

SFWRENG 3XA3 Fall 2018**Software Engineering Practice & Experience: Software Project Management****Problem Statement****Group 15 CLOUD10****What is the problem going to be solved?**

~~Mobile game has no doubt become one of the most popular and important activities that people would choose for entertainment. Nowadays, as smartphone updates faster than ever before, players are demanding more from the games on it.~~ Game has no doubt become one of the most popular and important activities that people would choose for entertainment. Nowadays, as computers update faster than ever before, players are demanding more from the games on it. In this situation, the classic aircraft shooting game that we are trying to redevelop is still a great concept, but it is too simple regarding gaming interface, modes and dynamic effects. The shooting game we are trying to redesign and implement will have several updates towards the problems listed above to satisfy more demands and expectations from players.

Why is the problem important to the stakeholders?

~~Nowadays, there are many shooting games on the mobile device application market. With the rapid upgrade on mobile hardware, the majority of game producers are trying to make higher image qualities, and the games are more prone to be transplanted from PC platform.~~ Under the rapid development of the technology, the majority of game producers are competing each other through the quality of game images and fantastic effects. This trend has also caused the lack of classic elements in the market. Based on the original PythonShootingGame and the Pyxel library, our team have allowed the game return to the simplest game style, pixel game. We have also upgraded the game with more features such as skills and gifts. By doing so, we've allowed customers playing a classic shooting game without any obstacles and dive into the infinite fun.

What is the context of the problem to be solved?

The stakeholders are clients, developers, and users. Clients make demands of the project and developers are the group of people who implement the project to satisfy those demands. (In this project, the clients and developers are the same group of people.) Besides, developers also take the role of maintaining the product during its lifespan. Last but not least, the satisfaction of users is the major criterion for the quality of the product. ~~The running environment of our product would be Android OS since it is one of the most prevalent operating systems. (Android OS occupies 84.8% users in the smartphone market~~

~~worldwide, according to the data from IDC.com.)~~ The running environment of our product would be on Python since it is one of the most prevalent environment on computers and almost every computer is installed with Python as default. The target age groups of our product are mainly teenagers and adults.

How is the problem going to be solved?

Based on the original Flight Shooting Game, the problem mentioned above is going to be solved by using Pyxel library (It is a library on Python which offers functions to develop games in 8-bits graphic style). We are also going to have our original design on the modes and game interface which includes characters, music, background and so on. Modular architecture is going to be used as the overall architecture of our project. Each feature will be a module for our design convenience. In this way, We have allowed the users to enjoy our creative pixel game.