

My Running Journal

William Krug

March 8th, 2021 | Cullen

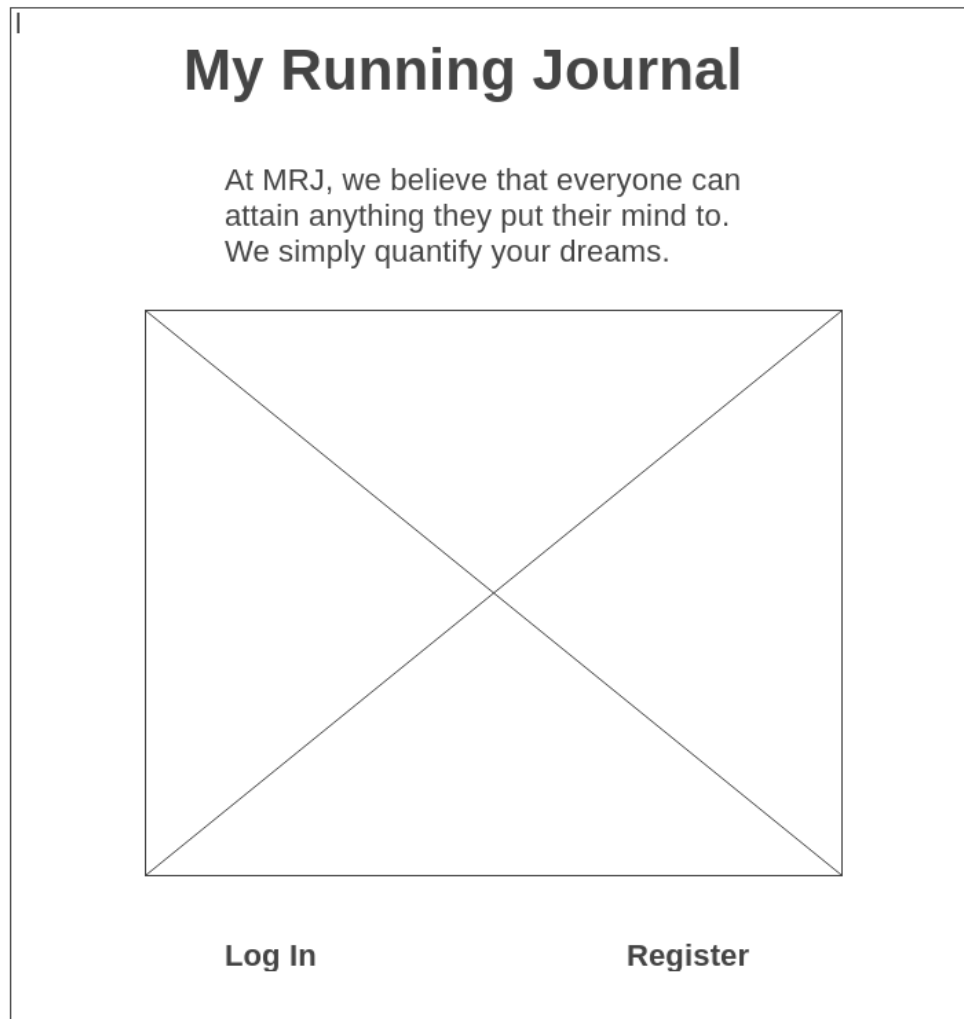
Application Overview

Have you ever dedicated so much time and effort into something only to fall on your face? I have. In 2014, I trained for the Marine Corps Marathon and hit the proverbial “wall” at mile 18. I walked the next 8 miles and fell far short of my goal. With ***My Running Journal*** I would have been better prepared to tackle that marathon. With its dashboard of statistics and calculations on speed and pacing, I would have known if my goal was feasible and could have been better able to adjust my pacing to finish the marathon at a run instead of a crawl.

My Running Journal provides runners with an interactive breakdown of their recorded runs. Users can see their longest run, fastest run, daily averages, weekly averages, and monthly averages on their distance, time, speed (MPH), and pace (minutes/mile). Also available to each runner is a timeline graph that can be drilled into to see the specifics of an individual run.

