CS Capstone Design

Alpha Prototype Demo Grading Sheet (100 pts)

TEAM: Pandemic Processing

Overview: The purpose of the Alpha Prototype Demo is to clearly demonstrate the extend to which all core user flows envisioned for the product are supported by the current implementation. The flow of the demo is very natural: you simply introduce each of the major usage scenarios, and then follow through each of them, just as an end-user would in using the product. Grading is based on how completely the current product supports all key functional aspects within a coherent, realistic user flow. Interface refinement, clunkiness, and aesthetics should be ignored for now; the focus is simply on functional ability to complete the user flow.

This template is fleshed out by the team, approved by the team mentor, and brought to demo as a grading sheet.

Overview of major product use cases

Based on the Requirements document and subsequent development discussions with your client and mentor, briefly describe each of the key use cases for your product:

UC1: Uploading and running user code. Safely running user code is difficult when the code could be untrustworthy. We will show that we can safely sandbox external code and run it with specified parameters.

UC2: Displaying output of user code. We must make sure code output is well formatted and parse it effectively. We will demonstrate that the application can parse an output file and graph the data points.

UC3: User manipulation of input variables. The user must be able to specify which variables may be changed when running the code, and then when graphing the user must be able to change those variables which are specified.

UC4: Ability to create threads, posts, and comments. Admins should be able to create threads, within these threads are posts within the posts there is discussion via comments. Posts can be public or private. Threads/posts can also be attached to the models.

UC5: Users can be granted Administrative privileges. Since admins are responsible for adding threads, users can be granted Admin privileges.

UC6: Users can create accounts. A user should be able to create an account and have their information stored securely in the database.

UC7: Users can create and join groups. Users should be able to create and join groups with other users.

UC8: Users can add modify account information. Once a user creates an account they should be able to modify information such as institution, profile picture, contact information, and biography.

Etc. Most products will have between 2 and 5 core use cases.

User Flows: Detailed walk-through for each use case:

In this section, we outline the demonstrations of each use case that we have prepared, giving a step-by-step outline of the user flow that would be followed by a real user for that use case.

Use case 1: User uploads code and generates a dynamically modifiable model

(UC1, UC2, UC3)

User Flow:

1. A user clicks the model tab
2. A user clicks create new model
3. A user is prompted with a form to upload their code, give their model a name, a description, and state which parameters are modifiable
4. The code is ran in a secure sandbox
5. If the code is not malicious it'll generate an output CSV
6. The output CSV will be used to generate a model, the model will be uploaded and connected to a thread and a post
7. Another user can view the model and modify the parameters the original user specified they could and see how the visual model changes in real-time

Evaluation and Comments:

- ✔ Convincingly demo'd each of listed challenges?

- ✔ Other evaluative comments:

Use Case 2: Within an Admin-User created thread a user creates a post where other users can comment

(UC4)

User Flow:

1. If a thread already exists a user will simply click on the thread (if not admins will generate threads)
2. Once the user has clicked on a thread, they will be able to view other posts and create a post
3. If they click on create a new post they will be sent to a form to create a new textual post.
    a. Title of post
    b. Description

    c. Public/Private

4. The post will then be displayed with the other posts in the thread

Evaluation and Comments:

- ✔ Convincingly demo'd each of listed challenges?
- ✔ Other evaluative comments:

Use case 3: A user should be able to create an account with a certain set of required and non-required fields, they than can modify this information later, join and create groups, and become an administrator.

(UC5, UC6, UC7, UC8)

User Flow:

1. A user will go to the webpage in the top right corner and click sign up
2. They will sign up and their information will be stored securely. Filling our fields such as:
    a. User name
    b. Email
    c. Password
    d. Institution
3. They will then be prompted to their user dashboard where they can modify any of this information. This is also where they can upload a biography and profile picture.
4. Once on this user dashboard they can create groups, view their models, and view models that they follow

Evaluation and Comments:

- ✔ Convincingly demo'd each of listed challenges?
- ✔ Other evaluative comments:

Known short-comings: Functionality still deficient/missing:

If there were challenges you listed earlier that were *not* covered by a demo, list here. This will hopefully be a short list…but better to be clear about where you are. If you have items here, you could list (if applicable) any pending plans/schedule to get this implemented.