BMWPHD
Developer's Manual

Version 1.0

Revision History

Date	Version	Description	Author
03/23/2023	1.0	Initial work on the document	Chirayu Jain

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1. Introduction

1.1 Purpose of this Document

The purpose of this developer manual is to provide the information necessary for the developer(s) that will be maintaining the software BMWPHD in future and effectively be able to maintain the current features and develop new ones effectively.

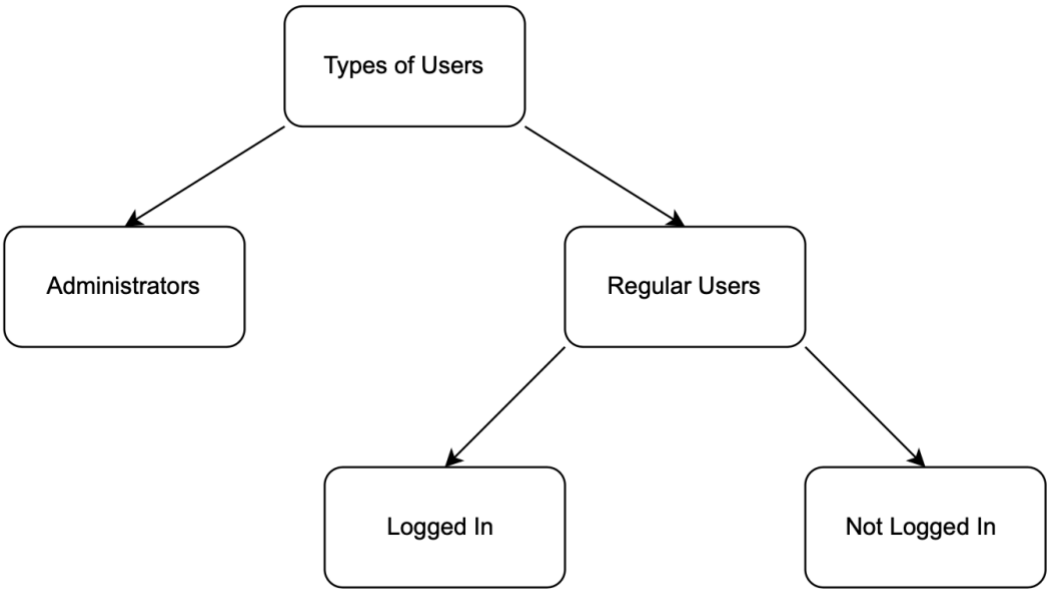
1.1 Project Overview

Almost all modern-day sports assessments are made using data analytics. These statistics can be run at a surface level by new fans trying to learn the sport or at a substantially deeper, more nuanced level by the pros, coaches, trainers, and team owners to ensure they are getting the best performance for their investment. This data is not limited to human athletes; the racehorse industry has a similar system to assess a horse's performance on the track that simplifies the information for first-time bettors or delves into multi-faceted performance percentages, speed scores, track surface ratings, and more for the astute bettors, breeders, owners, and trainers to try to maximize each horse's performance. Unfortunately, horse racing is the only horse sport that currently utilizes any form of advanced analytics. Reining, a western horse sport similar to figure skating, is scored based on a system that assigns points for every maneuver performed to determine the winner. These maneuver scores are publicly available but not aggregated into any sort of system useful for data analytics. This creates issues for fans to track their favorite horses and for investors to find and rank horses for purposes of breeding, buying, and determining show schedules. Unlike the current state, our project will provide one stop data about horses based on different sources and increase general interest for the public by giving them concrete and enhanced ways to track their favorite horses. When completed, this database would be useful to over 15,000 members of the NRHA (National Reining Horse Association) and to a quickly growing fan base thanks to new industry events and sponsors. It could then be expanded to other similar maneuver score-based horse sports such as reined cowhorse, cutting, ranch riding, and dressage.

2. Deployment

2.1 Project Architecture

There will be different types of users for BMWPHD, and the visibility for the users will differ depending on the category the specific person falls in. Below, can be seen how users are divided in the system. However, the differences on the screen visibility and permissions will be based on whether the user is an administrator or a regular user that is logged in or not logged in.



