Capstone Project Presentations

Day 1: December 10, 2018 (Monday)

MH 206

Presentation Time	Student(s)	Advisor	Project Title	Class
8:25 am - 8:40 am	Victor Yasiuchenia	Kaur, Komalpreet	Mind Speller: P300 classification using EEG signals	CSC520
8:45 am - 9:00 am	Fadi Nassereddine	Hatfield, Bo	A Peer-to-Peer File Manager	CSC520
9:05 am - 9:20 am	Anuda Sharma	Hatfield, Bo	Salon Management System	CSC520
9:25 am - 9:40 am	Dorje Namgyal Sherpa	Hatfield, Bo	Home buying guideline	CSC520
9:45 am - 10:00 am	Eric Pacheco-Valente	Hatfield, Bo	For the Love of Health	CSC520
10:05 am - 10:20 am	Sudeep Sharma	Hatfield, Bo	E-commerce management system	CSC520
10:25 am - 10:40 am	Kevin Melo	Hatfield, Bo	Internet Forum	CSC520
10:45 am - 11:00 am	Ty Dawson	Kentros, Sotirios	Python Arcade Game	CSC520
11:05 am - 11:20 am	Colby Leclerc	Kasprzyk, Joseph	Advanced Garden Monitor	CSC520
11:25 am - 11:40 am	Anthony Pham	Yi, Beifang	Project Zen	CSC520
11:45 am - 12:00 pm	Owen Apile Kasozi	Kentros, Sotirios	Content Delivery Network	CSC520
Lunch				
1:05 pm - 1:20 pm	Nicholas Motta	Kasprzyk, Joseph	Asset Management System	CSC520
1:25 pm-1:40 pm	Brian Gorenca	Kentros, Sotirios	Intramural Sports App	CSC520
1:45 pm - 2:00 pm	Emma Hall	Kasprzyk, Joseph	Student Connected	CSC520
2:05 pm - 2:20 pm	Lorina Sinanaj	Hatfield, Bo	Currency Exchange Web-App	CSC520
2:25 pm - 2:40 pm	Oliver Justice Murdoch	Hatfield, Bo	String Tuner Mobile	CSC520
2:45 pm - 3:00 pm	Muhammed Imraan Shaikh	Hatfield, Bo	Game Boy Emulator for Android Devices	CSC520
3:05 pm - 3:20 pm	Cristy Portillo	Kasprzyk, Joseph	Puppy Tracker	CSC520
3:25 pm - 3:40 pm	Kent Pina	Kentros, Sotirios	P/V Resource management	CSC520
3:45 pm - 4:00 pm	Ryan Jacobberger	Kentros, Sotirios	Workout Planner	CSC520

Project Descriptions:

Student	Project Title	Project Description
Victor Yasiuchenia	Mind Speller: P300 classification using EEG signals	Brain Computer Interface (BCI) helps people with severe neural muscular disorders to communicate and control devices using brain signals. The goal of this project is to design a P300 classifier that will help convey the user's intent. The required EEG signals will be recorded from the scalp using EMOTIVE EPOC+ cap. P300 response recorded from the cap will be used to control the BCI that will allow the user to type single letter at a time.
Fadi Nassereddine	A Peer-to-Peer File Manager	A cross platform software that can connect with other instances on separate machines and pool together storage. It needs to be able to efficiently partition a file and store it on different nodes (or on the same system) and reassemble the file on a later date. One specific instance (or node) need to be able to communicate with other nodes to determine if it can send a partition of a file to it.
Anuda Sharma	Salon Management System	Salon Management System is a web based application which allows the management team to post, update information, and keep track of customers and their appointments. In addition, it provides ways for customers to browse for information, make appointments, check appointments, and give feedback. The main objective for developing this Salon Management System Project is to manage all the information of the salon services.
Dorje Namgyal Sherpa	Home buying guideline	A web-based application which is to provide guidance and simplify the process of purchasing a property. This web-app functions as a helper for anyone who is looking forward to buying a house. The goal of this application is to refine the formal steps involved in a purchase process in order to ease and simplify the process itself; searching and looking up properties, setting up a medium of interaction between agents and clients, as well as helpful guidelines and insight on the process.
Eric Pacheco-Valente	For the Love of Health	The goal of For the Love of Health's web application is to create a platform that is universally understandable by anyone eager to participate in improving their overall wellness. This is a holistic platform that encompasses not only dietary aspects of health, but spiritual and emotional aspects as well. The intention is to convey the importance of health while providing a means to help each individual rise to their own personal peak state of health. This will be accomplished through blog posts,
Sudeep Sharma	E-commerce management system	The main objective of this project is to replace the garment business run solely by paper with fully functional web application where admin will be able to manage and sell products online. On the customer side, customer once login/register can view different products according to categories and add products to his/her shopping cart.
Kevin Melo	Internet Forum	Internet forum used for Salem State students to ask questions or share ideas about any school related topics. Users are able to create accounts, send each other private messages and submit public posts. A user is able to make it public which classes they have taken and what their major is along with their graduation date so other users know more about know they are talking to.
Ty Dawson	Python Arcade Game	Using the Python language, the IDLE environment, and Pygame package resources, an object oriented arcade-style graphical game will be implemented. Various different player characters, enemies, levels, and scoring elements will be implemented in a polymorphic style in order for a simpler customization and application of a basic "beat 'em up" style video game.
Colby Leclerc	Advanced Garden Monitor	A continuous monitoring system that captures sensor data points which continuously describe the state of the plant's environment. Once recorded, this data can then be viewed graphically. In more sophisticated setups, we can actually automate the task of keeping parameters such as temperature, humidity, and soil moisture within their proper bounds.
Anthony Pham	Project Zen	The Project goal is to create an application that allows the user to relieve stress through different modules/activities such as breathing exercises, simple stress relieving games, and journal to ease the mind. This application may serve as a source for seeking additional assistance from SalemState counselors or other forms of motivation.
Owen Apile Kasozi	Content Delivery Network	The objective of this project is to build a PULL content delivery/distribution network (CDN) which is a system of servers (that are networked) that deliver web pages and other web content to end users based on the geographic location of that end user, the origin of the webpage and the content delivery server. Building this project will help me gain a better understanding of the delivery of content to end users, network traffic management as well as network architecture and infrastructure.
Nicholas Motta	Asset Management System	Businesses and organizations need a way to keep track of their material assets, as well as keep track of any issues those assets may have. This web-based asset management system allows for users to keep track of assets. It also lets users create tickets for assets that need to be addressed. Admin users have control over what other users have access to.