Application Features

1.1 Landing / Log-in Page



The **Home** page will have:

- Landing page that all users come to when navigating to app
- There will be a brief summary of what the app is about
- The image will be a silhouette image of a runner / runners
- The Login button will toggle the image to display the login screen and allow users to access their personal page
- The Register button take the user to the Registration page to sign up for the app

1.2 Registration Page

My Running Journal

Registration

First Name: William

Last Name: Krug

Gender: Male

Birthdate: 08/10/1984

City: New Brighton

State: Minnesota

Country: United States

Username: gearwrench171

Password: *****

Create Account

The **Registration** page will collect:

- This page is only accessed by clicking the Register button on the home page
- The user's first and last names are collected in text fields
- The user's chosen gender is selected with via dropdown list
- The user's birthdate (mm/dd/yyyy) is entered in a text field
- The user's city is a simple text field
- The user's state and country are chosen via dropdown list
- The user's selected username is captured in a text field
- The user's Password will be collected in a text field
 - The password populates as encrypted (***) while typing
 - **Stretch Goal** - Check and enforce password security and have the option to see the password
- When the Create Account button is clicked, the user will be saved in the database and be taken to their personal page

1.3 User's Personal Page

My Running Journal

Admin Profile

William's Running Log

Date: Route: Distance: Time: Notes:
03/08/2021 Treadmill 3.35 00:30:00 Charge phone

Add Run

Dashboard

Last Run

Distance (miles): 10.10
Time: 01:38:17
Speed (MPH): 6.17
Pace (min/mile): 09:44

Longest Run

Distance (miles): 26.2
Time: 04:58:38
Speed (MPH): 5.26
Pace (min/mile): 11:24

Fastest Run

Distance (miles): 3.61
Time: 00:30:00
Speed (MPH): 7.22
Pace (min/mile): 08:19

Metrics

Mileage Time MPH Pace

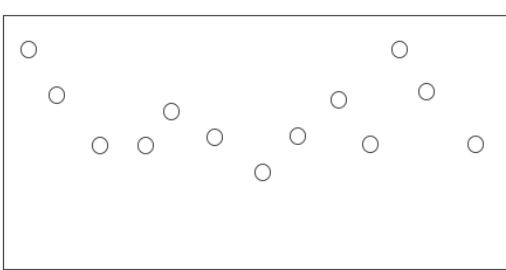
Daily Average: 4.59 0:41:49 6.77 08:54

Weekly Average: 15.84 02:24:29 6.79 08:52

Monthly Average: 58.09 08:49:45 6.81 08:50

Yearly Average:

Distance



Date

Date: 02/21/2021
Route: Lake Johanna
Distance: 10.10
Time: 01:38:17
MPH: 6.17
Pace: 09:44
Notes: Need to push it up the last hill

Edit RunDelete Run

The **User's Personal Page** will:

- Be accessed via the Login button on the home page or the dashboard button on any other page
- This page will only be accessible to the associated (logged in) user
- The user will have the option to log a new run that will capture:
 - Date - captured via input field (mm/dd/yyyy)
 - Route (optional) - lists the name of the route (if any)
 - Distance - tracks distance ran in miles
 - Time - tracks how long the run took (hh:mm:ss)
 - Notes (optional) - user can leave any notes about their run
 - Add Run button logs the run in the DB and updates user's dashboard and metrics
- The user's Dashboard will display their most recent run, longest run, and their fastest run with the following details about each:
 - Distance, Time, MPH, and Pace
 - In the event that multiple runs qualify for the longest or fastest run, the more recent run will be displayed
- The user's Metrics will show their daily, weekly, monthly, and yearly averages of Distance, Time, MPH, and Pace
 - **Stretch Goal** - Allow the user to view metrics based on:
 - Year
 - Distance
 - Time
 - Route
 - A graphical representation of the metrics will be displayed showing the date along the x-axis and distance (base) or selected view (stretch) along the y-axis
 - All runs fitting selected view will be displayed as points on the graph
 - User's can click on any point and see an overview of that run (Date, Route, Distance, Time, MPH, Pace, and Notes)
 - User's can click on the Edit button to update the Date, Route, Distance, Time, or Notes
 - User's can click on the Delete button to remove the run from their journal
- The user can click on the Profile button to be taken to the Profile page to view their profile
- User's with Admin or Employee rights will see an Admin button that takes them to the Admin page

1.4 Profile Page

My Running Journal

Admin Profile

William's Running Log

First Name: William

Last Name: Krug

Gender: Male

Birthdate: 08/10/1984

City: New Brighton

State: Minnesota

Country: United States

Username: gearwrench171

Password: *****

EditDelete Profile

The **Profile** page will display the user's current profile settings.

