

# Team 21 Sprint I Retrospective

## Project Name: STABLE

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### What Went Well?

In Sprint I, we were able to complete the majority of the user stories we outlined in our planning document. Since we were all new to web application development, much of our time was spent learning the necessary skills for creating the user interface, database, and communication between them. After figuring out how to get things working, the tasks became easier and great progress was made toward the end of the sprint. Although we tried and failed with several server and database options, we finally found a solution and got it working by the end of the sprint.

### *Following are the tasks that were successfully completed in Sprint 1.*

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#### 1. Learned HTML, CSS, JavaScript, Firebase, AngularJS

- The biggest success we had during this sprint was our ability to quickly learn multiple different languages and frameworks. The user interface and the database both required knowledge that none of us were familiar with whatsoever. Considering our lack of experience and difficulty with the backend database, the progress we made in the end was noteworthy. We were able to apply our new knowledge to produce a minimum-deliverable-product.

#### 2. User interface and database functionality for sign-in and account creation

- The user interface was successfully created and error checking was successfully implemented. Users were able to create an account, sign in, and create a new password by answering security questions. The database could successfully communicate with the client by sending and receiving the required log-in information. While there are a few minor bugs to fix and better security measures to implement, this user story is essentially complete.

#	Task Description	Status	Owner
1	Implement Create Account webpage	Completed	Adam
2	Implement Log In webpage	Completed	Adam & Roy
3	Set up communication with backend	Completed	Roy
5	Set up database	Completed	Pedro & Shantanu
6	Implement authorization for account	Completed	Pedro & Shantanu
7	Implement ability to track accounts on backend	Completed	Pedro & Shantanu
8	Implement ability to update profile on frontend	Completed	Pedro & Shantanu
9	Implement error handling for invalid usernames or pre-existing accounts	Completed	Shantanu

#### 3. User interface and database functionality for changing password

- Both the front end and back end are working successfully. Users are able to see an option to change their forgotten password by answering security questions. The user interface consists of a form with error checking that sends the information to the database. If the information is

correctly matched, the password is updated and the user would be allowed to log in with their new password. This user story is complete, aside from testing for bugs and improving security.

#	Task Description	Status	Owner
1	Implement password recovery webpage	Completed	Adam
2	Implement security question or means of validating identity	Completed	Adam
3	Implement error handling for invalid answers to security questions	Completed	Adam
4	Connect the front end to the backend	Completed	Pedro & Shantanu

#### 4. User interface and database functionality for horse creation and deletion

- Again, the user interface and database functionality were successfully implemented. The user can create a horse by filling out a form with all the information and sending it to the server. Then the profile would be updated and the user could view and edit all the information. This user story is complete with some improvements to be added in Sprint 2.

#	Task Description	Status	Owner
1	Implement horse class	Completed	Roy
2	Implement horse database	Completed	Pedro & Shantanu
3	Implement horse information webpage	Completed	Adam
4	Implement change horse information webpage	Completed	Adam
5	Implement vaccine class	Completed	Roy
6	Implement vaccine information webpage	Completed	Adam
7	Implement add horse webpage	Completed	Adam
8	Implement vaccine database	Completed	Pedro & Shantanu
9	Implement horse database webpage	Completed	Roy
11	Connect the front end to the backend	Completed	Pedro & Shantanu

#### 5. User interface and database functionality for vaccine creation and deletion

- For the vaccine records, the user interface can successfully take the vaccine form information and submit it to the database. When the user hits the submit button, they immediately see the information they just submitted and have the option to edit it or return to the main screen. This user story is complete.

#	Task Description	Status	Owner
1	Implement vaccine information webpage	Completed	Adam
2	Implement vaccine database	Completed	Pedro
3	Implement create-a-vaccine webpage	Completed	Adam
6	Implement vaccine database webpage	Completed	Adam & Roy

#### 6. User interface and database functionality for horse search

- The search functionality can successfully display search options as the user types, but the format of the clickable horse buttons still needs some work. Instead of buttons and links to the horse

profiles, we will eventually have it so a Google-style dropdown menu appears. This user story is complete with some improvements to be added in Sprint 2.

#	Task Description	Status	Owner
1	Implement horse searching functionality	Functional	Roy & Adam
2	Connect the front end to the backend	Completed	Pedro & Shantanu

## **What Did Not Go Well?**

In Sprint 1, we had some difficulties figuring out the best approach for the backend database. We had to try several options before finally settling on Firebase. This, combined with our inexperience, caused a delay at the beginning that prevented us from making more progress than we did. However, the two incomplete user stories described below can easily be finished in the first week of Sprint 2.

### ***Following are the tasks that were difficult or unsuccessful in Sprint 1.***

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#### **1. Difficulties getting user interface and database communicating**

- Our biggest difficulty during this sprint was figuring out how to get the user interface communicating with the database. We tried Node.js with Mongoose, MongoDB, MySQL and a couple other options, but after we spent hours working on the issues, we could not make any progress. Therefore, we decided the best option was to go with Firebase, which allowed us to make progress again. We had tentatively decided to use a server between our client and database, but when we experienced difficulties, we researched our options and found Firebase as our solution as the rest api it provided replaced the need for a server for the time being.

#### **2. User interface and database functionality for training regimen creation and deletion**

- Since we spent so much time learning and working through our difficulties, we simply ran out of time to implement the training regimens. However, the training regimens can easily be finished at the beginning of Sprint 2 because they have the same basic structure as the vaccines.

#	Task Description	Status	Owner
1	Implement training regimen webpage	Completed	Adam
3	Implement training regimen database	Completed	Pedro & Shantanu
4	Connect the front end to the backend	Not Finished	Pedro
5	Implement a "database" page for the training regimen	Not Finished	Adam & Roy
6	Implement searching functionality for the training regimens	Not Finished	Adam & Roy
7	Implement the create-a-training regimen webpage	Completed	Adam
9	Implement training regimen class	Completed	Roy

#### **3. User interface and database functionality for vaccine search**

- Additionally, the search function for vaccines will need to be pushed to Sprint 2. We simply ran out of time. However, once we refine our horse searching functionality, we can take advantage of the reusable code we have written in order to implement our vaccine search.

#	Task Description	Status	Owner
1	Implement search functionality for vaccines in database	Not Finished	Pedro
2	Implement error handling for invalid searches	Not Finished	Shantanu

### **How Should We Improve?**

- During Sprint 2, we will use our knowledge from Sprint 1 to be more productive. We spent a lot of time researching to figure out the best approach, and our inexperience held up our progress. We will start off Sprint 2 with a better understanding of our project, which will allow more time at the end for testing and refinement.
- Our communication was adequate, but we recognize that there is always room for improvement in that area as well. Each person worked on his own part of the project and it might be worthwhile to coordinate our efforts a little more by developing related components side-by-side and figuring out the exact details of how they fit together.
- Now that we have the experience of Sprint 1, we can more accurately estimate our hours required for each task. In terms of hours of actual work, we can do much better in Sprint 2. We will need less time for research and tutorials and can focus more on implementing the features.
- We will try and divide testing a little less haphazardly so that the level of debugging is equivalent across all functionalities to avoid areas with higher levels of errors than others.
- We will use our meeting times more efficiently in order to avoid wasting time on unnecessary discussion or deliberation. We will decide on a course of action and use the rest of the meeting as an opportunity to help one another with issues that have arisen in our own responsibilities.