



Index

Current Conditions

1. Shortcut to index
2. Navigation menu
3. Title with current pi location and sensor read time
4. Current sensor data



2

1

Current data from: pi 1

3

Located at Josh

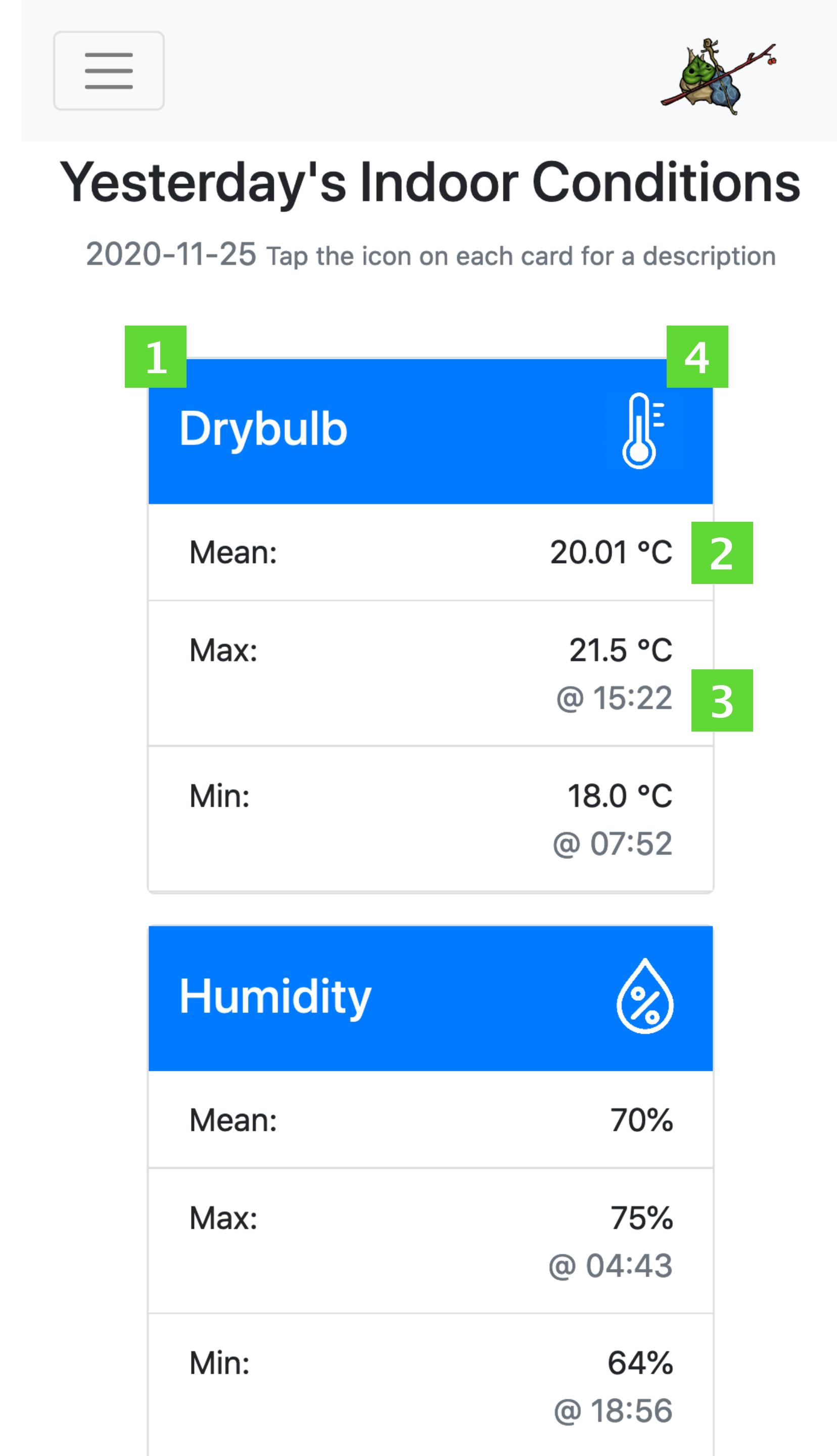
Last read at 12:00

| | | |
|--------------------------------|----------|---|
| Drybulb: | 20 °C | 4 |
| Relative Humidity: | 67% | |
| RH for 1 kPa VPD | 57% | |
| Dewpoint | 13 °C | |
| Vapor Pressure Deficit: | 0.78 kPa | |
| Light: | 317 lux | |