- This page will be accessed by clicking on the Profile button from the User's Personal page
- This page will only be accessible to the associated (logged in) user
- Clicking the Edit button will re-render the page and allow the user to update any profile items that they wish to
- Clicking the Delete button cancels the user's account and removes them from the database
- **Stretch Goal** - allow users to add/use avatars
- User's with Admin or Employee rights will see an Admin button that will take them to the Admin page

1.5 Admin Page

My Running Journal

Dashboard Profile

Admin

Community Dashboard

Gender Breakdown

Age Breakdown

City Breakdown

State Breakdown

Country Breakdown

Distance Breakdown

Time Breakdown

Speed Breakdown

Pace Breakdown

Community Metrics

Mileage Time MPH Pace

Daily Average: 4.59 0:41:49 6.77 08:54

Weekly Average: 15.84 02:24:29 6.79 08:52

Monthly Average: 58.09 08:49:45 6.81 08:50

Yearly Average:

Search Name Role

Jenny Tutone User

Update Access

The **Admin** page will display:

- This page is accessed by clicking the Admin button on the User's Personal page or Profile page
- Only Admin and Employees will have access to this page
- There will be a graphical (pie chart) breakdown (dashboard) of user demographics such as:
 - 40% of users identify as female, 30% as male and 20% as non-binary
 - 60% of users are 20-30 years old, 15% are 30-40 and 25% are over 40
 - 80% of users are based in the United States and 20% in Canada
- The Community Metrics will show the accumulative daily, weekly, monthly, and yearly averages of Distance, Time, MPH, and Pace for the entire user base
- The User Authorizations will only be visible to Admins
 - There will be a search box that allows a user to be found in the database by their first and or last name
 - **Stretch goal** to make this predictive text that narrows possibilities as more letters are typed
 - A dropdown list will be displayed showing possible roles for the admin to choose from. By default, all users will start off with lowest authorization (user) upon registration
 - The Update Access button will update the user's authLevel in the database
- The user can click on the Profile button to be taken to the Profile page to view their profile
- The user can click on the Dashboard button to take them back to their User's page

Project Milestones and Schedule

Milestone (Should match a Feature from Above)	Hours Est.	Due Date	Base or Stretch
Home Page / Login Page	4	3/15/21	Base
Registration Page	4	3/15/21	Base
User's Personal Page: Log Run	2	3/16/21	Base
User's Personal Page: Dashboard	2	3/16/21	Base
User's Personal Page: Metrics	4	3/16/21	Base
User's Personal Page: Graphic Representation	6	3/17/21	Base
User's Personal Page: Pop-up window	6	3/18/21	Base
Profile Page	2	3/18/21	Base
Profile Page: Edit	4	3/19/21	Base
Admin Page: Graphic Representation	6	3/19/21	Base
Admin Page: Metrics	4	3/22/21	Base
Admin Page: Authorizations	4	3/22/21	Base
Home Page / Login Page: Material-UI Styling	2	3/23/21	Base
Registration Page: Material-UI Styling	2	3/23/21	Base
Profile Page: Material-UI Styling	2	3/23/21	Base
User's Personal Page: Material-UI Styling	6	3/24/21	Base
Admin Page: Material-UI Styling	4	3/24/21	Base
Admin Page: Authorizations - Predictive Text	4	3/25/21	Stretch
User's Personal Page: Change Metrics Parameters	8	3/26/21	Stretch
User Avatar	4	3/26/21	Stretch
Password Checker Upon Registration	6	3/26/21	Stretch

Database Documentation

users table:

