ABSTRACT

The excitement and competition elements that can be found at a game can be used to support education. Many various games have been developed to help a children to learn foreign language or to enrich the vocabulary of that foreign language. But, not many of those game that involve networking as it’s interaction system so that all player can play together and compete each other online. Whereas a game will be more interesting if it involves interaction between player. Thus, the web-based real-time multiplayer game to help children to enrich the vocabulary of foreign language is required. This final project aims to create “Yuk Kita Cari” game for initiating the accomplishment of that requirement.

The technology used in this final project are Flash ActionScript 3 and SmartFoxServer2X. Flash platform is used to create client application that composed by display interfaces of the game. The client application is synchronized with each other using SmartFoxServer2X assistance, so it can be played by many players. SmartFoxServer2X also useful to bridge the connection between the client application with the database. Java extensions
used by SmartFoxServer2X for adapting logic when communicating with the client application.

Test carried out by 50 players. From the test, it can be concluded that the client application has a stable performance when played, with an average of 24 fps (frames per second). SmartFoxServer2X successfully handles many clients' synchronization with data transfer speeds between 0.49 KB/sec up to 0.69 KB/sec. In the future, we hope “Yuk Kita Cari” game can be upgraded so it can provide more benefit to the children to enrich the vocabulary of foreign language.

Keywords: Education, Flash ActionScript 3, Foreign language, Multiplayer game, SmartFoxServer2X