

What your report should contain:

☐ You should have the following chapters in order:

- ☐ **Introduction:** Discuss the application domain, your client, the data, and any potential for product commercialization. Also include the URL for your project as well as sample (working) usernames and passwords for each type of user in your system.
- ☐ **ERD:** Must include an ERD in any type of notation (Chen, Crow's Foot notation, or the traditional way). You should explain all constraints and provide DDL for all tables.
- ☐ **Queries:** List at least 20 useful queries (with justification) for your system in natural language, relational algebra, and SQL. You should use an "extended" relational algebra for queries containing aggregates.
- ☐ **Analytics:** List at least 10 useful analytic functions (with justification) for your system in natural language and SQL.
- ☐ **Normalization:** Provide an in-depth discussion of normalization, dependency preservation, and de-normalization with respect to your project.
- ☐ **Indexing selection:** Give an in-depth discussion of indexing as it relates to your project including how/ why you created specific additional indexes and why you decided on specific indexing structures (B+, Bitmap, etc.). Provide the associated SQL statement for creation of those indexes.

What your report should contain - more

☞ You should have the following chapters in order:

- ☞ **Optimization and Tuning:** Discuss the topics covered in class, specifically how they impacted the design of your final project.
- ☞ **Security setting:** Discuss the topics covered in class, specifically how they impacted your final project (e.g. any views you created for your project, including the SQL statement used to create the view; discretionary access control setting, etc.).
- ☞ **Other topics:** If you included any other database-related items in your project (triggers, PL/ SQL, Hive, Hbase, etc.), you should provide code and discuss their use.
- ☞ **User's manual:** Provide a manual that allows anyone to learn how to operate every aspect of your project. Include screenshots of interfaces and step-by-step instructions. with interfaces and instructions to use your system.