

ABSTRACT

Psychological tests are used to determine human's attitude and behavior. In its application, psychological tests still use the old method by distributing sheets of questionnaires or a series of questions to related objects. Objects are asked to answer questions and then the answers will be collected again to be calculated, and then conclusion will be drawn from the result. The conclusion is a representation of one's personality based on the answer of an object that is real or not fake. It will be time consuming and impractical.

Computer-based psychological test have an answer to these deficiencies. This research discusses the design and implementation of computer-based psychological test based on Edwards Personal Preference Schedule (EPPS) personality theory using linear congruential method for randomization of test item developed by web-based programming. The EPPS psychological test is used to measure the user's personality based on the measurement aspects in EPPS.

Through this final project, the author designs and implements computer-based EPPS psychological tests by utilizing the ease of test item management using linear congruential method as a randomization method of test item. With the creation of this system, it is expected to be a psychological test tool that facilitates the implementation of test, management of test data, test scoring, and distribution of test results.

Keywords : *Computer-based Psychological Test, EPPS, Linear Congruential Method*