

Universiti Teknologi MARA

Self Learning Module on Securing IPv6 Deployment

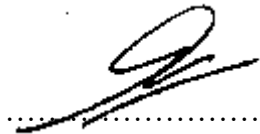
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STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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ABSTRACT

IPv6 Module application is a mobile learning application with the gamification elements for IPv6 deployment. This project was designed especially for all users who want to learn the IPv6 in fast as anywhere at any time. The main purpose is to make this mobile application as the supporting tool for the users on learning the IPv6 deployment. There was no tool that helps or encourages the people on the IPv6 module along with gamification elements. The uses of the gamification elements in the application are to attract the user and make the application interesting. Besides that, it can also motivate the learner to learn or encourage the people to study more. Furthermore, the gamification method was accomplished in the quiz session that is related to the module with difficulty of quizzes and the feedback to each category. It also has the ranking status after finished answered the quizzes. By applying the gamification elements to the mobile application, it can enhance user behaviour by motivating them to learn more about studying the IPv6. The application has been evaluated using usability and performance test. Some potential users were invited to install and use the application. They were required to answer the questionnaire. The results show that most of the respondents (88%) are satisfied with the application. The network performance testing to test the network response time and network success rate was given a successful result. In terms of heuristic evaluation, most of the participants feeling motivated and enjoyable while using the IPv6 Module application. Therefore, the IPv6 Module application can enhance and assist the user experience in the learning process. Furthermore, it can improve the user understanding in learning IPv6 deployment.

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