The navigation bar will have the following options for regular users:

- Home
- Search
- About Us
- Login/Logout

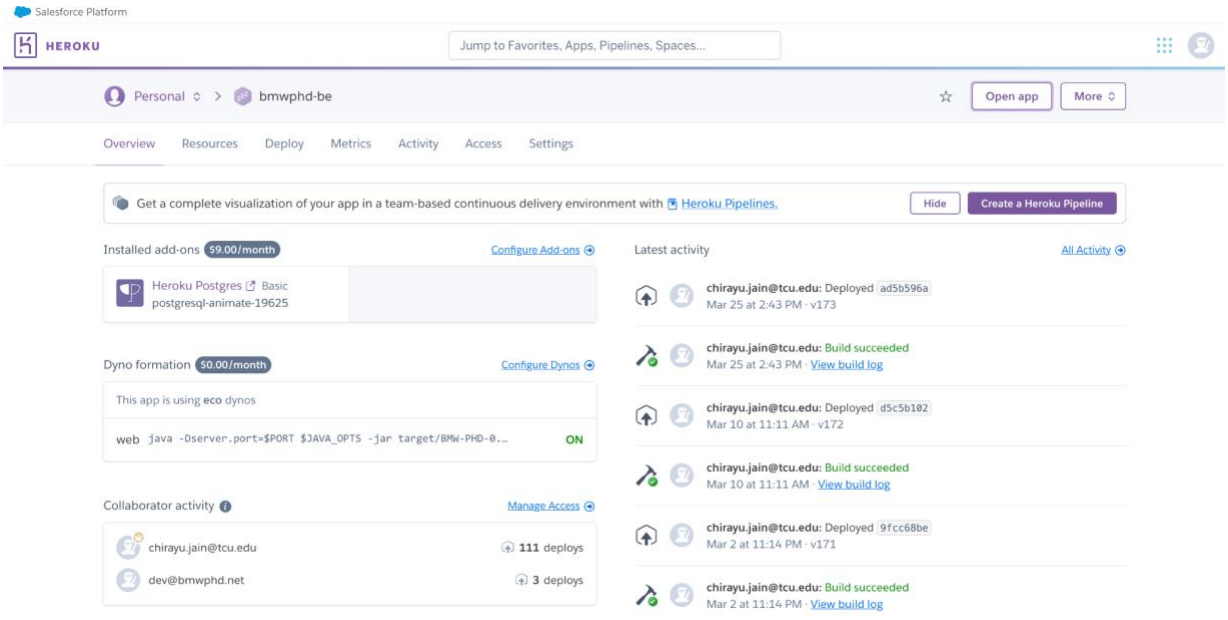
The navigation bar will have the following options for the administrators:

- Home
- Search
- About Us
- Login/Logout
- Manage Requests
- Manage Users

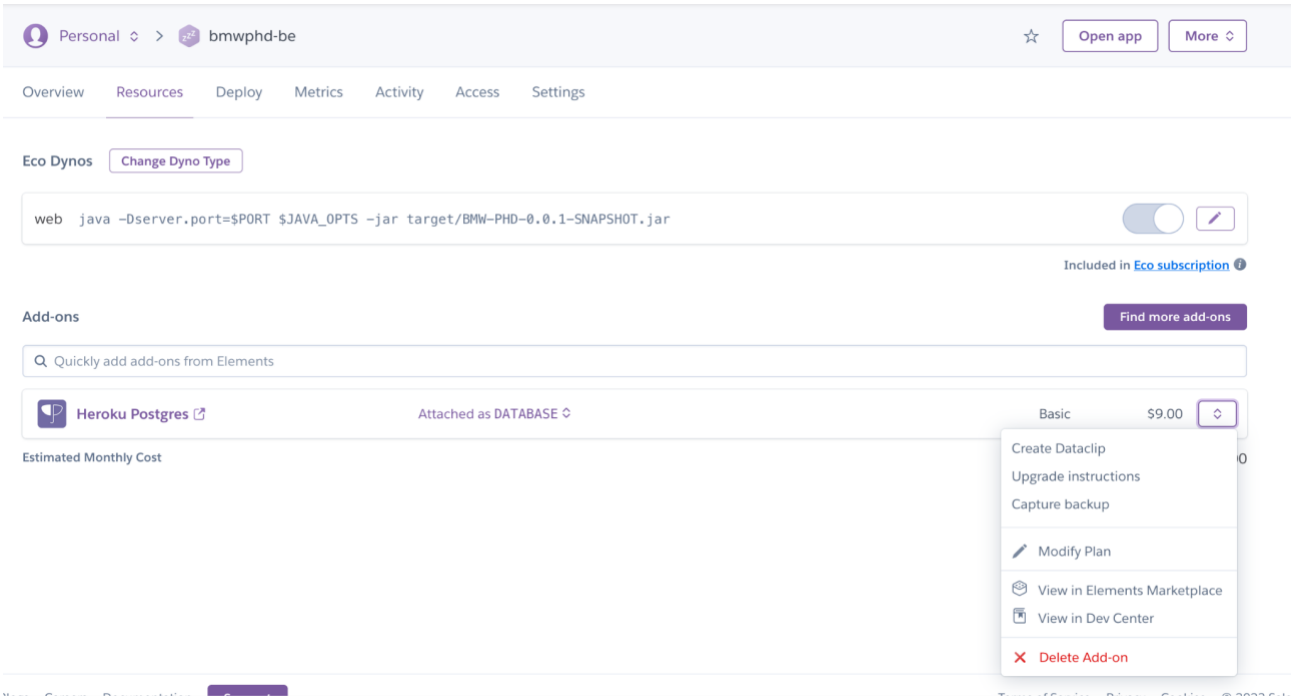
The only difference between regular users that are logged in and not logged in is that users that are logged in have the ability to flag a horse for review, whereas regular users who are not logged in do not have the ability to flag a horse for review.

