

SDSU

presents a thesis defense for Master of Science degree in Computer Science Monday, March 30, 2015

> 4:00pm GMCS 405

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GIS Based Application on Events during World War II

Abstract

The focus of this thesis is to create a GIS tool for World War II. The tool was cowritten with Ankur Singh. This is a geographic computer interactive tool which makes it simpler to perform a study of world War II on the basis of countries involved, events occurred and famous people during the war. The user can select from any of the above mentioned categories and click on any tab to view more detailed information. This application enables users to get detailed information on various events, people, casualties, epilog and a timeline of events occurred. Another important feature is to display many interesting Quotes from World War II. One of the biggest design challenges is to keep the interface simple and capable of handling multiple tasks without compromising on the feature set.

Consequently, every attempt has been made to present a rich depth of subject knowledge through a lucid yet powerful interface. The application has been made in Java and utilizes MOJO (Map Objects Java Objects), which is provided by ESRI. Using MOJO, GIS related features can be easily incorporated into the application by linking data to various geographical features on the map.

The tool hopefully uses methodologies for teaching and sharing information in a very effective manner. Computer graphics are much more engaging to gather and display information than using books for collecting facts and figures. Hence, this tool would be very useful in teaching the history of World War II.

Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science Guy Leonard, Department of Computer Science Vadim Ponomarenko, Department of Mathematics & Statistics