Index

Yesterday's Data

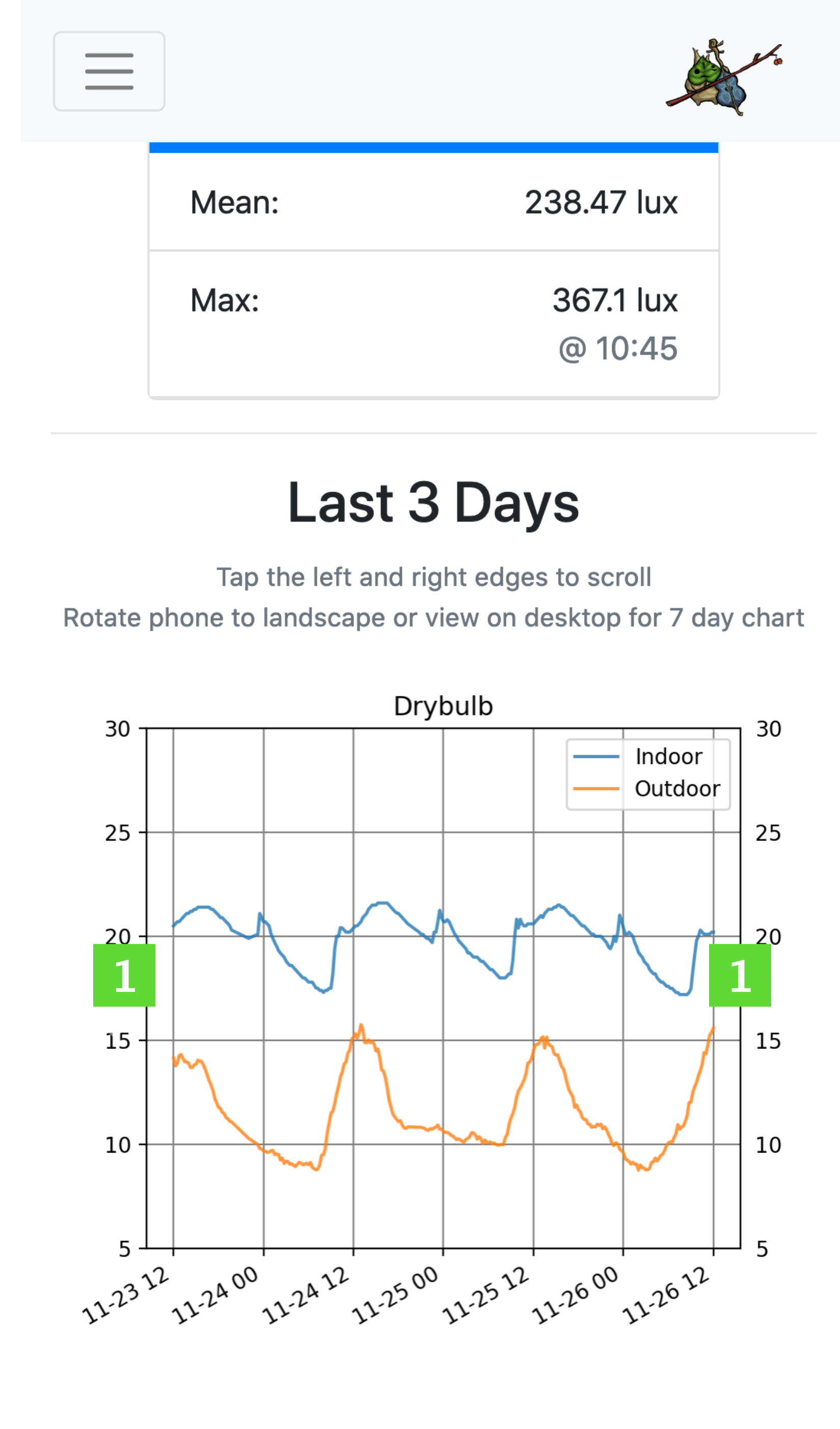
1. Data Type
2. Data
3. Time of min/max (in grey)
4. Tap the icon on each card to show an explanation of each metric



