Howler - MoonWalker

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Information Provided on App

01

This app will ensure that astronauts are up to date on any conditions on the planet Howler, like weather, average temperatures, etc.

02

With all the information of the planet, this app will also ensure that the astronauts are getting enough exercise to try to avoid bone deterioration and kidney stones. Meditation can improve mental health.

03

Doing exercise is not enough for a healthy body, but having a healthy diet can help with the physical health of the astronauts

04

To collect data from Howler and present it on the app, like statistical data

Fact!

Did you know that astronauts can not stay in space for really long otherwise their bones start to deteriorate and they can possible develop kidney stones. This is due to the microgravity in space.

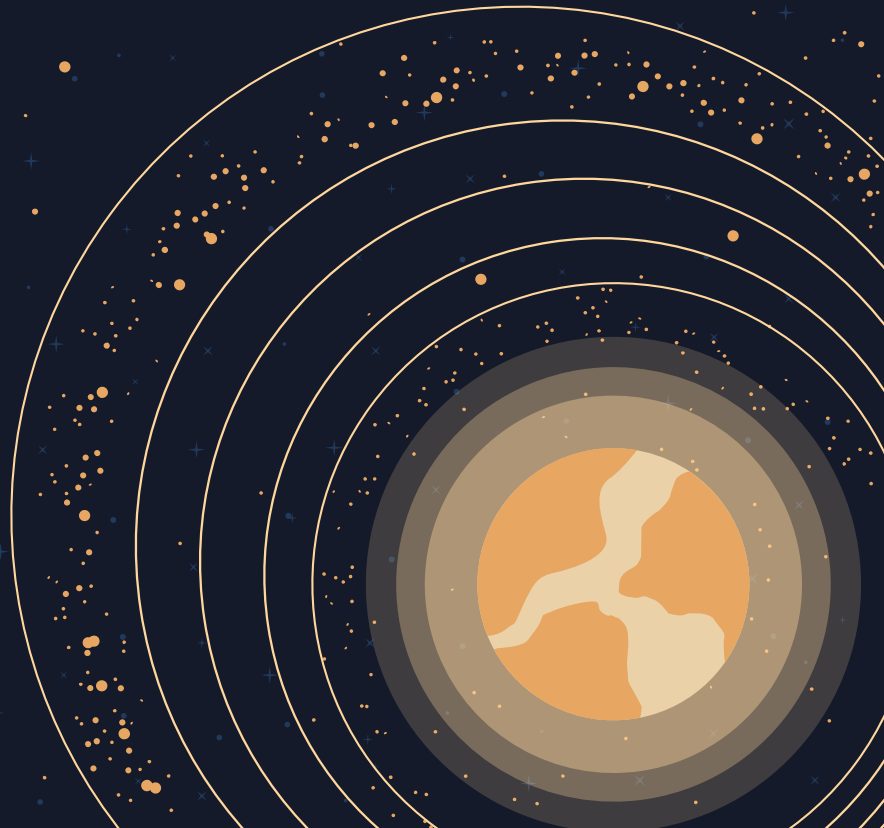
01

App Details

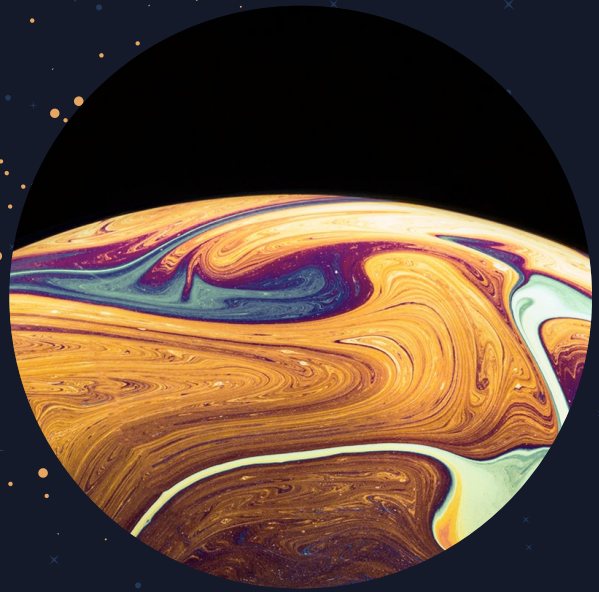
Weather Conditions

Advantages of knowing weather conditions:

