

T.W.I.P.

Two-Wheeler Indicator Panel

Feedback

Units for distance,
speed and pace

Is it legal to use
that kind of display
on a bike?

Notice if the
username already
exists
(authentication)

Not a fully
presentable MVP

No security tests

No failed tests

Organization & Planning

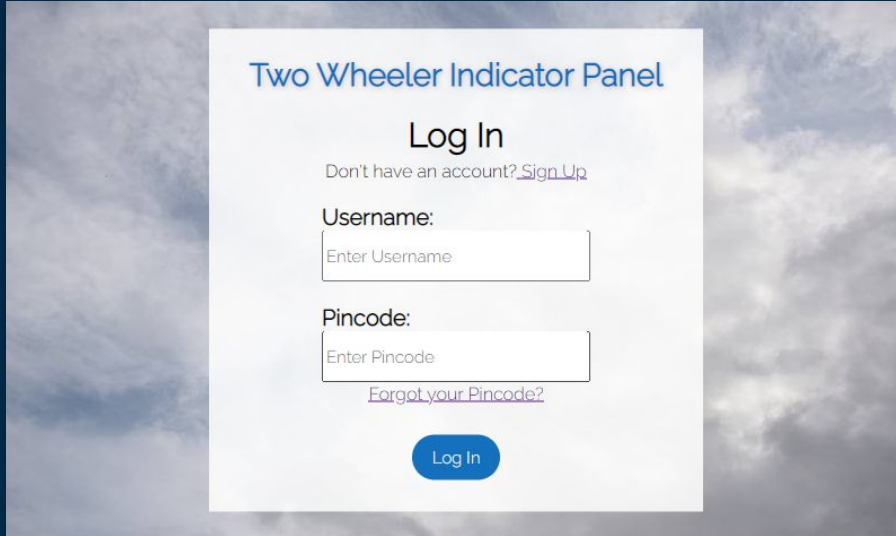
Hardware

Back-end

Front-end



Product increment - Login page



Two Wheeler Indicator Panel

Log In

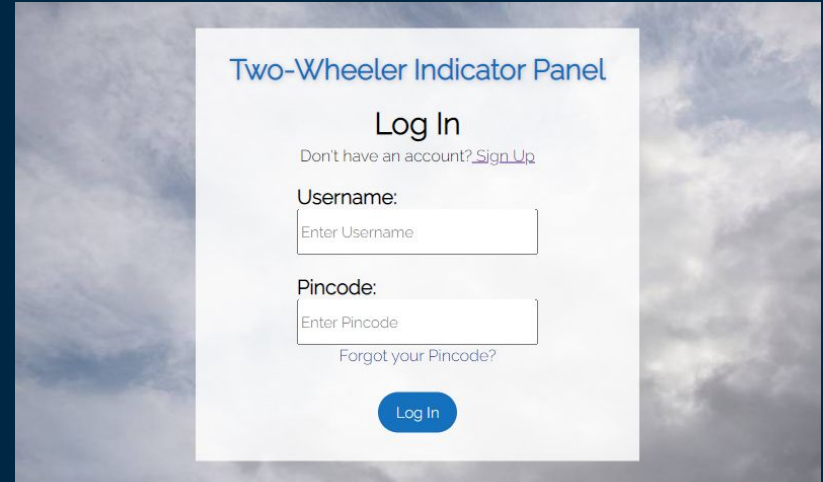
Don't have an account? [Sign Up](#)

Username:

Pincode:

[Forgot your Pincode?](#)

