

SDSU presents

a thesis defense for

Master of Science

degree in

Computer Science

Monday, November 23, 2015

> 2:00pm GMCS 418

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A GIS Tool to Demonstrate "History of Automobile Industry"

Abstract

The emphasis of this thesis is focused on explaining the summary on "History of Automobile Industry "and providing a better way to visualize the corresponding data on the map. This Summary explains the major breakthroughs in the automobile industry which eventually leads to modern day car which we all enjoy and built our lives around it.

This is explained through a GIS application built using JAVA and MOJO (Map Objects Java Objects) provided by ESRI (Environmental Systems Research Institute). The application explains some of the milestones in the automobile industry starting from the birth of car. This tool has numerous hypertext markup language (HTML) pages. The user can click on the hotlink, which results in opening up HTML pages using a custom toolbar 'Hotlink'. The HTML pages have various information like inventor of the automobile, place of invention, specifications of the car, an image gallery, and also embedded video links.

The hope is to use modern computer technology to present an important subject in an engaging and interesting fashion, and use multimedia GIS technologies. The tool was intentionally kept simple and effortless for the user to use the tool. To retain the user's interest in the tool, important features are described using an image gallery and videos in the HTML pages. The idea behind using these features is that it will aid the end users by increasing their interest in learning more about the history of automobile industry.

Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science William Root, Department of Computer Science Vadim Ponomarenko, Department of Mathematics & Statistics