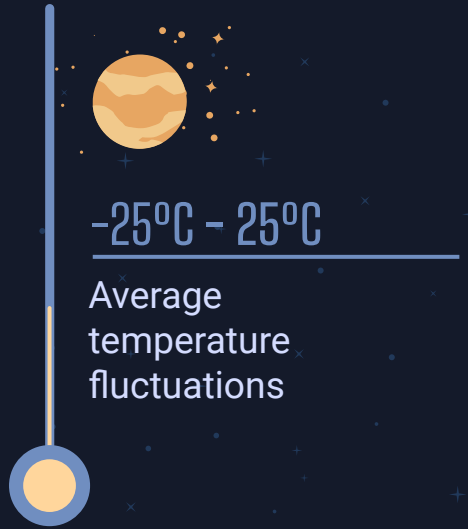
- Can prepare the astronaut for any worsening conditions
- Can prevent any damage to structure as the astronaut will know beforehand when to cover the equipment
- This can decide how much sunlight plants will need



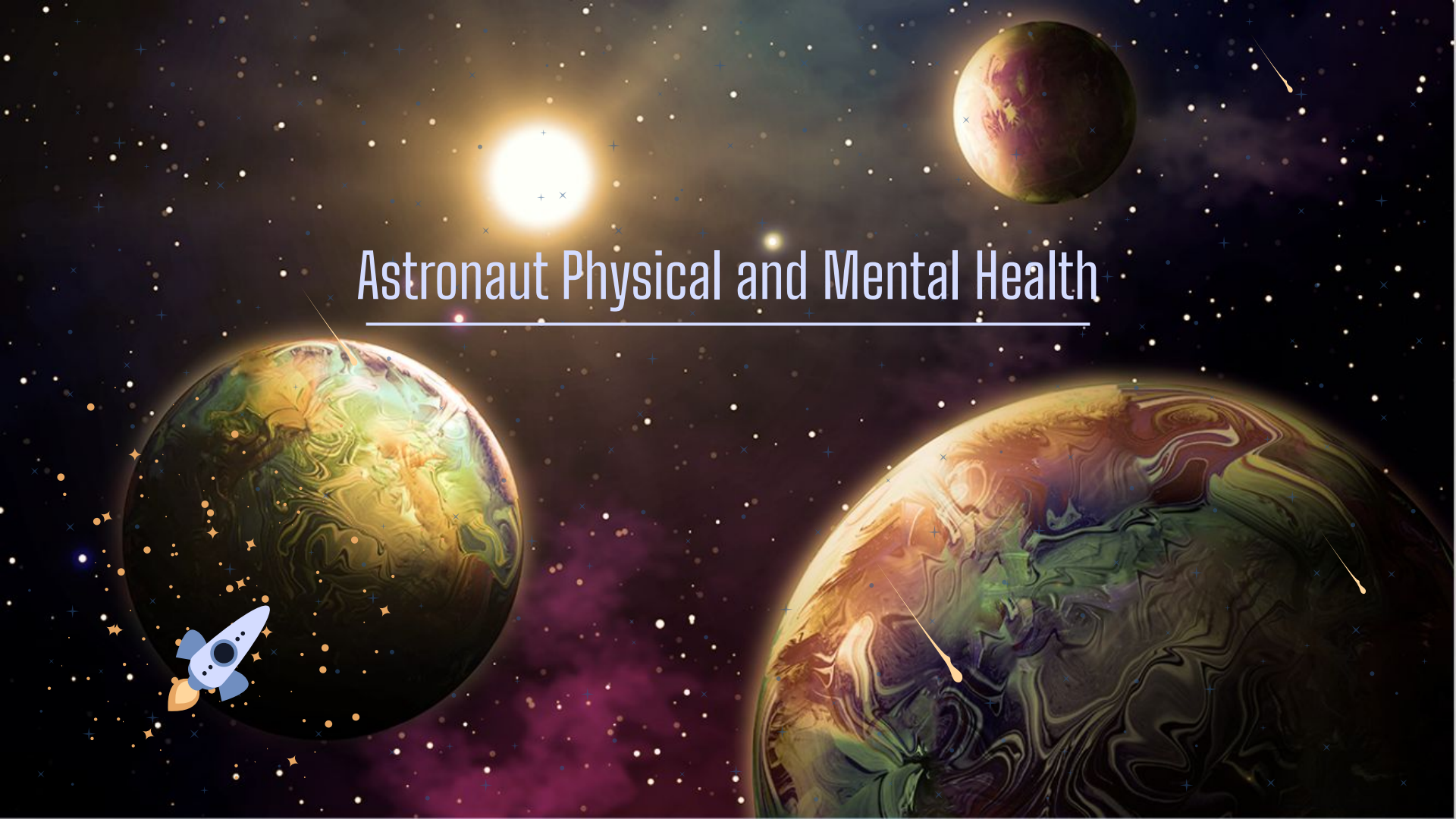
Average Temperature



- Average temperature for the day on Howler.
- This ensures that the astronaut knows what humidity or drop in temperature to expect



Astronaut Physical and Mental Health



Physical and Mental Health

Physical

Biggest challenge as an astronaut is to get enough exercise so the bones do not deteriorate really fast.

Mental

Having a strong mental health can promote wellbeing by doing meditation and relieving stress

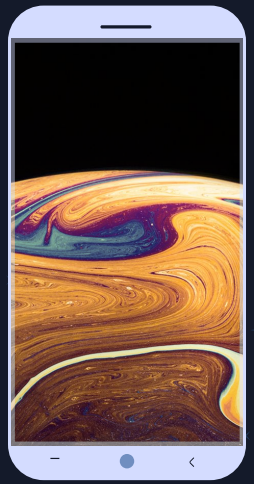
Nutrition

Having good nutrition can ensure good health. The plant facts and nutritional values will also be provided in the app.

Good nutritional foods can ensure that the astronaut can follow a balanced diet with enough carbohydrates, protein and fats.

