# **CS** Capstone Design

# Technical Demo Grading Sheet (100 pts)

# TEAM: RED ALERT

**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: Create user account -** This is a challenging aspect of our project because we want each user to have their own account with an associated password and username and be able to save data associated with the account. In order to effectively demo this challenge, we would need to show a user account with an associated username and password

**C2:** Get subset of customers from map - This may be the most difficult of our challenges as we must find a way to graphically select a region on a map and return the subset of clients within that region. To demo this effectively, we should be able to show some functionality of visual map interaction that results in a subset of address data.

**C3: Send email notifications -** This is a challenge as we must find a method by which to have our back-end communicate with an email server to send an email to a customer. In order to effectively demo this, we would need to show some part of our system successfully sending an email to an outside email account.

**C4: Send text notifications -** Similar to the email challenge, we must find a way to get our back-end to send a text notification to an outside phone number successfully.

**C5:** Access clients in database - This is a challenge since there are a wide number of clients we can query. To effectively demo this challenge, we will need to show our system querying a database based on some attribute.

**C6: Save search results -** This challenge goes hand-in hand with our user account challenge since users should be able to save searches. This will be challenging since we'll need a data structure and method by which to save search data and associate it with an account. To demo this challenge, we will demonstrate how to save a search and show its successfulness.

**C7: Automate notifications -** This will be a challenge since we'll have to use some sort of timing system to determine when and how often an automated notification will be sent. To effectively demonstrate this, we'll show that we can send notifications in an automated fashion.

**C8: Create a dashboard for users -** This challenge will not be too hard, but will still take some effort to bring our tools together in an organized and understandable way for the user. To demo this challenge, we will show an interface that includes some defined features above.

# Challenges covered by demos:

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

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# Demonstration 1: Create a user account and login with the newly created account.

Challenges addressed: C1

Flight Plan: Step by step overview of demo

- 1. First we will navigate to the new account creation page on the website.
- 2. Then we will create a new user account.
- 3. Lastly we will login using the credentials used to create the new account.

# Evaluation:

Convincingly demo'd each of listed challenges?

Other evaluative comments:

Demonstration 2: Select multiple clients on a digital map.

#### Challenges addressed: C2

#### Flight Plan: Step by step overview of demo

1. First we will navigate to the part of our site that contains the digital map.

2. Then we will use our selection tool to select multiple clients in an area based on users choice.

3. The clients will appear below the map showing that the correct clients were selected based on the users selection.

#### Evaluation:

Convincingly demo'd each of listed challenges?

Other evaluative comments:

#### Demonstration 3: Use the website to send text or email notifications

#### Challenges addressed: C3, C4

#### Flight Plan: Step by step overview of demo

1. First we will create a message to be sent over text and email.

2. We will then send the email to a team member's inbox and a text message to a team member's phone.

3. Finally we will show the messages to our mentor.

#### Evaluation:

Convincingly demo'd each of listed challenges?

Other evaluative comments:

**Demonstration 4: Access clients in database** 

#### Challenges addressed: C5

## Flight Plan: Step by step overview of demo

1. First we will show our mentor our demo database with fake client data.

2. We will then click a button on the site that will query our database and retrieve some client database records.

3. Finally our site will display the client information on the screen.

### Evaluation:

Convincingly demo'd each of listed challenges?

Other evaluative comments:

# **Demonstration 5: Save search results**

#### Challenges addressed: C6

Flight Plan: Step by step overview of demo

1. First we will type a query into a demonstration search bar.

2. The query we make will then appear in an area on the site labeled saved searches.

3. We will then click on the saved search which will be placed back into the search bar without needing to retype the query.

#### Evaluation:

Convincingly demo'd each of listed challenges?

Other evaluative comments:

# Demonstration 6: Create a dashboard for users.

### Challenges addressed: C8

Flight Plan: Step by step overview of demo

- 1. Our team will create a dashboard layout that contains almost all of the elements we will have on our site dashboard.
- 2. We will show the dashboard layout to our mentor.

### 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.

# **C7** Automate notifications

We are not going to demo automated notifications because the biggest challenge will be implementing notifications in general. Once this feature is complete we assume that automating a notification will be relatively simple. We will only need one function to schedule the notification to be sent at a later time.