Abstract
The focus of this thesis is to show the emperors, wars and important battles during the rise and fall of The Roman Empire. This is a geographic computer interactive and user friendly tool which could be considered as a supplement to text book learning. This approach provides an effective way of learning for the students as it’s easy to use and more aligned to the interests of the younger generation. In this tool, the user can click on the various points located (the points are of the battles) on the world map which will open up a webpage for that point giving up the detailed information of that battle as how it started, between whom, where it happened, what were the casualties in the battle from both sides, who won it and the background information about the Emperors involved in those battles.

Apart from the information about the Roman Empire students have the ability to customize the tool to suit their individual interests, select layers of their choice and click to know more about the places on the map. This tool uses Java as programming language and uses Map Objects Java Objects (MOJO) which is provided by ESRI, which is an international supplier of GIS software. MOJO is very effective as using it GIS related features can be included in the application. This tool has been developed taking into considerations the university students and hence its interface has been kept simple and straightforward without any compromise on the knowledge which the students gain from this tool.

Among the advantages of this approach as the geography emphasis in which is a subject in which modern students are notoriously poor.

Thesis Committee
Carl Eckberg, Thesis Chair, Department of Computer Science
Kris Stewart, Department of Computer Science
Mark Dunster, Department of Mathematics & Statistics