9/30/23, 1:28 PM Project Proposal

Project Proposal

Start Assignment

Due Friday by 5:29pm

Points 100

Submitting a file upload (Turnitin enabled)

File Types pdf

Specific Course Learning Outcome:

CLO 3 - Employ tools (such as Hadoop and Spark) and techniques for big data systems, technologies, and applications as part of the homework and project. [PLO 2, 5, 6]

CLO 4 - Create your own big data systems, technologies, and applications problem and design and implement software solutions by applying knowledge learned in the course to complete a course project. [PLO 1, 2, 3, 4, 5, 6]

CLO 7 - Effectively present and communicate knowledge about big data systems, technologies, and applications acquired in the course. [PLO 3, 6]

CLO 9 - Leverage emerging big data systems, technologies, and applications to transform data into knowledge though capturing, managing, analyzing, and understanding large data at volumes and rates. [PLO 2]

[Group assignment; One submission per group]

- 1. Project is a great way to learn because you frame your own questions / problems and come up with your own solutions! Please choose a topic that is relevant to the topics of this course (see syllabus) and **do something new**.
- 2. Remember: All assignments aim to measure how well students mastered the course topics and made progress towards the CLOs of this course. Implementing full-stack applications, amazing front-end / UI, recommender systems, and other tasks not related to the course <u>may not</u> count towards the grade.
- 3. The goal of the project is to exercise what is learned in this course not any Data Analytics topic. Discover your passion and do something different that will have a lasting impact on your career. If you work on a problem for which solutions are already available online, it's an opportunity wasted.
- 4. To quote a student who took my course in the past: "... the class project was a lot of fun to work on and it was the most fun I've had with a school project in years!" There have been students who got a job based on the project done for my course and others who have published research papers and gave user conference presentations based on the course project. So, please choose your project topic wisely!

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Please email me If you want to do a project in sustainability on campus. There is a funding opportunity that we can possibly apply for:

(https://docs.google.com/forms/d/e/1FAlpQLSdb6WkQfEsdUhkb91S5jVEqiuddX3o0iaKtM7pvluB9c-OzFw/viewform)

- 5. Please submit 1-5 page project proposal (can subsequently be included in your final report, appropriately). Remember to include the following in it:
 - 1. Abstract (a brief summary describing the goal and approach)
 - 2. Motivation for the project
 - 3. Brief literature survey, which can be expanded in your final report.
 - 4. Methodology (experiment design, algorithms to be used, evaluation methods, etc)
 - 5. Deliverables (including the possibility of writing a technical paper to submit to a journal, etc.) and milestones.
 - 6. Team members and their roles.
 - 7. Explain how the criteria in the rubric are met.
 - 8. Any other that you may think is relevant.

Please feel free to use

<u>\$CANVAS_OBJECT_REFERENCE\$/discussion_topics/gd92e9084b8be641d96639dcf6edef83e</u>
(https://sjsu.instructure.com/courses/1571736/discussion_topics/5008968)

to discuss and come up with a unique topic.

6. Peer reviews are optional. Here's a good reference on doing peer reviews:

https://community.canvasIms.com/t5/Video-Guide/Feedback-Overview-Students/ta-p/383514 (https://community.canvasIms.com/t5/Video-Guide/Feedback-Overview-Students/ta-p/383514)

and one more:

https://community.canvaslms.com/t5/Student-Guide/How-do-I-submit-a-peer-review-to-an-assignment/ta-p/293 (https://community.canvaslms.com/t5/Student-Guide/How-do-I-submit-a-peer-review-to-an-assignment/ta-p/293)

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Criteria	Ratings	Pts
Abstract		10 pts
Motivation		10 pts
Literature survey		10 pts
Methodology experiment design, algorithms to be used, evaluation methods		10 pts
Deliverables Including the possibility of writing a technical paper to submit to a journal, etc., and milestones.		10 pts
Team members and their roles Is the workload uniformly distributed?		10 pts
Relevance to the course Scope of the project falls within the topics covered in the course?		10 pts
Technical Difficulty		10 pts
Novelty Uniqueness		10 pts
Impact Chances of publication and utility		10 pts

Total Points: 100

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