The title of your report

Full names of report authors / group participants in alphabetical order

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# Abstract

In the abstract, provide a summary overview of your project, its goals and accomplishments. For the mid-project status report, I don’t expect this report to be complete, but I do want, at minimum, the sections on System Architecture and Database Design to be completed so that the TAs and I can begin to offer you technical feedback.

# Introduction

Explain what your project is about and its significance and the main features or use-cases. This text can be drawn extensively from your project proposal but include any updates that reflect instructor feedback if needed.

# System Architecture

Describe and diagram the architecture of your application and how different components communicate with one another. Include, for example, application components, data sources, databases, web-servers, application servers, etc. What we want is a high-level summary of how your project is intended to function as an integrated system.

# Database Design

Explain your database design. Include a figure with your ER Diagram / Conceptual Model. Explain the *key* entities and their relationships. Use the MySQL modeling tool to address both these requirements. We’ll assess the quality of your design and its effectiveness in addressing your project requirements. We may offer suggestions to improve your design. If you are using a non-relational database like Mongo, explain your document model including collection structure, document layout, fields, etc.

# Data Acquisition

Explain step-by-step how you acquired your data including all data sources. Use numbered citations like this [1] or like this [2, 3] and list any references at the end of your report following a consistent style. Describe any work you did to modify or clean the data prior to being loaded into the database. If you made up your data as part of an application prototype document any assumptions that may have been built into the data-generation process. Provide sufficient detail to enable the reader to reproduce your results.

# User Interface

If you created a proof-of-concept application then describe your user-interface and its capabilities, use-cases, etc. Include one or two screen shots that conveys to the reader what it is like to use your application. For the status report, it is sufficient to include mocked diagrams or even a hand-drawn sketch.

# Analysis and Results

Those of you doing a data-analytics-type project should present the results of your analysis here. Include charts, graphs, and other visualizations that demonstrate key insights.

# Conclusions

Summarize your results. Be concrete about your accomplishments as well as what perhaps didn’t go so well.

# Author Contributions

Describe how each member of your group contributed to the success of your project. There are many ways to make meaningful contributions to a project. I don’t expect each person to contribute to each aspect of the project. Some of you are more experienced web-developers, others make tackle the database design, or you may be primarily responsible for creating the class presentations and the writing of this report.

# References

1. Adibuzzaman, M., et al., *Big data in healthcare - the promises, challenges and opportunities from a research perspective: A case study with a model database.* AMIA Annu Symp Proc, 2017. **2017**: p. 384-392.

2. Murthy S., A.R., Goodwin R., Keskinocak P. Rachlin J., Wu F., Yeh J., Fuhrer R., Kumaran S., Aggarwal A., Sturzenbecker M., Jayaraman R., Daigle R., *Cooperative Multiobjective Decision Support for the Paper Industry.* Interfaces, 1999. **29**(5): p. 5-30.

3. Rachlin, J., et al., *Biological context networks: a mosaic view of the interactome.* Mol Syst Biol, 2006. **2**: p. 66.