CS Masters' Thesis Defense

Title: *GIS Multimedia Teaching Tool about Africa*
Speaker: Vivek Shah
Date: Wednesday, November 16, 2011
Time: 2:00 p.m.
Location: GMCS 418
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Abstract:
The motivation of this software is to develop an interactive GIS application which should enhance student activity and interest in learning world history. Computer aided teaching enables teachers to engage the students to the subject material in a more successful manner and also increases kid's desire and motivation to learn.

This thesis focuses on creating a GIS multimedia teaching tool about the Africa continent. The tool provides interactive graphical information of colonial history, independence history, points of interests, demographics and physiographic of Africa. Students can switch between various colonies (Belgian, French or UK) of Africa to see which countries experienced colonization and when students use hotlink tool on particular country, a pop up window gives description about the country name, capital city, independence date, population, and area and government type. If user wants to know more about a particular country, a Wikipedia link is also provided. Hotlink tool works the same way for points of interests' layer. Students can also view deserts and rivers of Africa. A dynamic user interface created using JAVA and the MOJO software package has been included in this tool for effective learning. Some of the user interface features provided in this tool include zoom-in, zoom-out, a legend editor, location identifier, print command, map tips, measure, and query builder.

This interactive map teaching tool has been created by Vivek Shah at San Diego State University. GIS technologies like Map Objects - JAVA edition and j2sdk were used along with the Eclipse IDE to develop this tool. The tool can run standalone and user just needs to have JRE install on their system.