# **CS** Capstone Design

# **Technical Demo Grading Sheet** (100 pts)

# **TEAM: HeartStep**

**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:** User Authentication. We need to be able to have users log in via OAuth2. To prove a good solution, we need to build a tool to test logins using OAuth2.
- **C2: Database Export.** We need to be able to export data from our database in a CSV format as specified by our client. To prove a good solution, we need to show that we can export in that format as requested.
- **C3: Stored File Access.** We need to be able to access and delete locally stored files as specified by our client. This will be used for storing previous exports. To prove a good solution, we need to show that we can create folders where users can access files on our web app.
- **C4: Plot activity data.** We need to be able to plot activity data on a webpage using either a CSV file or from our database. To prove a good solution, we need to show a plot of activity data on our web app.
- **C5:** Website navigation. We need to be able to navigate our website from any point. To prove a good solution, we need to show how web pages would be connected on our user interface.
- **C6: API use.** We need to be able to export data via our API. To prove a good solution, we need to connect our API to a database and export data.

# **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.

**Demonstration 1: Basic Frontend Functions** 

<u>Challenges addressed:</u> C1: User Authentication, C3: Stored File Access, C4: Plot activity data

# Flight Plan: Step by step overview of demo

- 1. First, we will log in to a demo webpage using OAuth2.
- 2. Then, we will access a webpage that shows a file in a folder, and delete that file to show we can delete it.
- 3. Then, we will show a graph using activity data from a CSV.

#### **Evaluation:**

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

\_\_\_\_

## **Demonstration 2: Database Export**

**Challenges addressed:** C2: Database Export

Flight Plan: Step by step overview of demo

- 1. First, we will show our database
- 2. Then, we will export a CSV file
- 3. Then, we will change part of our database.
- 4. Then, we will export a new CSV file to show that it has changed.

#### Evaluation:

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

## **Demonstration 3: Website Navigation Chart**

Challenges addressed: C5: Website navigation

Flight Plan: Step by step overview of demo

- 1. We will show a tree that shows how all our webpages are connected.
- 2. Then, we will show a mockup website navigation user interface for what we believe it will look like.

#### **Evaluation:**

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

# Other challenges recognized by not addressed by demo:

• **C6: API use.** We will not be demoing this, as our client wants us to focus on the API far later in the project and says we should not do this.