Course ID/Name: Comp790 Capstone   *(rev 1/24/23)*
Semester: Spring 2023
Instructor: Michael Jonas   (**office:** room 141. **email:** mcy59@unh.edu)
Time: Tuesday, 1:00pm – 4:00pm & Friday 2:30pm – 5:30pm
Location: hybrid, with in-person in room 142, and virtual via Zoom & Wonder.me
Office Hours: by appointment
Web Presence:
　　　　Website: http://stem.unh.edu/mcy59/comp/790

Course Description:

This course requires the development of a real-world project that responds to organizational need in a computing discipline. The project is undertaken by a team of students. An iterative approach is used to incrementally address the project requirements while constructing a prototype of the solution to the original problem. 4 cr.

Learning Objectives:

The purpose of this course is to provide students with a significant team project experience that involves a complex design and implementation task. This project will involve an on-campus client, specifically the instructor, and require students to use a range of practices and techniques in solving a substantial problem. This includes setting up a batch queue of 10 machines, installing speech recognition software, organizing large quantities of data to generate a baseline system to be used for future work, recording that work in an experiment database and constructing a set of tools to allow others to reproduce those results.

Software Tools:

Students will use the CMU Sphinx Speech Recognition Toolkit as the primary backbone for their work. We will also use LDC's Switchboard corpus as our data set to build our initial baseline

Student Work and Class Pedagogies:

We will have weekly progress meetings for the first hour of class. During this time, each student will present status updates on their respective tasks, present problems that lead to discussions for the entire group of possible solutions and point to potential future issues. On occasion there will be a one to two-hour seminar given on the fundamentals of the speech recognition process to enable students to better understand the tools that they are using.

Homework Assignments and Projects:

Each student will be assigned a set of tasks they need to complete, either within a sub-group or by themselves. It is the student's responsibility to communicate with fellow group members current status and possible delays.

Schedule

Class meets twice a week with 1-4pm Tuesday being in-person and 2:30-5:30pm Friday being virtual. Schedule reflects entire week with Tuesday date identifying it. Status updates will generally be held at 2:30pm on Fridays and work product due dates will specified individually.

Week of	Class Topics	Work Due
Jan 24	Class begins: Overview of project	
Jan 31	Student tasks and sub-groups	
Feb 7	Status update	
Feb 14	Status update, Rough draft of project proposal/timeline	Draft Proposal
Feb 21	Status update, Final draft of project proposal/timeline	Final Proposal
Feb 28	Status update	
Mar 7	Status update	
Mar 14	*Spring Break (no meetings)*	
Mar 21	Status update	
Mar 28	Status update	
Apr 4	Status update	
Apr 11	Status update	
Apr 18	Status update	
Apr 25	Status update (hand out Result Summary template)	
May 2	Status update	
May 9	Status update	Result Summary
May 16	Project evals & feedback on draft	Draft Report
* Can submit within 5 days without penalty	Due May 17th*	Final Report

Grading:

Students will be evaluated at end of the semester both by instructor and their peers as to quality of work accomplished on the project. Grades will be based on quality of work achieved, as well as how students dealt with adversities or unforeseen problems. Grades are divided as follows:

6% Participation
     -1% per missed class
     -½% late arrival
15% Individual documents
     12% Status Updates
     3% Member Evaluations
34% Collaborative documents
     14% Proposal
     20% Final Report
45% Work as graded by peers *(average letter ranking will be mapped to highest number grade)*
     A : Exceptional team member – went above and beyond what was required
     B : Average team member – met requirements consistently
     C : Below Average team member - tasks were consistently late, bad at communication
     D : Troublesome team member - lack of communication, missed many status reports
     F : Failed as team member - no significant contribution or team participation

Each student will confidentially rank fellow members, with detailed reason given. Instructor is final arbiter, also adding input. Student can request transcribed (scrubbed) summary of reviews.

Policies

Academic Honesty and Collaboration:

Collaboration is encouraged and supported in the classroom through lab activities and outside the classroom as directed by instructor. Note that homework assignments and tests you submit **must be entirely your own work.** Deviation from this policy will result in dismissal from the course.

See the University policy on **Academic Honesty** for more information.

Attendance:

Is mandatory and you will lose on class participation grade for unexcused absences. Since work is based off lecture and class activities it becomes difficult to do well with too many absences.

Late Assignments and Make-Up Exams:

Policies for late assignments and make-up exams are very strict and apply only in exceptional cases of student illness, accident, or emergencies that are properly documented. It is your responsibility to make arrangements with instructor before the deadline as soon as you are aware you will miss a deadline, exam or class. Unexcused late assignments are penalized 20% per day.

Use of Electronic Devices in Classroom:

Not allowed during examinations. Absolutely no cell phone use during class time.

Accessibility Services:

The University is committed to providing students with documented disabilities equal access to all university programs and facilities. If you think you have a disability requiring accommodations, you must register with Student Accessibility Services (SAS) office. The Student Accessibility Coordinator at UNHM is Jenessa Zurek (email jenessa.zurek@unh.edu).

Mental Health and Wellness

In partnership with The Mental Health Center of Greater Manchester, UNH Manchester offers free mental health sessions for students. For scheduling a session email unhm.advising@unh.edu.