02

App Design



App Construction

01

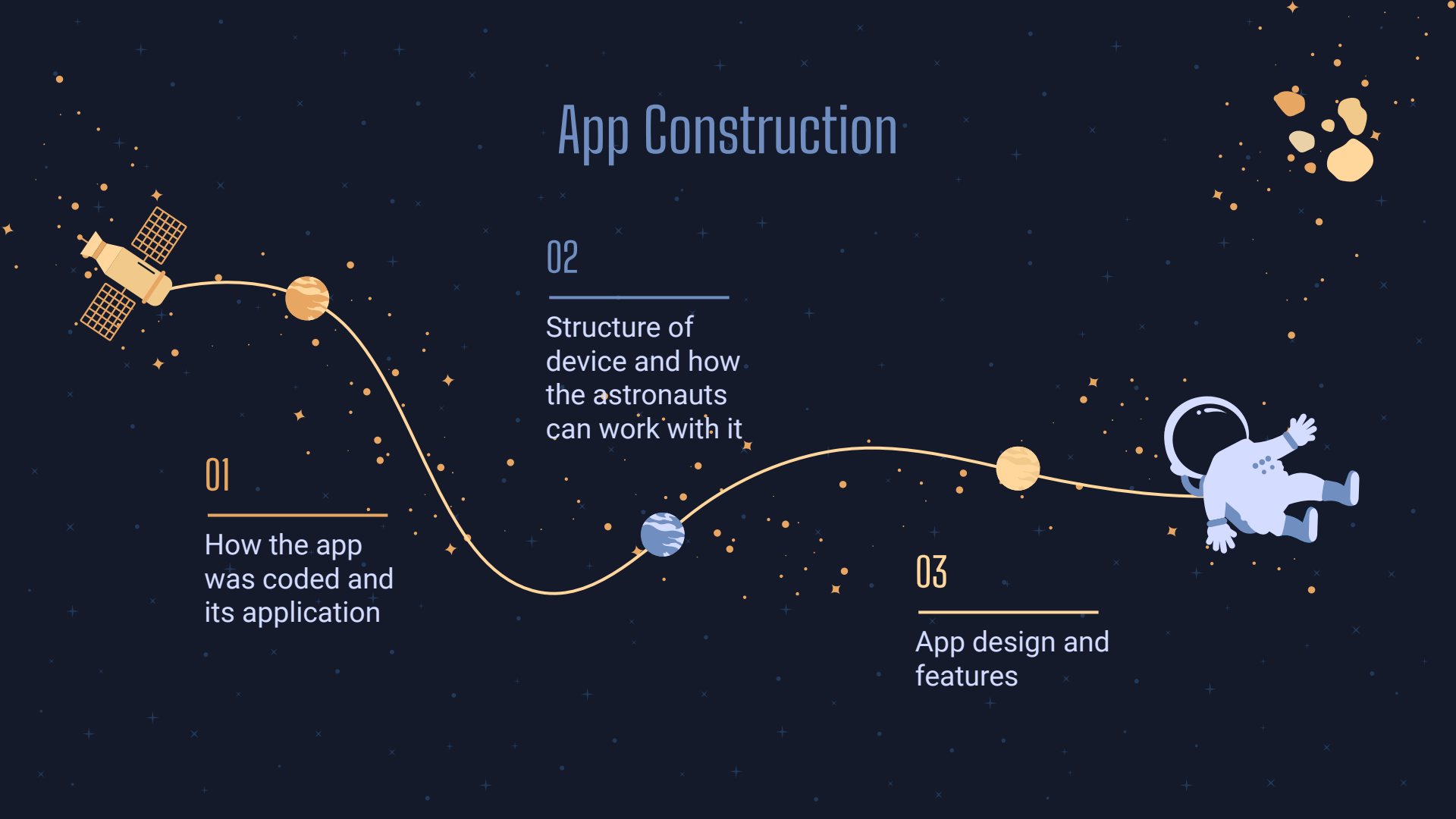
How the app was coded and its application