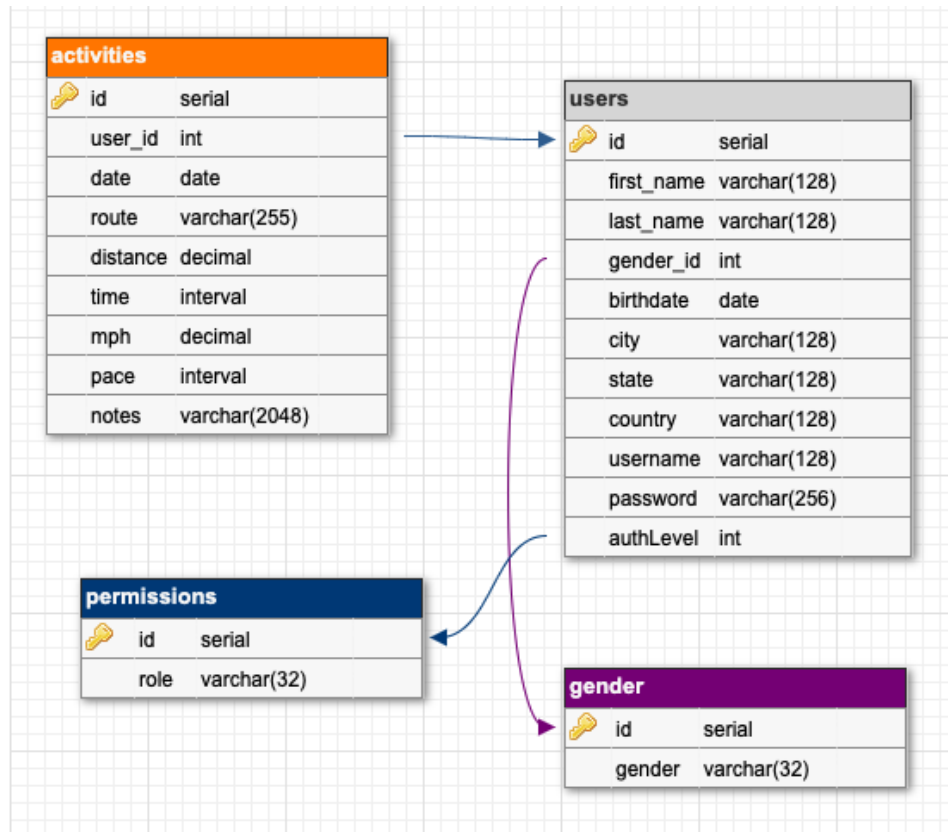
- POST '/users' -> create new user
- GET '/users' -> get all metrics for admin page
- PUT '/users/:id' -> update user profile
- PUT '/users/authLevel/:id' -> update user authLevel
- DELETE '/users/:id' -> delete user account

activities table:

- POST '/activities' -> user logs new run
- GET '/activities/:id' -> pull data for user metrics section
- PUT '/activities/:id' -> user edit's run details
- DELETE '/activities/:id' -> user removes the run from their journal

1 **user** can have Many **activities**

1 **user** can have 1 **permission** (authLevel)



Browsers

Application will fully support browsers listed below. All browsers or versions not listed below are considered out of scope.

Browser Name	Mobile or Desktop?	Version
Chrome	Desktop	88
Safari	Desktop	14
Firefox	Desktop	83

Assumptions

While completing this estimate the following assumptions were made.

- I can learn and implement Material-UI in 3 days
- Material-UI setup will not adversely affect base functionality
- I can learn and implement React Charts in 1 day
- User data will be compatible with React Charts framework for graphical displays
- I can learn SweetAlerts in half a day (4 hours)

Technologies

- Node
- Express
- React
- React-Router-Dom
- React Charts 2
- Redux
- Redux-Logger
- Redux-Saga
- Axios
- PostgreSQL
- Dotenv
- Postico
- Material-UI
- SweetAlert
- Heroku

Stretch Goals

The following list of Stretch Goals are to be worked on (in order) provided there is time. If time is not available, these can be turned into feature enhancements for the application.

- Predictive Text
 - While searching for a user on the Admin page, the search box will utilize predictive text to narrow and refine search results as the Admin is typing
- Metrics Filter
 - The user will have the option to refine their metrics data and graphical representation using a dropdown list to filter by:
 - Distance
 - Time
 - Year
 - Route
- Avatar
 - The user will have the option to select an avatar when they are editing their profile and have that avatar appear on all pages as when the user is logged in
- Password Checker
 - There will be a visual indicator of password requirements that changes when requirements are met
 - The user can toggle the visibility of the password to see their password while typing or keep it encrypted