CS Capstone Design

Final Project Demo Grading Sheet (50 pts)

50	
A: +90%	45
B: +80%	40
C: +70%	35
D: +60%	30
F: <50%	25

TEAM: _Dendro Dawgz_____

Overview: The main purpose of the "Technical Demos" is to very clearly explore the extent to which the team has implemented the key functional and performance requirements for their project. Grading is based on two factors:

- **Completeness:** Have all of the key requirements been implemented. To what extent does the product have all of the functionalities and performance that was promised.
- **Quality:** Just having basic functionality is the bare minimum. What is the quality of the implementation? Is the resulting product aesthetically pleasing, easy to use, and a pleasure to work with; to what extent is it "ready for market"?

This template is fleshed out by the team, **reviewed and approved by CS mentor beforehand,** and then brought to demo in hardcopy for the mentor to use as a grading sheet.

Requirements Review

Based on our requirements acquisition work and evolution during implementation, the following are the key technical requirements driving of our product:

R1: Reading in data from a dendrometer.

Specific implemented functionalities that satisfy this requirement:

- Able to download data from a dendrometer.

R2: Creating a frontend for a mobile application.

Specific implemented functionalities that satisfy this requirement:

- Home page displays download and dendrometer information. Allowing a user to download data from a dendrometer.
- Graph page displays dendrometer data and allows a user to view specific data.
- File Viewer page displays all available dendrometer data for that specific user in csv format. Also allows a user to merge, graph, upload, and share data.
- Option page allows a user to change specific settings, also log in and out.

R3: Exporting and sharing data using the cloud.

Specific implemented functionalities that satisfy this requirement:

- Able to upload data, as csv files, to the cloud.
- Able to share data with other users.
- Able to log in/out and register an account.

R4: Computing and displaying statistical analysis.

Specific implemented functionalities that satisfy this requirement:

- Able to select files in the File Viewer page and graph them. Can also merge files and graph them.
- Able to convert files to either serial or parallel.
- Able to observe temperature and growth data in a graph for each data file.

Demonstration Sequences:

This section outlines the demonstration sequences prepared to prove the above functionalities. Each sequence is a coherent walk-through of some piece/area of the product, designed to highlight implementation of specific requirements/functionalities outlined in the last section.

Demonstration Sequence 1: Dendrometer Communication

Requirements demonstrated: R1

Flight Plan for this demo sequence:

1. Obtain dendrometer and functioning TMD adapter
2. Plug the adapter into the Android mobile device
3. Open the simple application
4. Connect the dendrometer to the TMD adapter
5. The application will read in the data and display that it is reading in the data
6. Once downloaded, the data will be stored and viewable as a CSV file on the user's device
7. View the newly created file to additionally showcase that information was successfully read in from the dendrometer

Evaluation (filled in real-time by mentor):

✔ Convincingly demo'd each of targeted requirements?

✔ Quality, aesthetics and other evaluative comments:

Demonstration Sequence 2: Frontend

Requirements demonstrated: R2

Flight Plan for this demo sequence:

1. Open DendroDoggie application on Tablet/Phone
2. Click File Viewer button to navigate to main data selection page
3. Click Options button to navigate to the settings page
4. Click on Create Bookmark button
5. Click Home button to navigate back to home page

Evaluation (filled in real-time by mentor):

✔ Convincingly demo'd each of targeted requirements?

✔ Quality, aesthetics and other evaluative comments:

Demonstration Sequence 3: Cloud Export

Requirements demonstrated: R3

Flight Plan for this demo sequence:

1. Open the application and navigate to File Viewer page
2. Select a file and click the upload to cloud button
3. Select the file that was just uploaded and click the share button
4. Input the user you want to share the file with, the file will now show in that users own application

Evaluation (filled in real-time by mentor):

✔ Convincingly demo'd each of targeted requirements?

✔ Quality, aesthetics and other evaluative comments:

Demonstration Sequence 4: Statistical Analyses

Requirements demonstrated: R4

Flight Plan for this demo sequence:

Tablet must already hold a dataset inside the database of the application. We want this set to be extensively large to prove feasibility with edge case

1. Open DendroDoggie application on Tablet
2. Select File Viewer page on application's home screen
3. Select desired file to view and click the graph button
4. Application will create graphical representation of data
5. Go back to File Viewer page and select two files to merge
6. Click the graph button and the application will create a graph for the two files
7. Go back to File Viewer page and select two files, then press convert to serial or convert parallel

Evaluation (filled in real-time by mentor):

✔ Convincingly demo'd each of targeted requirements?

✔ Quality, aesthetics and other evaluative comments:

Other challenges recognized by not addressed by demo:

If there were requirements that 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 what is done and not. If there are items here, one could provide explanation of why they weren't done.