Authors: Zack Dragos, Sampath Reddy, Palak Sood

# 1. Starting the App

- Open the app by running the Python script (main.py inside of Application Folder).
- Once launched, the main screen will display a Welcome Message with an "Enter" button.

### 2. Uploading Data

• Before generating a schedule, upload the necessary data files

#### **Upload Horse Data**

- Click on the "Upload Horse Data" button.
- Select a file containing horse information. Supported formats: .csv, .xlsx, or .xls.
  - o In our case, we use HorseData.csv inside Testing folder
- A confirmation message will appear, showing a preview of the uploaded data.
- The app will automatically process the horse data.
  - This can be seen in the python terminal if you wish to view it

### **Upload Rider Data**

- Click on the "Upload Rider Data" button.
- Select a file containing rider information.
  - o In our case, we use RiderData.csv inside Testing folder
- A confirmation message will appear, showing a preview of the uploaded data.
- The app will automatically process the rider data.
  - o Again, this can be seen in the python terminal

# 3. Managing Horses and Riders

• The app allows you to manage horse and rider information directly:

#### Add a New Horse

- Click "Add Horse" to open the Add Horse window.
- Fill in the details:
  - o Name

- Maximum Weight
- Skill Level (B | N | I | O) or any combination of the four as long as they are separated by a hyphen
  - I.e. B-N or N-I-O
- Whether it's a jumper (yes/no)
- Maximum Rides Per Day
- Leaser (optional)
- Click "Add Horse" to save the horse to the system.

#### Remove a Horse

- Click "Remove Horse"
- Type in name of horse you want to remove
- BE CAREFUL
  - There are certainly scenarios in which you eliminate too many horses and can no longer generate a schedule that fits all criteria. Often this happens when you remove the one horse that is the only horse an outlier rider can ride.

#### Add a New Rider

- Click "Add Rider" to open the Add Rider window.
- Fill in the details:
  - o Name
  - Weight
  - Skill Level (B | N | I | O) or any combination of the four as long as they are separated by a hyphen
    - Le. B-N or N-I-O

C

• Click "Add Rider" to save the rider to the system.

#### Remove a Rider

• Click "Remove Rider" and input the name of the rider you wish to remove. Confirm the action.

# 4. Adding Lessons

- Click "Add Lesson" to schedule a lesson for a rider.
- In the lesson form:

- Select a rider's name from the dropdown list.
- Choose a day of the week for the lesson.
- Select whether it's a jumping or non-jumping lesson.
- Specify the duration of the lesson (30 or 60 minutes).
- Set the lesson start time (using the hour, minute, and AM/PM selectors).
- Click "Add Lesson" to save the lesson.

## 5. Generating the Weekly Schedule

- After uploading all necessary data and adding lessons, click "Generate Schedule".
- The app will process the information to assign horses to riders based on availability and skill levels.
- If the schedule generation fails (e.g., due to conflicts), it will retry automatically or display an error.

### 6. Viewing the Weekly Schedule

- Once the schedule is generated, the app will display it on the screen:
  - o Each day of the week is listed.
  - Under each day, the scheduled times, riders, and assigned horses are displayed.
  - Use the scroll bar to view all days and entries.

# 8. Going Back

• Click the "Back" button to return to the main menu or the data upload screen.

# 9. Closing the App

• Simply close the application window when done.

Link to repository:

https://github.com/ZDargos/Horse-Lesson-Planner