Index

Charts

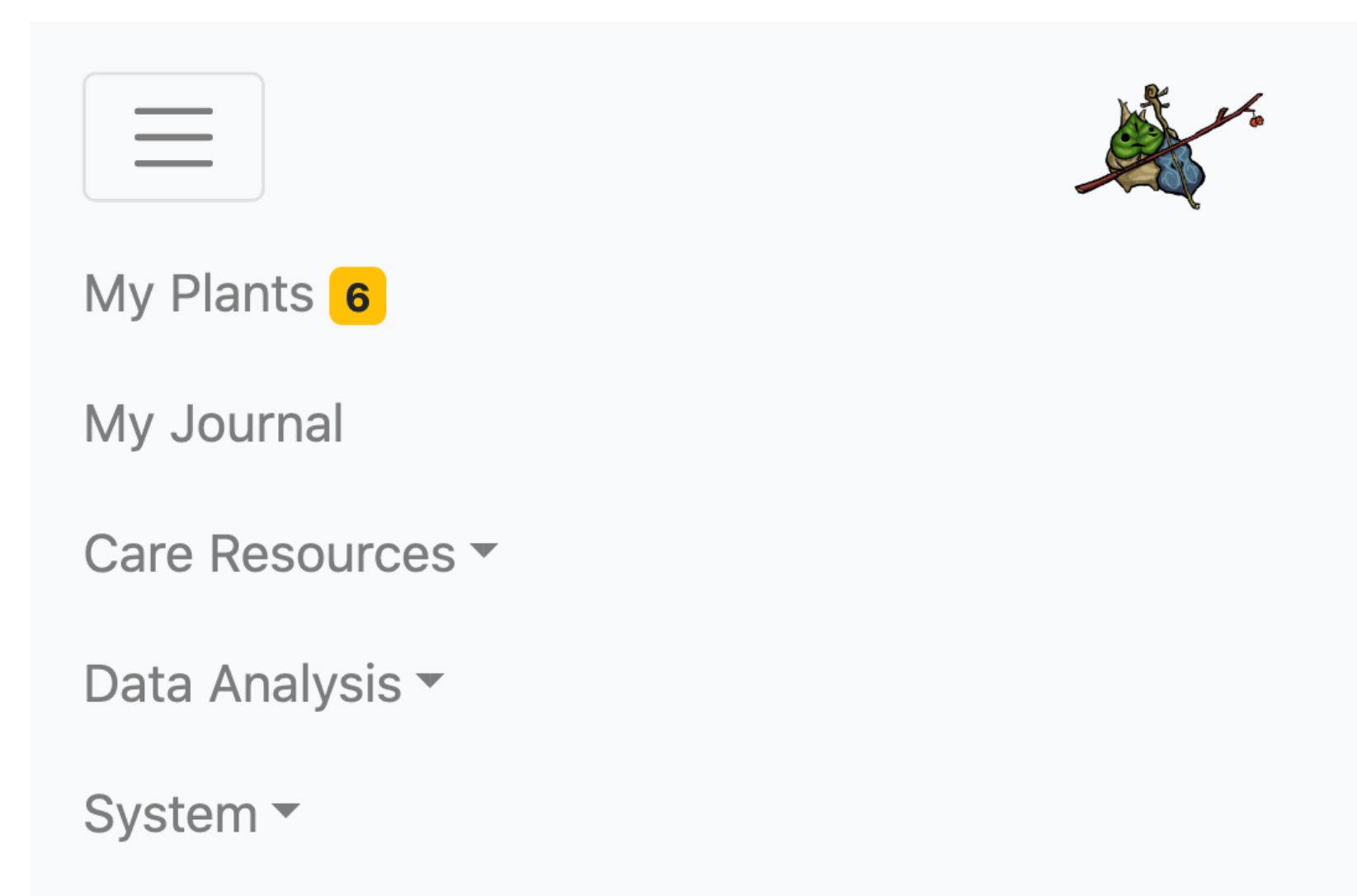
1. Tap the left or right side of the chart to scroll through the different charts (dry bulb, relative humidity, VPD, Lux)
2. 3 day charts are optimized for mobile screens
3. Rotate your phone to landscape or view on laptop/tablet for the full 7 day chart



