**CMSI 401 PROJECT PROPOSAL: COLD CASE DATABASE**

**Project Proposal**

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**DESCRIPTION:**

For our senior thesis project we will build a case information database and front-end interface for many of the Los Angeles Police Department’s (LAPD) cases. Our focus will be to provide an easy experience for detectives to add new cases, update existing ones as new information comes in, and query all existing cases with a wide search criteria. Ideally our database will be able to track the completeness of data related to each specific case and predict which cases are most worthwhile investigating. Our end users will mainly be homicide detectives; however, our project should be robust enough for other divisions to be able to track their cases in it as well. We will need to include user authentication to protect classified information, additionally some users should be given read-only access so they can track the progress of other detectives and cases, while other users should be granted read and write access to update case information. We intend to implement this project as a web-based application that, depending on how it is deployed, should be accessible on any computer using a modern web browser. If time permits we will implement a barcode tracking system for case binders.

**JUSTIFICATION:**

This project serves as a culmination of the LMU’s Computer Science curriculum. The design of this project will combine our individual experiences and knowledge of website design, interface design, database design, and deployment. Although our client wants a friendly front-end interface, creating this project entails much more. This project puts us in a great situation to implement an intuitive user interface using knowledge from our Interaction Design course. While we put these previously learned concepts to use, the database component of the project will allow us to apply the materials we are currently learning in Database Systems as well. By applying these concepts as we are learning them, we will learn through both coursework and real world experiences. This is an opportunity to become well versed in SQL, construct efficient models and queries, and utilize our knowledge of Data Structures and Algorithms. Since Dr. Johnson is instructing both 401 and 486, we are sure his insights and advice will be invaluable. We believe that we are partaking in a project that will be robust and viable enough to help LAPD for years to come, and for that reason, we are all on board to make this project happen.