

CSP584

Project Instructions

General Instructions:

1. Identify the topic of your interest and team up with **TWO** of your classmates to formulate a team of **THREE**. The team will then select a team **LEADER** who will communicate with the TA all issues regarding the project presentations.
2. **Team leader** is required to **email the TA** regarding the topic the team will work on, team members' names, and the date the team will present the presentations during class time, 5-7 minutes the length of your presentation.
3. **The deadline to notify the TA** through email about the topic that you selected, and the two presentation dates that you will present your project is set to be **9/25/20 by 11:59pm**.
4. There are **THREE PHASES** and deliverables for your project
 1. **Phase 1:** Project description and requirement specifications; in-class presentation is required, select a presentation date from the following dates: 10/9, 10/16, 10/23. In this phase it is expected that you will go over the requirements of what you intend to do for your project; you might present the structure, and the main web page of your project as well. Please budget your presentation for this phase from 5 to 7 PPT slides.
 2. **Phase 2:** Project demonstration; in-class presentation is required, select a presentation date from the following dates: 10/30, 11/6, 11/13, 11/20, 12/4. In this phase, it is expected that you will go over the design, architecture, and implementation of your project and also It is expected that you will be done at least with 50% of the requirements; you are not required to have 100% complete project in this phase. Show screen-shots and code snippets in this

presentation. Please budget your presentation for this phase from 5 to 7 PPT slides.

3. **Phase 3**: Final Project Delivery Date: 12/5/20 by 11:59pm. Final Deliverable: post your final project as a SINGLE zipped file on Blackboard with the name "Project_YourLastName,FirstName".

5. Budget your presentations for 5 to 7 slides

Project Technical Requirements:

1. Identify the topic of your interest from the following list of online Software applications:
 - 1) Grocery Hub to buy groceries on daily, weekly, or as-needed basis for home delivery or in-store pickup
 - 2) Health Hub to order/search for Health clubs, doctors, medical services, hospitals, health insurance, etc.
 - 3) Home Hub to order/search for services, repairs, tools, etc.
2. Your Application must support the following features:
 - 1) Trending, Realtime streaming of new products, services, events, etc.
 - 2) Recommenders for at least one of the followings:
 - i. Social places (restaurants bars, etc.) based on the user profile, locations, date/time, posts, search histories.
 - ii. Social events (Musical concerts, Theater, Comedy, etc.) based on the user profile, locations, date/time, posts, search histories.
 - iii. Sports events (basketball, baseball, etc.) based on the user profile, locations, date/time, posts, search histories.
3. Your application must utilize SQL, NoSQL, and Graph database engines as the backend datastore
4. Data must be created for users/customers in different locations (zip codes)
5. Context-aware (location, time, events, etc.) recommenders must be utilized in your project.
6. Your application shall export the data it has into CSV/JSON and utilize it in Neo4j/Cypher/Python/Java to create the knowledge graph of people, location, and events in order to detect communities and most influential people in the Graph
7. After you identify the topic you are interested in from the listed provided above, you are required to document the requirements, design, source code, and output for your project. Final deliverables are:
 - 1) Brief project overview statement and requirements
 - 2) Class diagram
 - 3) Source Code
 - 4) Compiled Code
 - 5) Readme file for how to build/deploy your project.
 - 6) All Screen-Shots of your Application MUST BE captured and documented in a pdf file called OUTPUT.pdf

- 7) Use screencast-o-matic (<https://screencast-o-matic.com/>) and record a demo (video + audio) for 5 minutes of your project live-run for all features implemented.
 - 8) Clearly state how many lines of code written in the Readme file.
8. Post your project as a SINGLE ZIPPED file on Blackboard on 12/5/20 by 11:59pm. Please post your project under the name "CSP584 Project - Lastname, FirstName". On the very first page write your members names and email addresses.

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