CS Capstone Design

Technical Demo Grading Sheet (100 pts)

TEAM: DigiTool Inc.

Overview: The main purpose of the "Technical Demos" is to very clearly communicate the extent to which the team has identified key challenges in the project, and has proven solutions to those challenges. Grading is based on how complete/accurate the list of challenges is, , and how convincingly and completely the given demos cover the given challenges.

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

Risky technical challenges

Based on our requirements acquisition work and current understanding of the problem and envisioned solution, the following are the key technical challenges that we will need to overcome in implementing our solution:

C1: Managing a database which contains usernames, passwords, and possibly a user's progress. The challenging part is allowing communication between the website and database to be efficient and accurate. We want to make sure that user information gets properly stored in our database while remaining secure. To prove a good solution, we'd have to present a user registration with communication to our database. We'd also have to show validation if that user were to register and then log in immediately after.

C2: Creating effective buttons and interactive events in each module. The challenging part is showcasing a specific event / action based on a button clicked. We want each event to accurately represent a task. For example, if I wanted to fill a square in, I should only have to click once to fill it in and every other click after that shouldn't darken the square by constantly calling a function. To prove a good solution, we'd have to show that each button or action accurately works.

C3: Giving stars to a user based on number of missed attempts. The challenging part is keeping track of the number of attempts a user has and calling a function to correlate with how well a user is doing. To prove a good solution, we'd have to show a user getting a question right on the first, second, and third attempt to see an accurate representation of stars given to a user.

C4: Keeping track of a user's overall progress. The challenging part is keeping track of the overall progress that a user has for each module. We'd have to find a way to save data so that when a user logs out and logs back in, their data will remain the same. To prove a good solution, we'd have to show a user completing a level. Once they have completed that level, they would have to log out and log back in. If they're able to load where they previously left off, then it should be functional.

Challenges covered by demos:

In this section, we outline the demonstrations we have prepared, and exactly which of the challenge(s) each one of them proves a solution to.

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Demonstration 1: User Login / Validation

Challenges addressed: C1: Managing a database which contains usernames, passwords, and possibly a user's progress.

Flight Plan: Step by step overview of demo

1. We will create an account.
2. We will load the database with the saved username / password.
3. We will then log in using created account credentials and the DigiTool homepage will load.

Evaluation:

- ✓ Convincingly demo'd each of listed challenges?

- ✓ Other evaluative comments:

Demonstration 2: Button / Event Functionality & User Stars

Challenges addressed: C2: Creating effective buttons and interactive events in each module. C3: Giving stars to a user based on number of missed attempts.

Flight Plan: Step by step overview of demo

4. We will load module 1.
5. We will try to answer the question by pressing buttons and filling in textboxes.
6. If the answer is correct, we should see a user star score alert and if we are wrong, we should be given two more chances. After those two chances are up, you should see a user star alert of 0 stars given.

Evaluation:

- ✓ Convincingly demo'd each of listed challenges?

- ✓ Other evaluative comments:

Other challenges recognized by not addressed by demo:
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 to reduce these risks.

- C4: Keeping track of a user's overall progress.

  - We just don't have enough time to create this before the deadline. Next semester this should not be a problem.