Log In



Two-Wheeler Indicator Panel

Log In

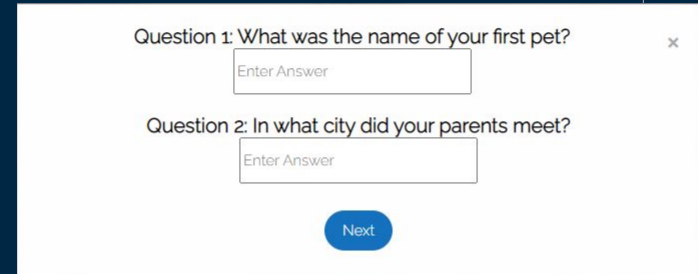
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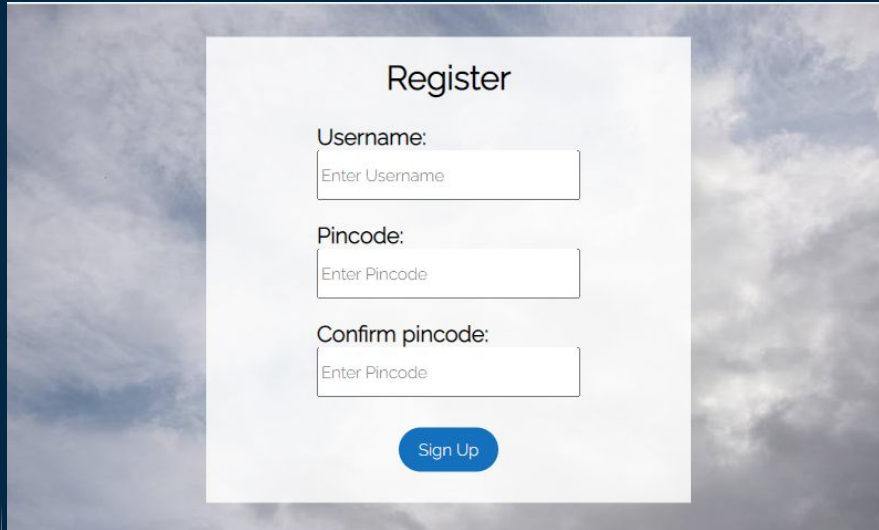


Question 1: What was the name of your first pet? ×

Question 2: In what city did your parents meet?

Next

Product increment – Register page



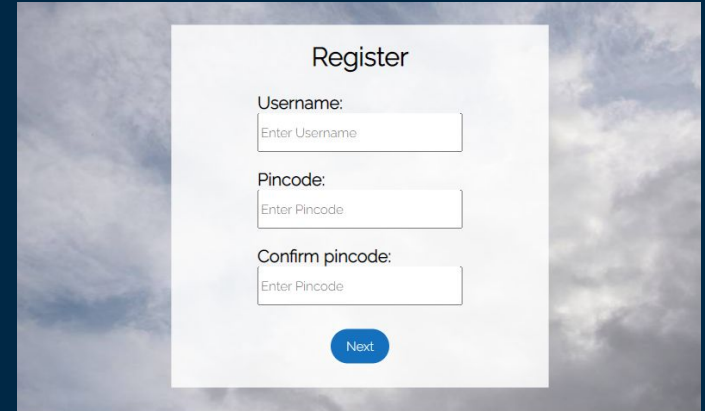
Register

Username:

Pincode:

Confirm pincode:

[Sign Up](#)



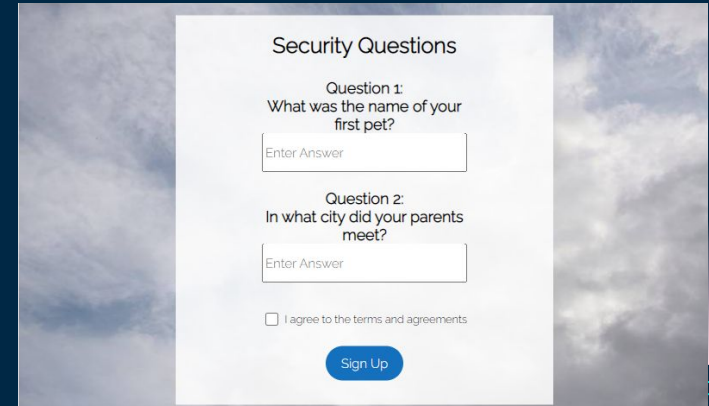
Register

Username:

Pincode:

Confirm pincode:

[Next](#)