Navbar

How to get around

1. **My Plants** – manage plants being tracked by the system
2. **My Journal** – add, view and manage journal entries for your plants
3. **Care Resources** – Mostly under construction at the moment, but come here to add missing plant species
4. **Data Analysis** – dig deeper into the data collected by your pi's sensors
5. **System** – Change system settings and view logs for troubleshooting



LOCATED at JOSHI

Last read at 12:00

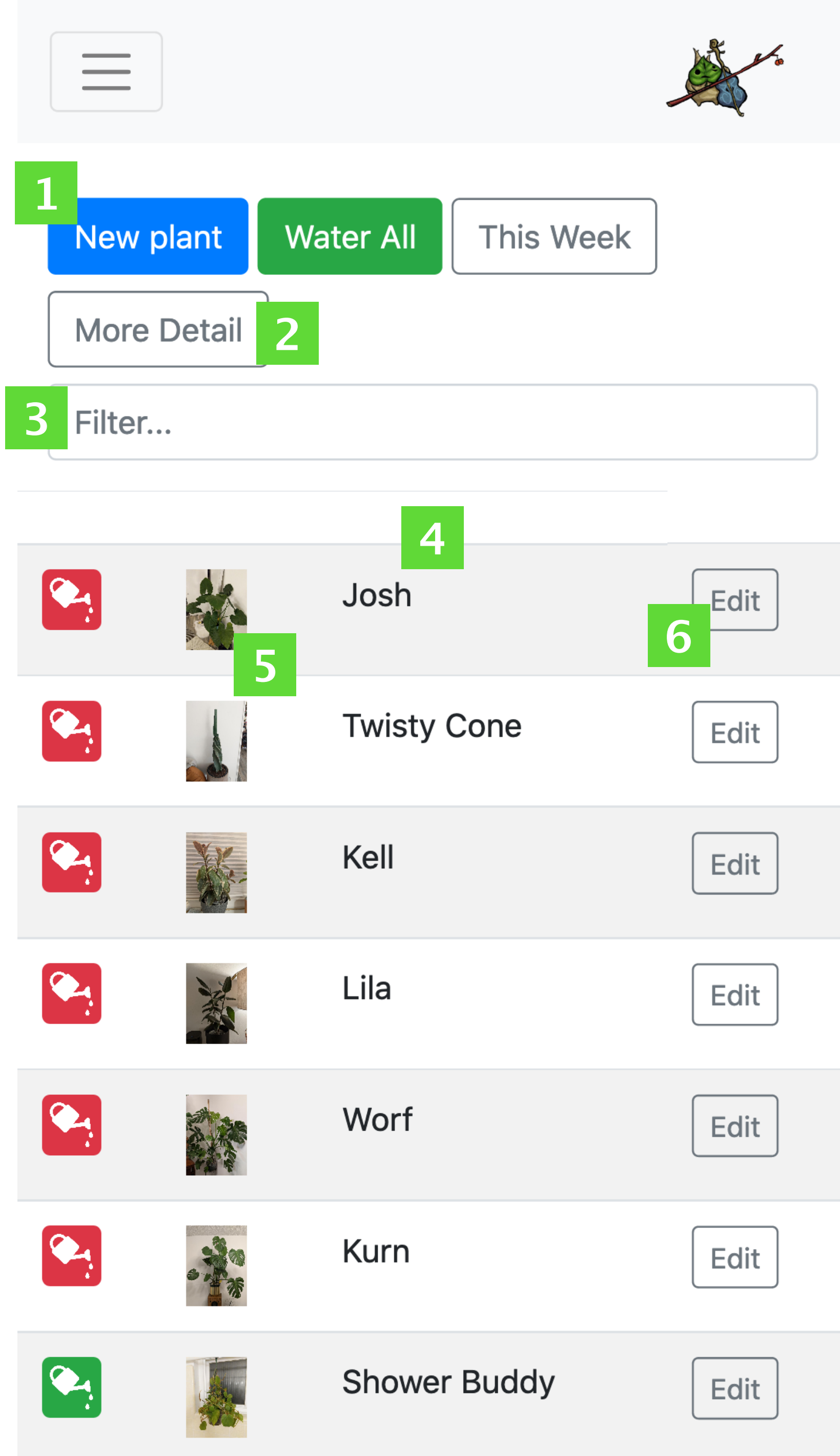
| | |
|--------------------------------|----------|
| Drybulb: | 20 °C |
| Relative Humidity: | 67% |
| RH for 1 kPa VPD | 57% |
| Dewpoint | 13 °C |
| Vapor Pressure Deficit: | 0.78 kPa |
| Light: | 317 lux |

