**Team 21 Project Backlog [Sprint I]**

**Project Name: STABLE**

**­**Adam Baker, Pedro Del Moral Lopez, Roy Ramstad, Shantanu Nair

**Problem Statement**

We will design and develop a green turf web application for use by veterinarians to track requisite data such as treatment records, bio-data, and training regiments for individual animals in their care, specifically race horses. This software will replace the current method of tracking such data which is manually on paper, and will provide the added functionality of generating paper reports and graphs of relevant data.

**Background Information**

Race horse breeding is a complicated science that requires keeping track of a great deal of information on an individual horse. This is only further complicated by a veterinarian being in charge of many horses, often number in the hundreds. Maintaining information on individual horses becomes difficult when done by paper and pencil, and no digital solution has been developed to date. Race horse breeding is extremely lucrative and so this form of software would have an excellent ROI. This software will be targeted for professional, not private, breeders who need to maintain information on many horses at once.

The data that needs to be maintained for a race horse includes: gender, breed, weight, size, sire, mother, vaccination and medical history, training regiment, auction price, and requisite expenditures in order to rear the horse. This software will be able to keep all of this information neatly displayed on one page, instead of multiple stacks of papers on separate information. Furthermore this software will be able to generate paper reports and graphs to visually display the information kept in the software, which previously had to be done by hand. The closest piece of software to this is Microsoft Excel. This software is preferable to Microsoft Excel because it is specialized for horses, which removes a lot of unnecessary clutter and unused functionality from your basic “graphing” program, and this software will be able to communicate with a phone to provide reminders on important events such as vaccinations, training days and auctions, which Microsoft Excel cannot do.

**Requirements**

**Functional Requirements**

1. [ ] As a user I would like to create an account.
2. [ ] As a user I would like to sign in to my account.
3. [ ] As a user I would like to create a password.
4. [ ] As a user I would like to change my password.
5. [ ] As a user I would like to import and export metadata
6. [ ] As a user I would like to be able to add a new horse to the database.
7. [ ] As a user I would like to be able to add pictures for a horse’s file.
8. [ ] As a user I would like to be able to remove horses from the database.
9. [ ] As a user I would like to be able to record my horse’s physical attributes.
10. [ ] As a user I would like to be able to track my expenses on each horse.
11. [ ] As a user I would like to track each horse’s training regime
12. [ ] As a user I would like to track a horse’s improvement throughout the training regime.
13. [ ] As a user I would like to track each horse’s auction price
14. [ ] As a user I would like to maintain and edit information on a horse’s health
15. [ ] As a user I would like to maintain and edit information on a horse’s vaccination history
16. [ ] As a user I would like to be reminded of upcoming events such vaccinations, auctions, and training days.
17. [ ] As a user I would like to maintain and edit different training regiments on file.
18. [ ] As a user I would like to maintain and edit the information of different trainers on file.
19. [ ] As a user I would like to maintain and edit the exercises of a regiment on file.
20. [ ] As a user I would like to maintain and edit information for equipment necessary for a training regime.
21. [ ] As a user I would like to maintain and edit information on a vaccine’s medical data.
22. [ ] As a user I would like to maintain and edit information on the price of vaccines.
23. [ ] As a user I would like to maintain and edit information on the providers of vaccines.
24. [ ] As a user I would like to be able to generate cohesive reports on a horse’s metadata.
25. [ ] As a user I would like to be able to generate cohesive reports on total expenditures and profits.
26. [ ] As a user I would like to generate a information pamphlet for auctions.
27. [ ] As a user I would like to be able to search for an individual horse’s data.
28. [ ] As a user I would like to be able to search for vaccines’ data.
29. [ ] As a user I would like to be able to send information updates from my phone. (if time allows)
30. [ ] As a user I would like to use a full mobile app. (if time allows)
31. [ ] As a user I would like to generate data graphs.
32. [ ] As a user I would like to be able to install and uninstall the software on any computer.
33. [ ] As a user I would like to be able to see total number of horses.

**Non-functional requirements**

1. [ ] As a user I would like to have fast response times while viewing and editing metadata on horses, vaccines and training regiments.
2. [ ] As a user I would like to physically rescale windows in the application
3. [ ] As a user I would like to be able to use this program for any number of horses.
4. [ ] As a user I would like to have a visually appealing user interface.
5. [ ] As a user I would like for the software to be stable.
6. [ ] As a user I would like to have the information secure behind a password.
7. [ ] As a developer I would like to have cleanly organized code.
8. [ ] As a developer I would like to have well-documented code.
9. [ ] As a developer I would like to create an API for original code.
10. [ ] As a developer I would like to employ good design patterns to make the software maintainable.
11. [ ] As a developer I would like for bug reports to be sent in the unlikely event of a crash.
12. [ ] As a user I would like this software to be cross-compatible across browsers or OS.
13. [ ] As a user I would like the software to be intuitive and easy to install.
14. [ ] As a developer I would like to be able to test functionality before implementing new features into a working released version.