Security Questions

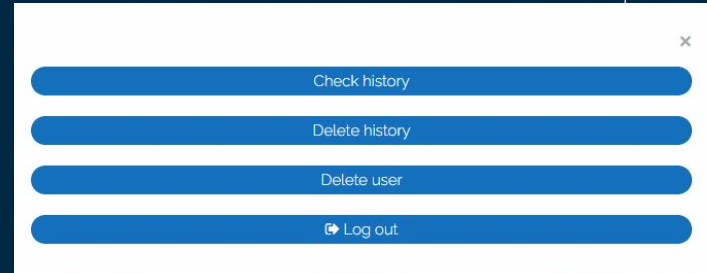
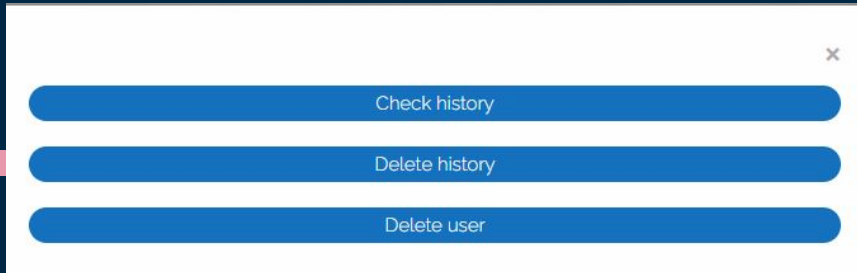
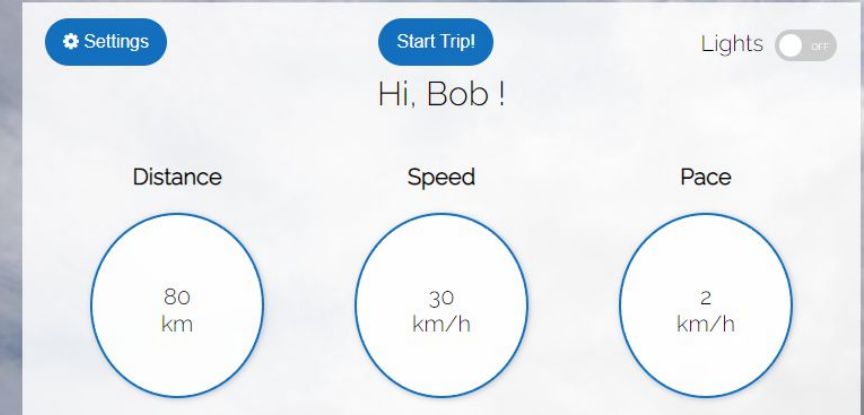
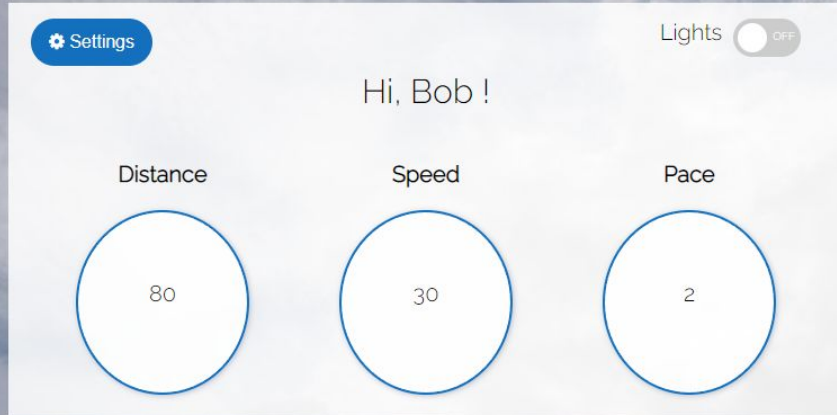
Question 1:
What was the name of your first pet?

Question 2:
In what city did your parents meet?

☐ I agree to the terms and agreements

[Sign Up](#)

Product increment - Homepage



Product increment - Homepage (modal buttons)

Check history

History of Bob

Trip length: km

Total distance: km

Top speed: km/h

Pace: km/h

Close

Delete user

Are you sure you want to delete the following account?

Bob

If yes, fill in the according pincode.

Confirm Cancel

Delete history

Are you sure you want to delete the history of the following account?

Bob

If yes, fill in the according pincode.