Yesterday's Indoor Conditions

My Plants

Track and manage your plant collection

1. Add a new plant to your collection
2. Links to the expanded my plants table, overview graphs, graveyard/list of sold plants
3. Filter the table to find specific plants
4. Table of basic plant collection info (rotate phone or view on tablet/laptop for more info)
5. Tap the thumbnails to view enlarged plant photos
6. Edit this plant



My Plants – Watering

Keep those plants moist and happy


1. Water all plants in your collection
2. Water this plant
 1. Red = Water now
 2. Yellow = Watering day coming soon
 3. Green = Plenty of time left!
 4. Grey = Watering Disabled (ignore)
3. If you make a mistake, edit the “last watered” field
4. Show 7 day look-ahead (see next slide)

The screenshot shows the 'My Plants – Watering' app interface. At the top, there is a menu icon (three horizontal lines) and a small cartoon character of a plant on a stick. Below the header, there are four buttons: 'New plant' (blue), 'Water All' (green, with a green square containing the number 1), 'This Week' (grey, with a green square containing the number 4), and 'More Detail' (grey). Below these buttons is a search bar labeled 'Filter...'. The main content area displays a list of plants, each with a watering status icon (a red watering can), a photo of the plant, the plant's name, and an 'Edit' button. The plants listed are Josh, Twisty Cone, Kell, Lila, Worf, Kurn, and Shower Buddy. The 'Shower Buddy' entry has a green watering can icon and a green square containing the number 2. The 'Josh' entry has a grey watering can icon and a green square containing the number 3. The 'Worf' entry has a red watering can icon.

| Watering Status | Plant Name | Edit |
|-----------------|--------------|------|
| Red | Josh | Edit |
| Red | Twisty Cone | Edit |
| Red | Kell | Edit |
| Red | Lila | Edit |
| Red | Worf | Edit |
| Red | Kurn | Edit |
| Green | Shower Buddy | Edit |

Watering Calendar

7 day look-ahead



My Plants

6

My Journal

Care Resources

Data Analysis

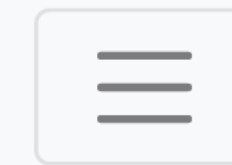
System

| Thursday | Friday | Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday |
|--|--------|----------|--------|--------|---|------------|----------|
| <div>Josh</div> <div>Twisty Cone</div> <div>Kell</div> <div>Lila</div> <div>Worf</div> <div>Kurn</div> | | | | | <div>Shower Buddy</div> <div>Doc Brown</div> <div>Phineas</div> <div>Ferb</div> <div>Ned</div> <div>Rhy</div> <div>Crowley</div> <div>Lwaxana</div> | Victreebel | |

