General purpose

The general purpose this study was to make the self-assessment more enjoying and interesting. The programming proficiency is a skill needed to be observed it is to help an individual to raise themselves in programming industry. It is also guide them to what should they focus on learning in terms of programming itself, adapting in environment, troubleshooting, and logics. The ability to track their programming proficiency can also gave them self-confidence, more motivation, more enthusiastic in learning, collaborating and discussing with others.

Specific purpose of the study

The study was aim to develop a self-assessment for programming proficiency integrated into mobile game. These are the specific purpose of the study:

1. To make the self-assessment more enjoying and interesting through visual design and game design.
2. To create criteria for programming proficiency from various literature.
3. To develop a tracking algorithm the tracks the result of the assessment and also comparing the previous data to updated data.

Significance of the study

The study aimed to benefit not only the students that has history in programming but also to those interested in the course. Aside from students there are also others that can gain in this study to be more specific these are:

1. Computer Studies Students – The benefit they can gain is to observe their own proficiency and take advantage according to its result.
2. Teachers – They can use the game for testing the understanding of their students in programming that is more helpful for those who teach 1st year students.
3. Upcoming Computer Studies Students – With the game, they can ready themselves on what they should learn in programming, help them on first step becoming programmer.

Scope and delimitations

The study focuses on measuring the programming proficiency of the students of Department of Computer Studies. The key factors in the programming proficiency are programming, logics, troubleshooting, and environment.

The game will be developed around puzzle and quiz like genre also focus on mobile platform with the use of Unity as game development software.

The study was will limit up to 100 participants in Department of Computer Studies.