02

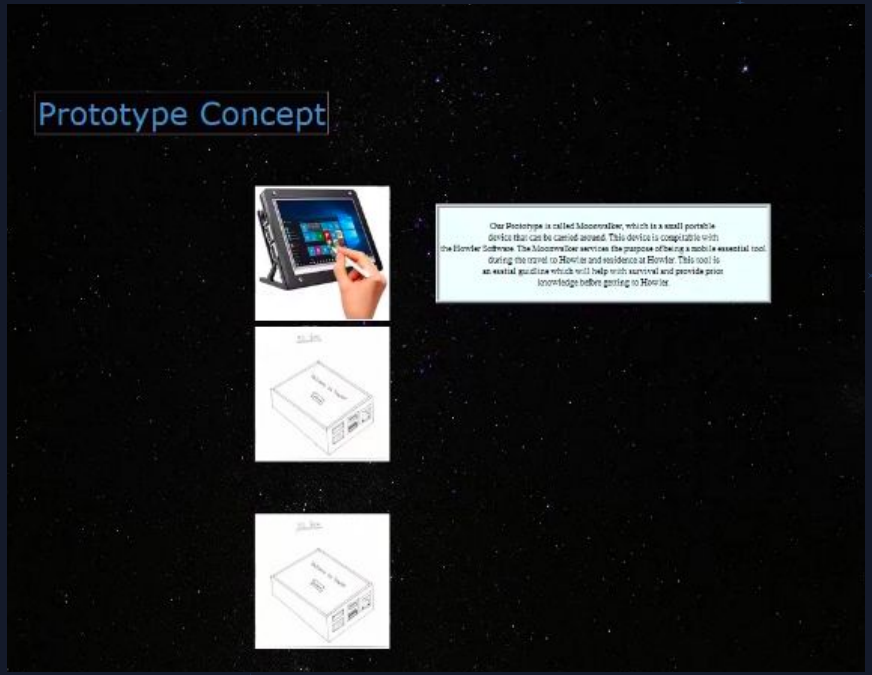
Structure of device and how the astronauts can work with it

