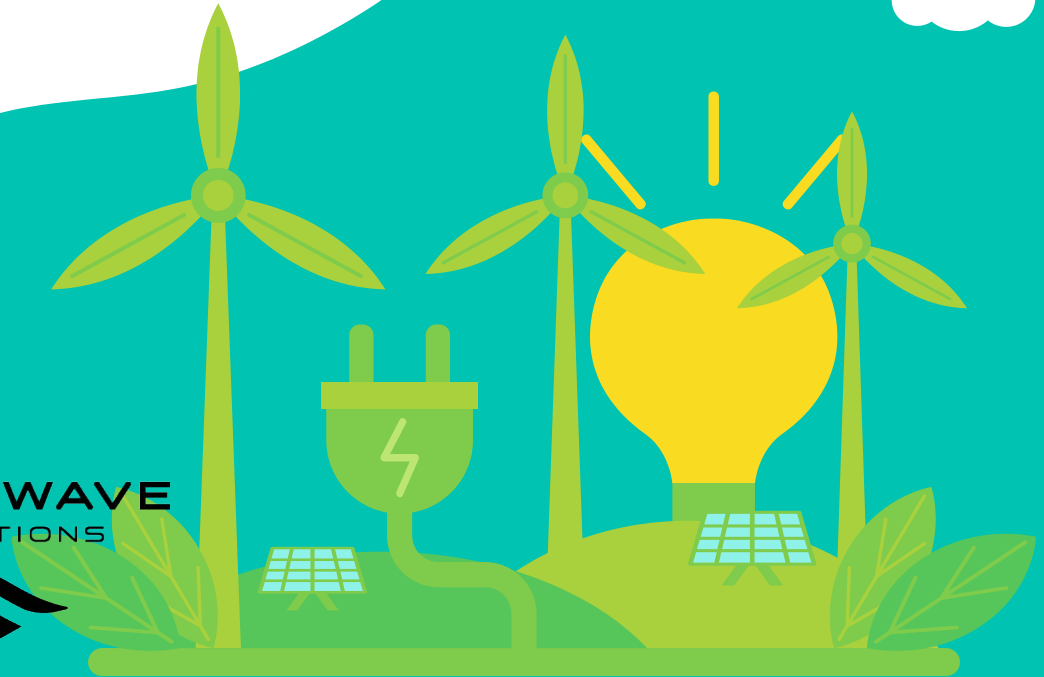# Team/Instructor Scrum #3

Oct. 15, 2021 - Oct. 29, 2021

**Team SolarSize**
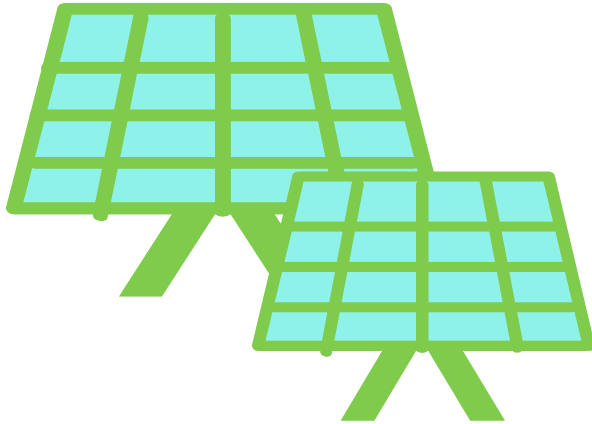Tristan Brown-Hannibal
Karlee Fidek
Kaden Goski

**+**

GREENWAVE
INNOVATIONS

# About This Project

- A tool that utilizes building consumption metrics and solar intensity data to calculate accurate ROIs
- Help to determine over or under generation windows and size solar generation solutions accordingly

# Project Status

**Green**

- We have a good base
- We would have liked to start connecting up front-end and back-end, but feel like we're still "on track"

# Project Issues/Changes

- No issues or changes so far with the project

# Team Member Contributions

**Tristan**

- Explored data visualization (ApexCharts.js, d3.js, Chart.js)
- Explored solar data APIs
- Initial class diagram

