

CS Capstone Design

Technical Demo Grading Sheet (100 pts)

TEAM: Portcullis

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: Docker Difficulties. A working Docker configuration is needed to rapidly develop and deploy a database solution. Without it, this project cannot progress. In a demo, we need to show that we have the configured docker to run on both Linux and Windows OS's.

C2: AWS Backbone. AWS is a good solution for connecting all the components into a unified system. Without this capability, development time will increase, and the team will need to homebrew its own system. In a demo, we need to show that the team has access to this resource and can develop a system based on this service.

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: Docker Does Work

Challenges addressed: **Docker Difficulties**

Flight Plan: Step by step overview of demo

1. Install a working database from a Docker instance on a Windows machine.
2. Demonstrate that the database works by inserting a table and junk data into the table.
3. Install a working database from a Docker instance on a Linux machine.
4. Demonstrate that the database works by inserting a table and junk data into the table.

Evaluation:

- ✓ Convincingly demo'd each of listed challenges?
 - ✓ Other evaluative comments:
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Demonstration 2: AWS Up and Running

Challenges addressed: AWS Backbone

Flight Plan: Step by step overview of demo

1. Show that the team has an account which can be used to deploy resources
2. Deploy an empty AWS IoT resource (IoT Core)
3. Configure a test service

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.

One challenge that the team faces is that we do not have hardware to develop with. We are currently in the process of acquiring the needed hardware but currently, the team is relying on mock up data to show that data transactions are occurring being components.