Add New Plant

Some key notes below

1. Names must be unique, but feel free to do “Fiddle 1”
2. Add new species in Care Resources → Plant Requirements Database
3. Leaf temp offset – leave at zero for now, but will come in handy later ;)
4. Pictures are optional



Add new plant to collection

| | |
|---------------------------------|--|
| Unique Name | <input type="text"/> |
| Species | <input type="text" value="none"/> |
| Location | <input type="text"/> |
| Purchased From | <input type="text"/> |
| Purchase Date | <input type="text" value="11 / 26 / 2020"/> |
| Watering Schedule (days) | <input type="text" value="7"/> |
| Last Watered | <input type="text" value="11 / 26 / 2020"/> |
| Substrate | <input type="text" value="Flowering house pla"/> |
| Pot Size (in) | <input type="text" value="4.00"/> |
| Leaf Temperature Offset (deg C) | <input type="text" value="0.00"/> |

Upload
Picture

No file selected.

Plant Requirements

Only sort-of useful right now

1. Find plant species included in the requirements database here
2. Add new species
3. Follow the source links at the top for great care info from UofG Ext.!
4. This is sort of WIP but will be useful in future updates

New Requirement


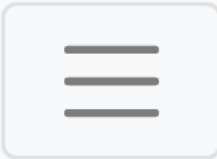
Info from guidance by [Prof. Bodie V. Pennisi](#), published by the [UofG Ext.](#)

| ID | botanical_name | common_name | light_categor |
|-----|-------------------|----------------------|---------------|
| 1 | Abutilon hybridum | Flowering Maple | 1.0 |
| 232 | Abutilon hybridum | Flowering Maple | 1.0 |
| 2 | Acalypha hispida | Chenile Plant | 1.0 |
| 233 | Acalypha hispida | Chenile Plant | 1.0 |
| 3 | Achimenes hybrids | Magic Flower | 2.0 |
| 234 | Achimenes hybrids | Magic Flower | 2.0 |
| 4 | Acorus calamus | Sweet Flag | 2.5 |
| 235 | Acorus calamus | Sweet Flag | 2.5 |
| 5 | Acorus gramineus | Miniature Sweet Flag | 2.5 |
| 236 | Acorus gramineus | Miniature Sweet Flag | 2.5 |

Data Analysis

More opportunities to go overboard

1. **My Plants Overview** – Nerdy charts including a plant timeline, pot sizes, and others
2. **Stats By Plant** – View all-time data for each plant/location
3. **Raw SQL** – query the databases to view more data and troubleshoot
4. **Forecasting and Charting** coming in future updates!



[My Plants 6](#)

[My Journal](#)

[Care Resources ▾](#)

[Data Analysis ▾](#)

[My Plants Overview](#)

[Stats by Plant/Location](#)

[Raw SLQ Query](#)

[Forecasting](#)

[Charting](#)

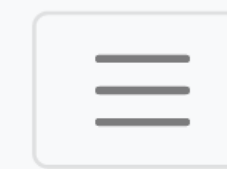
[System ▾](#)

Yesterday's Indoor Conditions

System Settings

Set up your datalogger

1. Name your pi
2. Enter your US timezone
3. Change to fahrenheit (bleh)
4. Change your pi's location
5. API key – free account needed for outdoor weather data
6. Lat/Long – also needed for outdoor weather
7. Add/remove sensors from the system
8. Add location – tracking something other than a plant? Maybe you have a greenhouse?



Change System Settings

| | |
|------------------------|---|
| Name | <input type="text" value="name"/> |
| Time Zone | <input type="text" value="US/Pacific"/> |
| Temperature Scale | <input type="text" value="C"/> |
| Current Location | <input type="text" value="Josh"/> |
| Ideal VPD | <input type="text" value="1"/> |
| OpenWeatherMap API Key | <input type="text" value="key"/> |
| Latitude | <input type="text" value="00.0000"/> |
| Longitude | <input type="text" value="000.0000"/> |

☒ Temperature/Humidity Sensor

☒ Light Sensor

☐ Soil Moisture Sensor

[Update](#)

[Add new non-plant location](#)