

## **Group Evaluation for MS1 Ethics Dashboard Group 1**

### **Checklick 0:**

**Brandon Krieg:** Your testing strategy includes usability testing and testing new features before implementing them in the main branch. What methods of testing will you use to ensure that these features are free of errors? E.g., unit tests, integration testing, .... Will some portion be automated, or will you provide manual inputs akin to how the system will operate on release to see if it behaves correctly?

**Sophia Joseph:** What are the evaluation privileges that come with the evaluators user group; are the privileges that are given to each user group very different from each other?

### **Checklick 1:**

**Sophia Joseph:** Are you going to make the site more user friendly; aka placing the buttons where it is easier for the user to find, etc?

**Sophia Joseph:** How will you ensure the security stays private in your application?

### **Checklick 2:**

**Alvin:** Since the scope has changed from what the client originally wanted, how will your group prepare the project in the way so future developers may implement changes and improvement into the system? For example if the client wanted to rebuild the general pages even though it is outside of the client scope, will there be any changes so that changes are implemented easier?

**Alvin:** Your group briefly touched the topic of security importance. During testing how will you ensure that user information remains secure on the web application?

### **Cyclops 0:**

**Sophia Joseph:** What are your plans for making it easier for the client to improve on this application in the future?

**Brandon Krieg:** You mention that the application will be used in a school setting. Is this targeted towards university students or grade school students? What sort of class would this be used in? Depending on what level of education this would be used in, how in-depth will Cyclops go into climate issues?

### **Cyclops 1:**

**Brandon Krieg:** What challenges do you expect to face when developing Cyclops for two entirely separate platforms (iOS and Android)? Will you be able to reuse a lot of code between both builds or will you have to build both entirely from the ground up due to the differences in operating systems?

**Monica Rampaul:** Since you are migrating the squarespace site to a separate, stand alone site, are you anticipating the need to update and review the currently implemented code/framework? What challenges are you expecting to face in terms of this?

### **Cyclops 2:**

**Monica Rampaul:** Was your choice to use the well-known google frameworks Dart, flutter, and MUI due to the fact that this would allow your web app to be more maintainable in the future?

**Monica Rampaul:** In terms of user groups, I know you said anyone who wants to learn and keep up to date is included in the user group however, does this mean anyone in the general public? Or more specific users such as students with studies in this specific area?

### **Ethics Dashboard 0:**

**Sophia Joseph:** Other than expanding to a mobile application, did the client specify any other long term plans, and if so, how are you going to make them easier to implement?

**Monica Rampaul:** You mention that the hosting needs to be secure. What exactly does this mean and how will you ensure that the hosting will be safe and secure for your web app?

### **Ethics Dashboard 2:**

**Sophia Joseph:** I am assuming student's grades and reports will be entered into a database that will need to have security. What security features are going to be implemented/ how do you plan to keep the application secure?

**Brandon Krieg:** You mention that Laravel prevents SQL injection attacks, is there any difference between using that and using a traditional prepared statement? Or is it just an automated prepared statement built into the framework?

### **Woo Woo 0:**

**Brandon Krieg:** I'm interested in some expansion about the helper bot. You mention it probably won't be made unless you have time, but what will it actually do? Is it sort of like the paperclip from Windows XP that will give tips or help you find things?

**Monica Rampaul:** It seems that there will be a good amount of security that is needed in order to secure users' payment information such as their credit card number. How will you ensure this protection? Will you be implementing this feature using a third party?

### **Woo Woo 1:**

**Brandon Krieg:** Is everyone on your team familiar with the tech stack? It is difficult to adopt a previous project with tech you have no choice over - will there be any difficulties related to this or is everyone confident with this tech stack?

**Monica Rampaul:** You mention that the backend must be able to support all of the users. How will you manage this / what challenges do you anticipate you might face at this point?

## **Woo Woo 2:**

**Sophia Joseph:** What specific security privileges do each user group get to hold in the application? (aka does one user group have more access to a database than the others?)

**Brandon Krieg:** Security is especially important when payment is involved. How will you verify that a payment is authentic, protect payment data, and process the payment from the client to wherever the money needs to go? Will you implement this manually, or use some well respected framework to handle payments?

