

CSCI 311 Term Project

Due Date: Nov 23

Project requirement update (Nov 6)

- Students should search reference on the selected topics, and read these material. The reference should be from three resources introduced in Chapter one.
- The project report is optional. There is up to 5% extra credit if you submit a term project report on the due date Nov 23. The project grade, include the extra credit, is emulated based on the criteria described below. Note: you do not have to give a presentation if you submit a report.
- If you opt out the report, your need to give a 5 to 10 minutes presentation in Nov 30 and Dec 2 class. In this case, the project grade is evaluated based on the contents of presentation and the references. Slides are required in presentation.

Overview

Due to the fast pace of technological change in computer hardware and system software, an information system professional must constantly update knowledge. During your career, you will update and expand your knowledge in many ways including formal classroom education, on-the-job training, short courses offered by software and hardware vendors, and continual assimilation of new information from books, periodicals, web sites, and other sources.

The purpose of this project is to prepare you for self-directed learning and research activities. You will investigate an emerging or relatively new technology or product in computer hardware or system software. You will deliver the results of your investigation and analysis via a research paper.

To successfully complete the research project, you must do several things:

- Find sources of information on the topic
- Gain sufficient background knowledge to provide a basis for understanding the topic

- Assimilate the information to a high degree of expertise
- Effectively communicate that knowledge in written form

For many topics, the contents of this course will provide only minimal background knowledge. You are expected to become an expert (or nearly so) in the topic. This implies that you understand all of the relevant technical information and that you can critically evaluate the topic.

This project requires you to demonstrate that proficiency with a highly technical topic. Your research paper must clearly communicate the **technical details and critical analysis** of your topic in an organized and concise manner.

Evaluation

As stated in class syllabus, the term project counts for 20% of the grade. Each student chooses a topic, and writes a project report based on your research.

Project Report

The written report is a summary of the highlights on your research on the topic as contracted in your project proposal. The report should have 10-12 pages, 11-pt font, double line and standard margin. A majority portion of your report grade is based on **technique details**.

The report should contain the following sections:

- Title, author(s) and affiliation and Abstract: up to 100 words (**Page 1:** cover page)
- Introduction: include topic description, motivation (why is the topic important), and the structure of the rest of the report
- The main body: may contain a number of sections to elaborate the topic. What are the various techniques / mechanisms? How do you classify them? Your choice of a case study, application, or examples that exemplifies the challenges of this topic and how they get resolved.
- Conclusions

- References: **At least five references** are required. Use the [IEEE references style](#). **Reference page and appendix page are NOT counted as page number.**

Suggested Topics

Topic Index

Electronic Voting System	1
Video conferencing software	KHALI D Clegg
Software outsourcing in U.S.	James "Logan" Logan Hostetler
Augmented Reality	Justin N Bradley
Arduino	Steven Lowe II
SaaS applications with great potential	6
Robotic in consumer level applications	JOSHUA THOMAS Lowe
Android vs. IOS	ANDREW LEE Gung
JIRA and software project management	9
Raspberry Pi	KIAEEM ANTWONE Felder
Wearable technology	JAMES J Grant
Java frameworks	ALAN Pulido
Programming in algorithm trading	13
Defense and attack on Email Account	WATA Kelleh
Version-control system in software development	ALAN MOISES Martinez
ERP systems	Trevor Jae Hall
CRM systems	RICHARD JAMES Sowel
Office Automation system	LA'BREA SHARRYA Harley

Digital Signage Software	JONATHAN CAMERON Rogers
The Applications of IoT	Jesus Mora
Agile software development	KATRINA Rangel
Applications of Block chain Technology	TALLON BLAISE McAbee
Web development in 2020	Montyia L. Cheeseboro