**Kaden**

- Data sources and equations
- Back-end (PHP - Laravel)
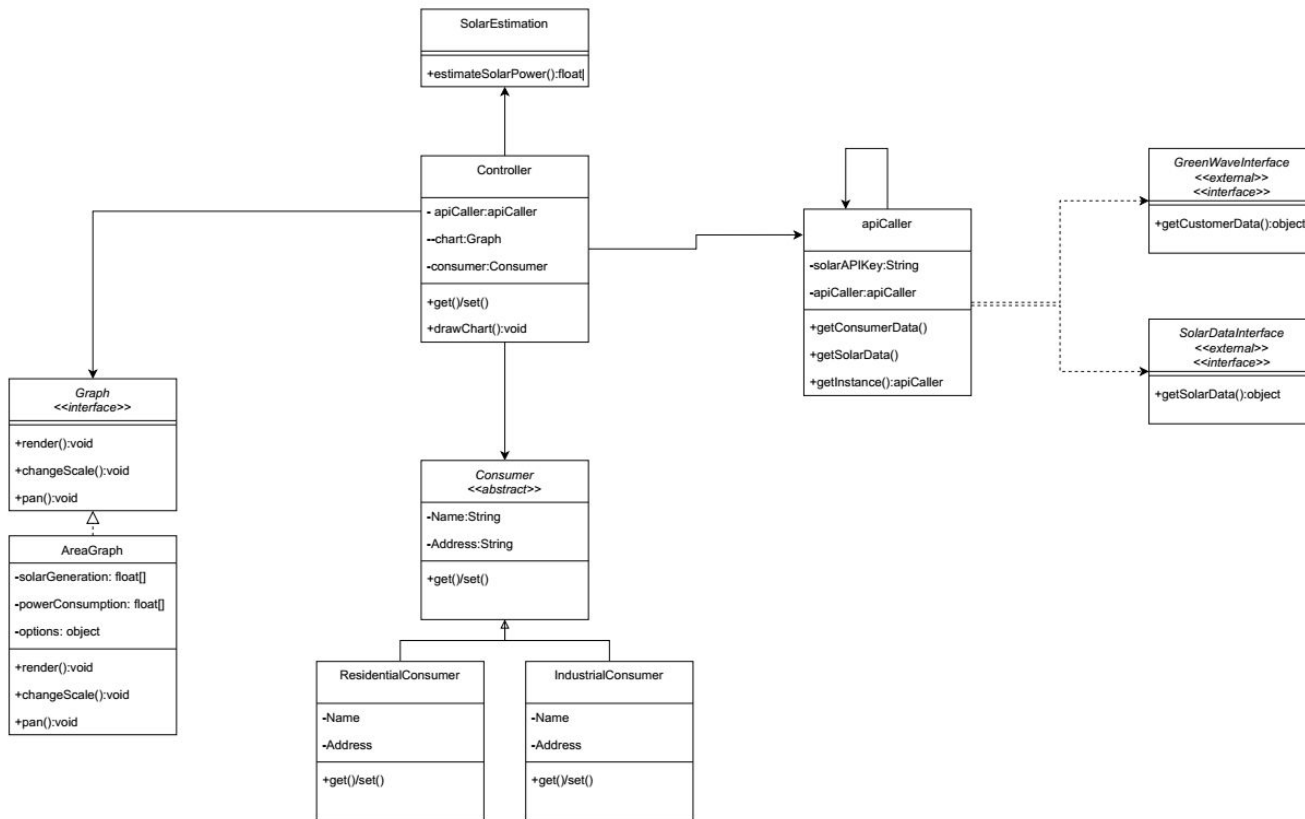
# Team Member Contributions

## Karlee

- Lo-fi UI prototypes
- Explored front-end technologies (React.js, Angular, Vue.js)
- Researched solar generation equation
- Meeting minutes

## Group

- Met with Dr. Yow
- Met with Greenwave Innovations
- Vlog #2
- Signed Greenwave capstone agreements

# Class Diagram



Class Diagram 1.0

**SolarEstimation**
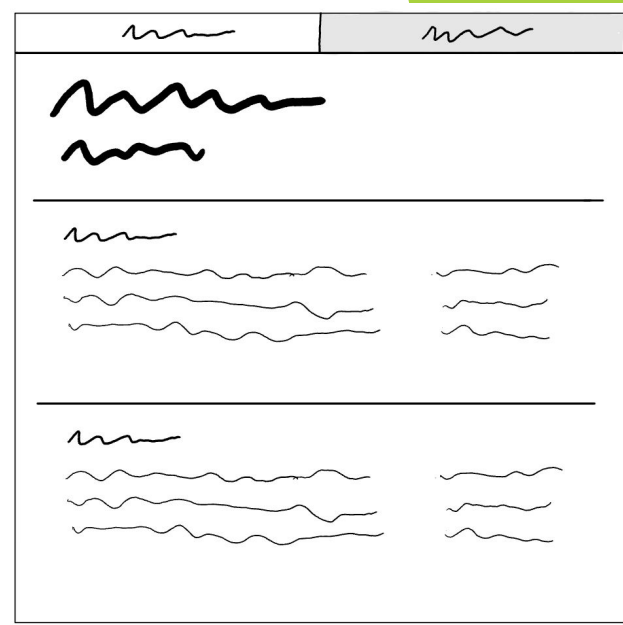
+estimateSolarPower():float

**Controller**

- apiCaller:apiCaller
- chart:Graph
- consumer:Consumer

+get()/set()
+drawChart():void

**apiCaller**

-solarAPIKey:String
-apiCaller:apiCaller

+getConsumerData()
+getSolarData()
+getInstance():apiCaller

**GreenWaveInterface**
<<external>>
<<interface>>

+getCustomerData():object

**SolarDataInterface**
<<external>>
<<interface>>

+getSolarData():object

**Graph**
<<interface>>

+render():void
+changeScale():void
+pan():void

**AreaGraph**

-solarGeneration: float[]
-powerConsumption: float[]
-options: object

+render():void
+changeScale():void
+pan():void

**Consumer**
<>

-Name:String
-Address:String

+get()/set()

**ResidentialConsumer**

-Name
-Address

+get()/set()

**IndustrialConsumer**

-Name
-Address

+get()/set()

# Lo-fi Prototypes

**Generation Overlay**

**Summary Details**

# Next Up

**Tristan**

- Begin building data visualization (with ApexCharts.js)
- Connect visualization with APIs
- Integration with user inputs

**Kaden**

- Create backend (PHP - Laravel)
- Test out data

# Next Up

**Karlee**

- Gantt Chart
- Hi-fi UI prototypes
- Pick front-end technology and start experimenting with it
- Start front-end development

**Group**

- Meet with Greenwave Innovations
- Meet with Dr. Yow
- Finalize solar production calculations
- Finalize solar data source decisions
- Get power consumption data from Greenwave

# Team Reflection

- **Does the team feel "on track"?**
  - Green
  - Yes, we have a good base so we feel like we are "on track"


- **What progress does the team particularly feel good (great) about?**
  - Lots of new things to learn, we feel we've done well trying to figure out solar/PV's

# Team Reflection

- **What barriers (if any) does the team feel are a current impediment to success?**
    - No barriers at this time

- **What help (if any) does the team require to move positively forward?**
    - None

- **What questions or concerns does the team have (if any)?**
    - No questions at this time