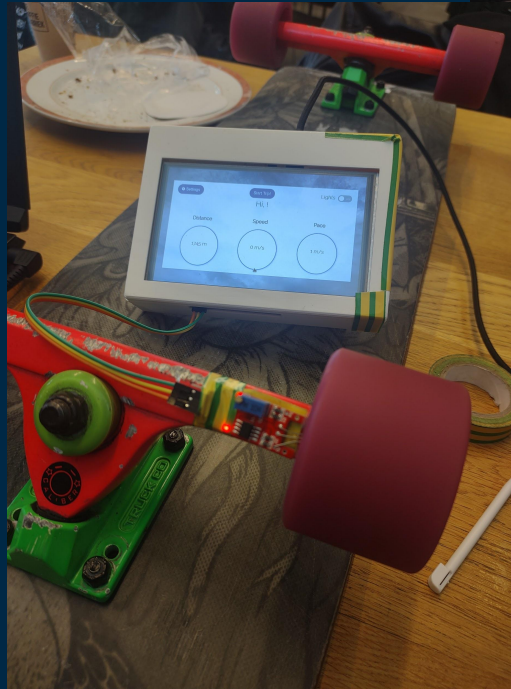
Confirm Cancel

MVP

Added a screen

Attached to skateboard

Working dataflows



Hardware

Long wires work

To do:
Allow user to set
Wheel perimeter

LDR

Lights



```
ssu@Berry: ~  
Response: 200 OK  
0.50040853  
Response: 200 OK  
0.47134128  
Response: 200 OK  
0.4480707  
Response: 200 OK  
0.40547556  
Response: 200 OK  
0.37017304  
Response: 200 OK  
0.28992352  
Response: 200 OK  
0.19476484  
Response: 200 OK  
  
=> Response succeeded.  
GET /hardware/data:  
=> Matched: GET /hardware/data (generate_hardware_data)  
=> Outcome: Success  
=> Response succeeded.  
GET /hardware/data:  
=> Matched: GET /hardware/data (generate_hardware_data)  
=> Outcome: Success  
=> Response succeeded.  
GET /hardware/data:  
=> Matched: GET /hardware/data (generate_hardware_data)  
=> Outcome: Success  
=> Response succeeded.  
  
ssu@Berry:~ $ su pi  
Password:  
pi@Berry:/home/ssu $ dir  
2021 intro-files LCD-show mod5 os2021-attack-binary-s2384361 prog src  
pi@Berry:/home/ssu $ cd ~//  
pi@Berry:~ $ dir  
Bookshelf Desktop Documents Downloads Music Pictures Public setuid.log start Temp  
pi@Berry:~ $ vim start  
pi@Berry:~ $ ./start  
[1488:1531:1105/025251.606679:ERROR:bus.cc(393)] Failed to connect to the bus: Failed to c  
1001/bus: Permission denied  
[1488:1531:1105/025251.608304:ERROR:bus.cc(393)] Failed to connect to the bus: Failed to c  
1001/bus: Permission denied  
[1488:1531:1105/025251.652342:ERROR:bus.cc(393)] Failed to connect to the bus: Failed to c  
1001/bus: Permission denied  
[1488:1531:1105/025251.653301:ERROR:bus.cc(393)] Failed to connect to the bus: Failed to c  
1001/bus: Permission denied  
[1530:1530:1105/025405.798452:ERROR:gl_surface_presentation_helper.cc(259)] GetVSyncParam  
r 1 times!  
[1530:1530:1105/025409.822664:ERROR:gl_surface_presentation_helper.cc(259)] GetVSyncParam  
r 2 times!  
[1530:1530:1105/025435.859153:ERROR:gl_surface_presentation_helper.cc(259)] GetVSyncParam  
r 3 times!
```

Programming

Finished up database for trips

Delays in authentication

Getting everything working on the PI



Testing

Alot still needs to be done

Test fail mitigation



Security

SHA256 -> SHA512

PIN code

Forgot your pincode



Planning for final sprint

Frontend based on feedback

Authentication

LDR

Finalizing



Q&A

An abstract geometric pattern on a dark blue background. It consists of numerous small squares in teal, orange, and pink, some of which are solid while others are hollow. These squares are connected by thin, light-colored vertical and horizontal lines, creating a network-like structure that frames the central text.