

## PROJECT REQUIREMENTS - Preliminary

### Project Name

SolarSize

### Functional Requirements

**Database** - GreenWave has one that we will be accessing, will possibly need to setup our own to manipulate that data as needed

**API** - TBD, might be one at GreenWave if not we may aim to create one in our program for integration with their systems.

**Login** - Users and GreenWave Admin accounts. Varying abilities to both.

**Graphs** - Interactive and scalable graphs using data from AI/Algorithms and databases.

**Solar Intensity Data** - Some way of automatically getting solar intensity map information.

**Map Display** - Display solar installations on a map based on locations.

**Email/Text Alerts** - Determine when issues have occurred and notify Clients and GreenWave.

**Solar Sizing** - Calculate ideal solar installation size for ROI based on usage patterns.

### Technical/Performance Requirements

**Scalable** - New Clients will be auto populated from the database. Both the database and program should be able to accommodate this.

**Secure** - Clients should only be able to see their own data. Security to ensure accounts have separation is needed.

**Good Experience/Pretty UI** - A good UI is key as this will be a client-facing tool.

**Efficient** - Load times are minimal, and do not negatively impact user experience. Key for "real-time data" and to efficiently determine scale of solar installation.