## **LIMS 0:**

**Brandon Krieg:** How will you ensure that every single device can access this software correctly? Will that include writing device-specific code (as you mention it will have a mobile app) or will you build it solely as a web application?

**Monica Rampaul:** In terms of your front-end, what made you decide to use bootstrap over another framework such as tailwind? Will you be implementing any other type of open API in the front end in order to have the system migrate to a mobile app version?

## **LIMS 1:**

**Sophia Joseph:** Is there going to be an admin or admin group monitoring this application and continually checking for bugs and/or updating anything if needed?

**Sophia Joseph:** How is security for the application going to be implemented and maintained?

**Brandon Krieg:** How are you going to handle payment? Which software, methods, etc..

## **LIMS 2:**

**Monica Rampaul:** It seems that this project involves handling a lot of personal data. How will you store this data in a way that meets the compliance guidelines you discussed in your video?

**Monica Rampaul:** You mention the use of a portal in order to schedule testing. What else will this portal entail? Will it be specific to user accounts? Or is this portal purely for scheduling purposes?

## **AGMEETING 0:**

**Brandon Krieg:** How will you get the application to run on all devices? I imagine it will be a web application? Apologies if this was expanded upon by the narrator, there was an issue with the audio and I couldn't hear anything.

**Monica Rampaul:** Do you expect there to be migration issues in terms of getting your app to run on all devices (I.e. issues with different operating systems)?

#### **AGMEETING 1:**

**Sophia Joseph:** What is the difference between the administrator and the super administrator? How do their responsibilities/privileges differ?

**Sophia Joseph:** How is your group planning on handling the security features of the application?

#### **AGMEETING 2:**

**Brandon Krieg:** How do you plan to increase the functionality of the application while also making it lighter weight? Is this just a product of using newer software or will you explicitly write more efficient code into the program?

**Monica Rampaul:** What issues do you expect with transforming the website from an older framework to a newer framework? What will you be using to aid in this transformation (adaptable framework)?

#### **MIM 0:**

**Alvin:** if the implementation of parallel computing becomes too difficult to implement into the project are there other alternatives your group is looking at? Alternatively if computer paralleling is implemented successfully how will power consumption and system cooling be handled?

**Monica Rampaul:** I'm interested to know if you will be training your AI upon implementation? If so, at which stage in the testing process will this be happening? Or alternatively, will it be happening in the testing stages or rather in the implementation stages?

#### **MIM 1:**

**Alvin:** Is there a function in place for if a set of images falls below the percentage threshold? Not in terms of flaws in the model but rather in the images themselves?

**Alvin:** What are your strategies/tech stack and milestones to ensure that the data stays secure in the BC Cancer Database?

**Brandon Krieg:** How will you preprocess the image without possibly losing some important data? Will you have to train the AI to ignore certain portions / cut it out completely, or will you manually specify a range to throw away (e.g., the corners.)

#### **TMI 0:**

**Alvin-** For database manipulation your group said they will use the pandas library, does your group also have a particular library to use in terms of security? Or will defensive programming be used in place for security?

**Alvin:** When doing testing for the plugin how will you ensure there will be no conflicts when merging into the master branch? Will there be unit testing, integration testing, etc.?

**Brandon Krieg:** Is there any possibility that a “paper trail” will be left behind during the de-identification process? Any way in which an image could be traced back to some relevant medical information? If there is, and you’ve thought of it, what strategies are you going to employ to reduce that risk?

#### **TMI 1:**

**Alvin** - In your tech stack I was wondering what methods you will be using to load the images into the database as there was no mention of it?

**Alvin:** In the scalability portion of the video, it is mentioned that the system should be able to expand to incorporate new functions. Is there a list of potential future functions and how will you group prepare the plug in for the functions?

**Brandon Krieg:** How will you accomplish future proofing? Modular programming such that you can easily add and remove functions, or?

#### **TMI 2:**

**Alvin-** confidentiality is a very big aspect with medical databases. Why has your group decided to implement security features in milestone 2 rather than 1?

**Alvin:** You mention a very well thought out testing strategy but i'm wondering how you will test your plug in? Is a database already given to you for testing or will you create a dummy database solely for testing?

**Brandon Krieg:** You mention protecting the quality of the DICOM files, what strategies do you have to prevent image degradation? Some sort of checksum feature?