

UI & Database Development

Responses to these questions should be sent by _____.

1. Develop paper prototypes of the each screen in the application based on your current understanding.
2. Using HCI principles, review your design and carefully consider if the workflow is appropriate for the user and if the look, feel, and behavior is consistent with other applications. Revise your design.
3. Develop simple use-case descriptions that explain all the major functionality of the application. It should clearly explain the transitions between different screens and the function of each screen.

Bring the prototypes and use-cases to the next meeting for review.

4. Make a table of all the data fields that need to be managed by a database. Include a column with a brief description of each and a column indicating the type of data in each field.
5. Create an ER diagram showing the relationships of all data in the application.
6. Explain why a database is truly necessary for this project. Consider if flat files, a spreadsheet, or XML files would be a suitable alternative.
7. If a database is necessary, what DBMS will you be using and why have you chosen it? If a database isn't necessary, what will you be using:
8. Provide a data dictionary explaining: a) the meaning of each field, b) how each field is created (which screen creates it), and c) if it can be deleted, the circumstances that will cause it to be deleted.

Be sure you have thoroughly reviewed your database design and checked it against your UI and use-cases.

9. Create an example database with made-up data.
10. Have your ER diagram reviewed by a faculty member or working professional with database expertise. Be sure to: a) contact them in advance and request potential meeting times, b) provide them with the data dictionary, ER diagrams, and example database.

11. At your next meeting you should be ready to explain:

- How the UI can be used for every major feature desired by your client.
- How the UI interact with ever field in the database (where data is created from, how it can be removed, etc.).
- The purpose of every field in the database.