CSCI 485
Fall 2025

Student ID: Points: 30

Student Name: Contribution: 1%

Students are required to **discuss their project proposal with the instructor during the lab session on September 19, 2025,** at their respective scheduled lab times.
This discussion is mandatory before moving on to the next step.

Project Proposal Template

Please complete the following fields. Word limit: 200–300 words.

Project Title:

(Enter a short and meaningful title for your project.)

Domain:

(Mention the domain, e.g., e-commerce, social media, healthcare, education etc.)

Reason for Selection:

(Explain why you chose this project idea. What interests you about it?)

Why NoSQL (MongoDB) is a Good Fit:

(Explain why this application requires MongoDB instead of a relational database. Discuss schema flexibility, handling of unstructured or semi-structured data, scalability, and relationships.)

Example Project Proposal

Project Title:
SmartFitness Tracker App

Domain:
Health and Fitness

Reason for Selection:
I chose this project because health and fitness tracking is a rapidly growing industry, and personalized data insights are in high demand. People use various fitness devices and mobile apps to track workouts, diet, and health metrics. Developing a database to store and analyze such data can showcase real-world applications of MongoDB.

Why NoSQL (MongoDB) is a Good Fit:
MongoDB is ideal for this project because fitness data is highly dynamic and varies from user to user. Each user may have different attributes such as workout routines, diet plans, heart rate logs, and sleep data. A relational database would require numerous tables and complex joins, whereas MongoDB allows flexible document structures. The schema flexibility of MongoDB makes it suitable for storing evolving fitness data, supporting fast reads and writes, and handling large-scale data generated from multiple devices.