Test

Users are able to back-up their account data on an account protected by email and password so they can transfer data across devices.

3. Feature

A login page for users open the game prompting them to log in to retrieve saved data or continue as guest where data is erased if the game is deleted.



Description of Validation Test

The first launch of the game will prompt the user to log in or as a guest. If the user chooses either option, the login page won't be shown again.

PROJECT JUSTIFICATION (HAROLD)

a) Workload

[Justify your expected and actual workloads]

b) Beyond Current Capabilities

[Rationalise and contrast the expected versus beyond expected capabilities]

c) Risks

Risk [Description of risk goes here.]

Example: [Certain tools we are depending on to build our XYZ are no longer available] Mitigation: [Description of mitigation efforts goes here. Example: Identify alternative tools to ensure that our work is done using an open standard]

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RESOURCES & TOOLS

The tools that we are currently thinking to use are:

• Android Studio:

The version we currently have is ver 3.1.3, it is free to download and use. The program itself is specifically used for designing apps for Google's Android operating system. We are thinking to use this as one of the option to develop our game. Unity is another alternative.

Unity Personal Edition:

The version we currently have is 2018.2.2f1, it is also free to download and use, however there is a subscription for more functionalities, but we can just use the free one. The program is specialise to design and develop games, from android, iphone, tablets to windows and mac, 2D and 3D, all sort. We also thinking to use this program to develop our game. Android Studio is another alternative that we have mentioned above.

Microsoft Visual Studio Community 2017:

The version we currently have is 15.7.6. It is free to download, as well as upon installing Unity, VS 2017 will also be installed in the process. The program is mainly used for coding. We will be using this to write code for Unity. Brackets and Notepad++ are another alternative.

• Brackets:

The version we currently have is Release 1.13 Build 1.13.0 -1696. It is absolutely free to download and I highly recommend to use over visual studio. Brackets is source code editor. We will be using this to develop our webpage and perhaps some part of the game as well. Alternatives are Visual Studio and Notepad++.

Krita:

The version we currently have is 4.1.1. It is free to download and use, no subscription needed as you'll get full features right from the get go. Krita is a software that specialised in graphical design and sketches. We will be using this for designing our UI, background, and characters if we have any.

GIMP:

The version we currently have is 2.10.4. It is free to download and use. GIMP is also a graphical editor software. Which we will be using this to finalise our sketches.

Audacity:

The resources are:

Google Drive:

Our group will be using Google Drive / Doc for written information, it is free and anyone who have a Google account will be able to have access to it.

Youtube:

YouTube is free and you can browse video as guest. It is a website to browse for all sort of videos. We use this as one of the options to make in-depth research about our project, as well as learn how to use the softwares we mentioned above more efficiently.

• Google:

Google is basically free to use, there is an alternation option, it is Bing. It is a search engine for any browser. We use Google to research on techniques that aren't available on YouTube.

COLLABORATIVE WORKSPACES

The workspaces we will use to collaborate are <u>Trello</u>, <u>Google Drive</u>, <u>GitHub</u> and Facebook Messenger. Everyone on our group knows how to access all of these websites however as a group we are all more comfortable using Google Drive rather than GitHub.

We already have a <u>Trello board</u>, <u>GitHub repo</u> and <u>Google Drive</u> that we are all able to access.

COMMUNICATION EXPECTATIONS

For communication, we have already set up a group chat on Facebook that we all use to communicate with each other when we are not in person. We expect everyone in the group to be able to respond to these messages in a suitable amount of time (within 24 hours unless it has been mentioned beforehand that someone will not be able to reply within the time), and if that expectation has not been met we will seek out that person individually by other means, such as directly messaging the person on Facebook or emailing their student email directly.

If needed at any point we should be able to meet up in person at the city, whether it be for lunch or just to work together if someone needs help in person.

DECISION-MAKING PROCESSES

As a group it doesn't seem like we'll be having many conflicting ideas, but if the time comes where there are conflicts, then the easiest solution would be to have a vote (which should work easily since we have an odd number of members) but if there comes a time where all 5 of us disagree, we're going to roll a 5 sided die.

For decisions that we have already made, we simply discussed with each other what we want to do.

PROJECT TIMETABLE

	Title	Planned Start	Planned Due	Lead by
Week 3	PERSONAL PROFILE	5/8	7/8	ALL
	PROJECT NAME	31/7	7/8	ALL
Week 4	Decision Making	7/8	10/8	Matthew
	Communication Expectations	7/8	10/8	Matthew
	Collaborative Workspaces	7/8	10/8	Matthew
	Resources and Tools	7/8	10/8	Ту
	Project Description	7/8	10/8	Ту
	Demonstrable Outcomes	7/8	10/8	Ming
	Motivation	7/8	10/8	Ming
	Project Justification	7/8	10/8	Huanghao
	Project Timetable	7/8	10/8	Kyong
	Report	7/8	11/8	Kyong
Week 5	Low-Fidelity Paper Prototype for App	13/8	19/8	Matt / Ming
	Paper Draft of Game Background and Characters	13/8	19/8	Ty / Kyong
	Searching Educational Referable Game Ideas	13/8	19/8	Harold
Week 6	Improve Paper Prototype (Adding colour / functions)	20/8	26/8	Matt / Ming
	Draw Background with Krita	20/8	26/8	Ty / Kyong
	Making Side Effect Sound with Audacity	20/8	26/8	Harold