2.2 loud Deployment and Version Control

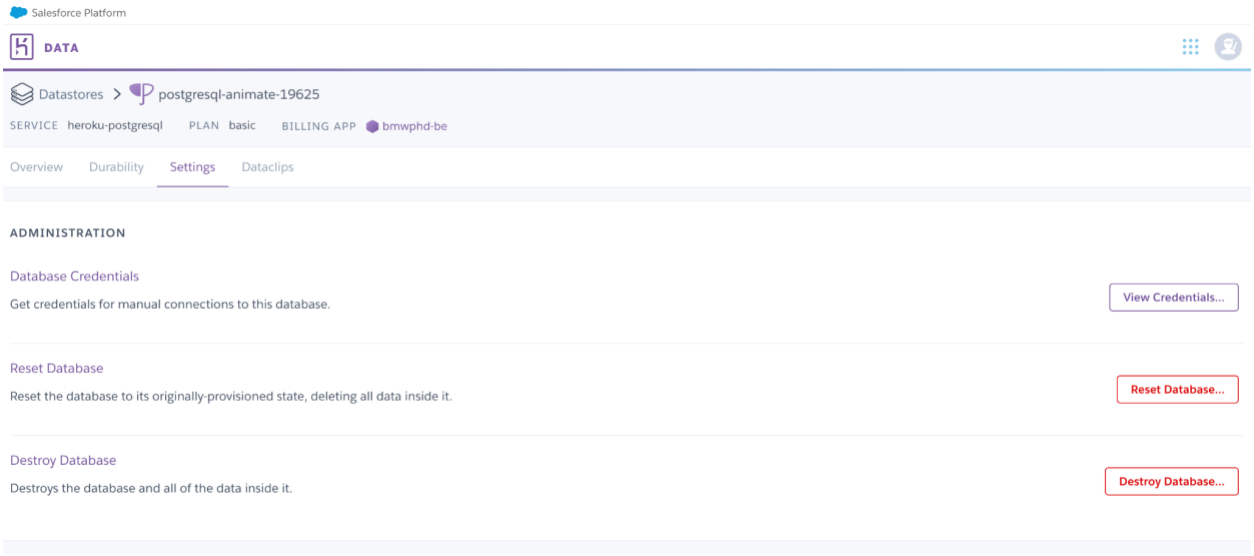
The code for the front-end has been maintained on the github repository:
https://github.com/Pikago-hub/BMWPHD-FE.git
The code for the back-end has been maintained on the github repository:
https://github.com/chirayu2001/BMWPHD-BE.git
The front-end has been deployed to heroku account (credentials given to admin - Miss Brooke Wharton) with username: dev@bmwphd.net
The front-end deployment is tied to the frontend github repository and is automatically updated and built with push.
The back-end has been deployed to heroku account (credentials given to admin - Miss Brooke Wharton) with username: dev@bmwphd.net
The pushes to backend heroku application have been through heroku CLI.
The backend heroku application also has the database Postgres attached to it. It can be configured by configuring add ons:



The plan and capacity of the database can be configured under the menu and the dynos can be changed and upgraded in the menu shown below:



The credentials for the database, reset and destroy actions are available in the Settings menu in the database add-on as shown below:



The backend application also has config vars which contain the private and public key for the JWT token encoding and decoding for authentication.