Brian Gorenca	Intramural Sports App	Intramural Sports App is an app that will make it possible for Salem State students to connect with fellow students who are interested in playing the same sports. This app will make it easier for students to find out what sport event is available and let them sign up for the event. Students will be able to create sporting events and also join other students events. The purpose of this app is to get students active and playing their favorite sports.
Emma Hall	Student Connected	The current process for evaluating and diagnosing a student with a learning based language disability is flawed to say the least. A missed opportunity to correctly diagnose a child can result in a lifetime of struggles and anxiety. Some examples of the complexity in obtaining proper diagnostics are; bias, miscommunication, stray medical records, lack of access, transparency, and personal factors not included in testing. Due to these factors and many more, components of a students profile often
Lorina Sinanaj	Currency Exchange Web-App	I will develop a reliable web application that can help a currency exhange business to efficiently manage the actual process of currency conversion transactions management across multiple branches. The application will be designed for the use of admins and customers as well. As a result: 1) Time and efforts for currency conversion transactions by hand are greatly saved through this automated system 2) Improved profits with better and easy reporting system 3)E-mailing reports directly to the bank
Oliver Justice Murdoch	String Tuner Mobile	The String Tuner Mobile app will be an android based application that will tune string instruments into their respective correct frequency with a higher accuracy than human detection. The app will have a primary focus on Guitar and it's various 6-string tunings, however it will support multiple string instruments like the Ukulele, Bass, Guitar Violin, Viola, Cello, and Mandolin. The user will also have the ability to use either an instrument preset tuner (string by string) or a chromatic tuner.
Muhammed Imraan Shaikh	Game Boy Emulator for Android Devices	For this project, the main objective will be to create a software emulator that allows the use of programs designed for one specific computer system to be used on another, different computer system. More specifically, it will focus on allowing a device running Android to run programs designed for the Nintendo Game Boy, a handheld gaming console that was released in 1989. This will be done with a user-friendly Android application.
Cristy Portillo	Puppy Tracker	Puppy tracker is an android app that will make keeping track of your puppy's needs with ease. New puppies need more than just love, like vaccinations, regular grooming, etc, and this app will help with keeping one on the ball with the puppy's needs. It will also notify you with little tips and tricks to keep your puppy exercised and learning.
Kent Pina	P/V Resource management	The purpose of this project is to demonstrate the advantages of moving critical servers/services to a virtual environment instead of having a dedicated server for each service. We will show how these servers (physical & virtual) behave under stress and how to manage the CPU and RAM resources on a virtual environment so our servers/services take advange of the resources that are not being used by other servers/services that are also being virtualized.
Ryan Jacobberger	Workout Planner	Workout Planner is a web-based application, the main objective is to create workout programs for people to follow. There will be preset workout programs already created on the website for new users to look at for guidance when creating their own workout program. Users can create a workout plan and post it on the site for others to view and use the plan; as well as rate the plan on the effectiveness of the workout and its toughness.