03

App design and features



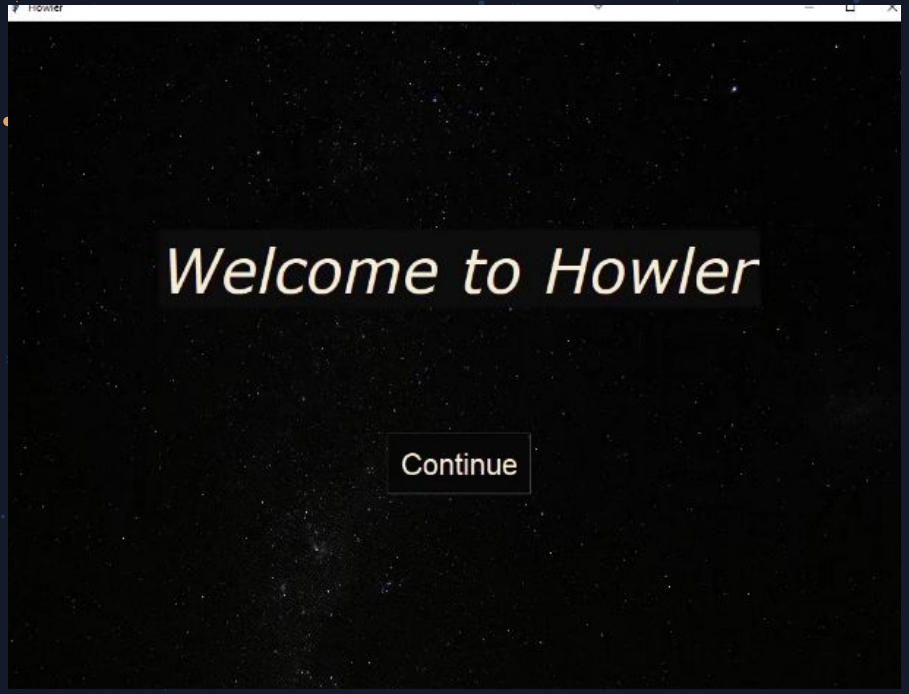
Design Concept

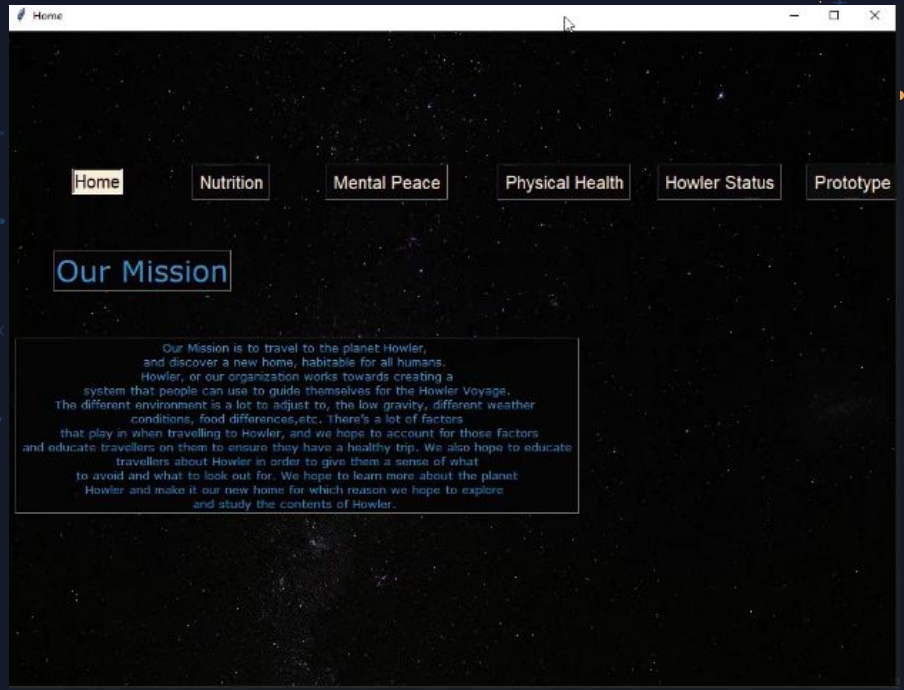


This is the prototype of this app to be used on, a raspberry pi is being used along with a display touch screen. Above image is from the app.

