

# SLOODLE TO AID DISTANCE LEARNING OF CELULLAR NETWORK HANDOVER

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By  
Nur Zareen Zulkarnain  
School of Computer Science

# Abstract

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Nur Zareen Zulkarnain

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Technology nowadays has played an important role in enhancing the way people learn. It not only provides numerous learning materials and tutorials for self-learning but also provides means to aid in distance learning. Among the emerging technology nowadays is the Multi-user Virtual Environment (MUVE). OpenSim is one example of MUVE and it uses Sloodle to integrate with Moodle. While Moodle is a more traditional way of teaching, Sloodle has a range of tools such as a quiz tool, that allow educators and students from all over the world to engage in a more interactive virtual learning environment. This project is about finding how it would be possible to teach cellular network handover in a virtual environment in a way that students would understand. In order to do this, the instructional design methodology is adopted as a guideline. The instructional design methodology helps educators to design learning activities so that they are consistent with learning objectives and learning outcomes. To teach about cellular network handover, a cellular network handover virtual world was developed in OpenSim. The virtual world was divided into two areas which are the basic concept area and the cellular network handover simulation area. Students will need to pass a quiz in the basic area before they can do the handover simulation. This is to ensure that all students have the basic knowledge needed to understand the simulation. Formative and summative testing was done to test the virtual world. The result shows that Sloodle can be used to aid distance learning of cellular network handover.