

1. Please list out changes in the directions of your project if the final project is different from your original proposal (based on your stage 1 proposal submission).
 - a. We modified user options and filters, and opted for the input search bar for all operations.
 - b. The potential map display is removed.
2. Discuss what you think your application achieved or failed to achieve regarding its usefulness..
 - a. Our website is able to provide users with basic information related to crime in Los Angeles. Our website is useful because we have an interface that is easy to interact with in which users would be able to make informed decisions related to traveling to LA or staying at a certain area in LA. Our website failed to achieve its usefulness for providing more information with each crime, such as the weapon used or victim descent which may be useful for users.
3. Discuss if you changed the schema or source of the data for your application
 - a. We followed the database schema from stage 2, and did not change the source of our data.
4. Discuss what you change to your ER diagram and/or your table implementations. What are some differences between the original design and the final design? Why? What do you think is a more suitable design?
 - a. Our final design is a bit simpler than the original design in that we discarded the TimePeriod table and put the time in the crime table instead. Other than that, it is relatively the same as the ER diagram and table implementations we made in the beginning. We think our final version for our table is a more suitable design because, as pointed out by the TA, time period is not an entity and instead is an attribute in the crime entity.
5. Discuss what functionalities you added or removed. Why?
 - a. Our application's functionality mostly fits in line with what was described in the project proposal. The only thing we didn't add is the map with areas being color coded. We knew this would be a stretch due to time constraints and decided later on that it would be best to remove the feature and focus on improving other aspects. One thing that was added is the bar chart shown on the about page which visualizes the crime counts by area.
6. Explain how you think your advanced database programs complement your application.
 - a. I think our advanced database programs complement our application very well and align with the purpose of our application. Showing areas by crime count allows users to determine which Los Angeles areas are safer to either visit or live in. Being able to show the different types of crimes gives an idea of what you should be on the lookout for and maybe gives the user info on which home precautions should be taken given the types of crimes being committed.
7. Each team member should describe one technical challenge that the team encountered. This should be sufficiently detailed such that another future team could use this as helpful advice if they were to start a similar project or where to maintain your project.

- a. DAVID
 - i. We encountered a technical obstacle when attempting to establish a connection with the SQL server on GCP. This involved a few challenges, including depleting account credits, unsuccessful connection attempts, and the need for clearer debugging processes.
 - b. ANNA
 - i. A technical challenge we encountered is coming up with a way to load the data into mysql. We settled on using a website that parses an input csv file into an sql query that adds a selected table.
 - c. HAMMAD
 - i. A technical challenge that we encountered was figuring out how to have multiple pages linked within the frontend. We couldn't just add hyperlinks to the buttons themselves because the page would not be displayed with data from the backend as is. It would need to also be connected using the server.js file. The solution was to have the new .ejs file rendered in the server.js file by adding it as a method so that it could update from the home page to the about page and vice versa.
 - d. MUKUT
8. Are there other things that changed comparing the final application with the original proposal?
- a. Other than the map and time table, the only thing that changed would be how many filtering options we have. The proposal listed mentioned filtering by date, which we do not have in the final application.
9. Describe future work that you think, other than the interface, that the application can improve on
- a. We can reorganize the table set up so that we do not waste space and for a single foreign key table.
 - b. We can add filters for a more dynamic display of the result table and the bar chart.
10. Describe the final division of labor and how well you managed teamwork.'
- a. Our team worked together well on this project.