



# CS Capstone Design

## Technical Demo Grading Sheet (100pts)

### **TEAM:** ECOdgers

**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 Permissions/Management.** For this challenge we need to give permissions to three different user groups. The primary user group is the CPCEUSU employees while the secondary groups being outside federal/non-federal organizations as well as the public. We must demonstrate that the CPCEUSU have the most permissions with access to information that the secondary groups may not be allowed to view.

(For the next challenges the user will be a CPCEUSU employee)

**C2: View project based on search criteria.** It will be challenging to query the database and grab information for the end user. Showing all the details that are attributed to a specific project will be the main goal of this demonstration.

**C3: Add project.** Create a project and add to the database using a form with robust validation to prevent user errors. Our product will need to show that a user, with correct permissions, can add a project with project details. This will be demonstrated through our products user interface.

**C4 : Remove project.** Similar to C3, now our product must show that it can remove a project from the database without error. We will demonstrate this using a simple user interface implemented on our web portal.

**C5: Service to multiple users using WSGI.** This will be the hardest to demonstrate because we need multiple machines running our product at once. This will be demonstrated by using two different end systems that are being served by our development server, which will house the same technology as our end product, at once.

**C6: Help Document.** There must be functionality that gives the user some help documentation. In the event where an end user is confused with certain functionality, there will be a avenue of help available through our product. We will demonstrate ‘help’ functionality that is specific to each user group.

## **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 management & permissions.**

Challenges addressed: C1, C6

Flight Plan: Step by step overview of demo

1. View site as public user
  - a. View created projects
  - b. Show that they cannot modify projects without permission
  - c. Show relevant help document for index
2. Login as outside organization
  - a. Log in
  - b. Show that they cannot modify projects without permission
  - c. Show relevant help document for index
  - d. Log out
3. Login as CPCESU employee
  - a. Log in
  - b. Show relevant help document for index
  - c. Move on to Demonstration 2 to show project management capabilities

Evaluation:

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

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### **Demonstration 2: Project management.**

Challenges addressed: C2, C3, C4

Flight Plan: Step by step overview of demo

1. Add new project
  - a. Add details to fields
  - b. Show form validation when user enters incorrect data.
  - c. Success confirmation message
2. View new project
  - a. Click the newly created project to view details
  - b. Edit project info
  - c. Demonstrate the updated info is properly displayed

3. Remove new project
  - a. Remove the project entirely
  - b. Demonstrate that the project was removed successfully by verifying it does not exist through the project list page.

Evaluation:

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

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**Demonstration 3: Multiple end users being served.**

Challenges addressed: C5

Flight Plan: Step by step overview of demo

1. Set up two end users and land them on the same page. Every step should show a very low latency with functionality.
2. Have both end users add a new project
3. Show that they can view separate projects

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.