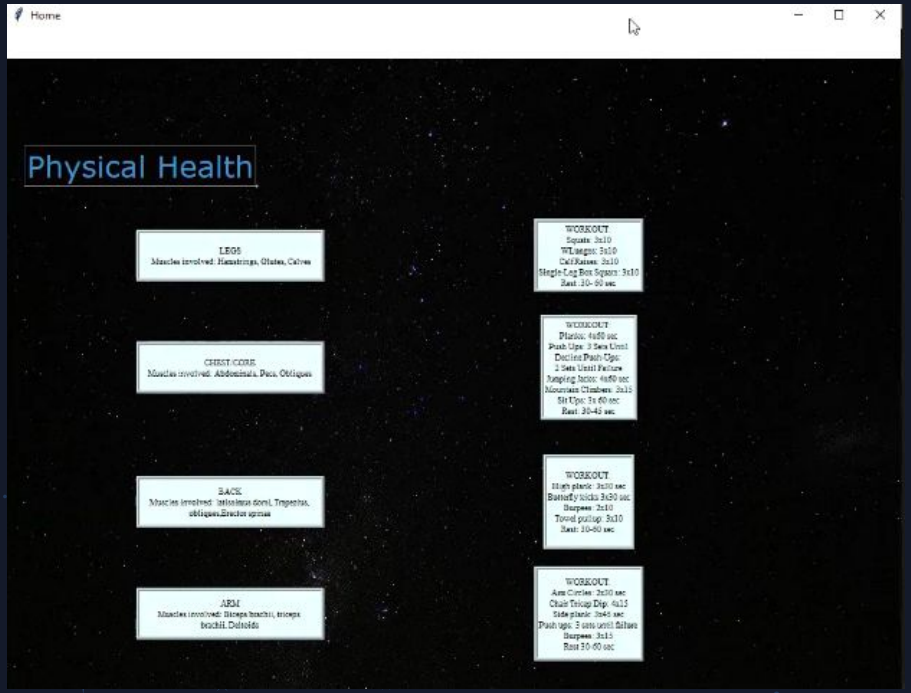
App Walkthrough

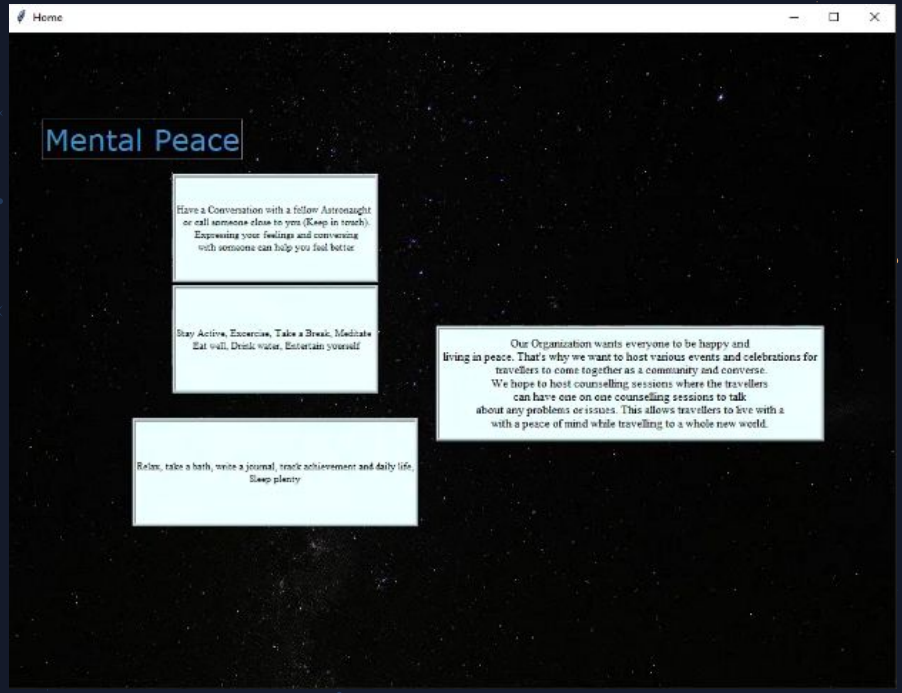
Home Page Walkthrough



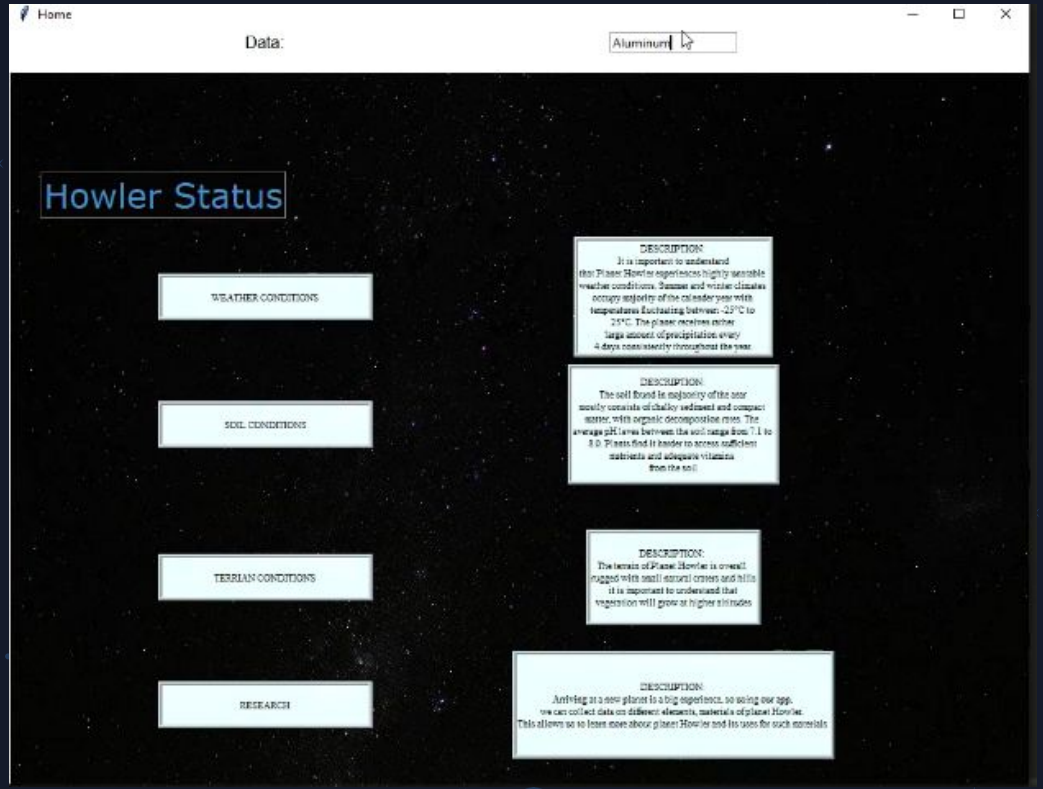


Physical and Mental Page Walkthrough

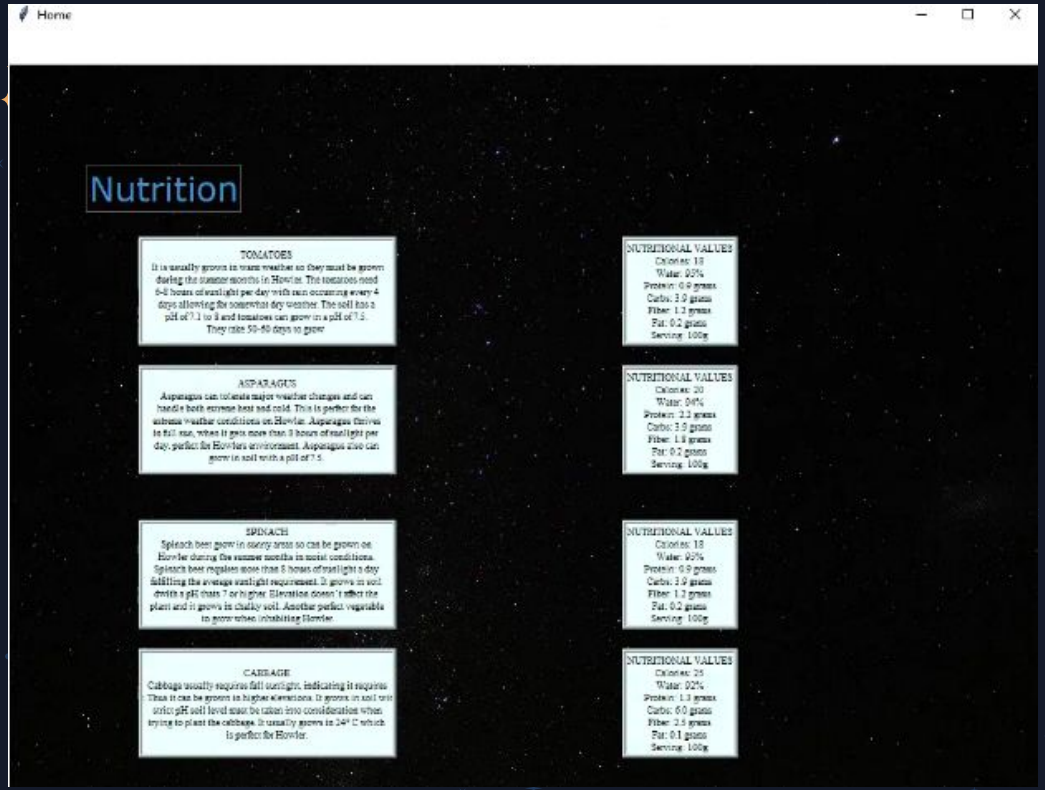




Howler Status Page Walkthrough



Nutritional Page Walkthrough



Our App Coding Team

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Our Research and Designing Team

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Resources

- https://www.almanac.com/plant-ph
- https://www.menshealth.com/fitness/a19545838/10-best-back-exercises/
- https://www.runtastic.com/blog/en/6-helpful-bodyweight-exercises-for-a-strong-back/
- https://gardening.which.co.uk/hc/en-gb/articles/214015225-How-to-succeed-on-chalky-soil#:~:text=Q%20Which%20plants%20will%20do%20well%20on%20chalky%20soils%3F&text=Spinach%20beet%2C%20sweetcorn%20and%20cabbage,but%20avoid%20celery%20or%20marrows.&text=Shallow%2C%20nutrient%2Dpoor%20chalk%20soil,naturally%20grow%20on%20these%20soils.
- https://gilmour.com/drought-tolerant-vegetable-garden
- https://www.rhs.org.uk/advice/profile?pid=763
- https://www.thespruce.com/root-vegetables-1403506
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Thank You!

Do you have any questions?
Feel free to ask