The front end:

The user needs to keep track of what is happening so we decided to make an android app. This app takes the data from the sensors which are present at the electricity grid. Due to the lack of sensors we have used a random function to generate artificial data for our needs.

Why an android app:

As we know that smartphone is taking the world by storm and android is one of the most popular OS. Also, the ease of access of the app.

What the app does:

The app keeps track of the current power stored by the battery. This is converted into the current percent stored. This is dynamically updated at run time as the data is received from the sensors. Also, the amount of power produced and the power redirected by the power grid is shown live along with the power consumed.

This data is stored in a local database and displayed as a graph so the user can more intuitively interact with the app and know more about the consuming patterns to cut down on the usage.

The app also gives the option to register a new house.

In the settings you can decide that whether you would like to save your data with the appropriate authorities. Also, a change of the capacity of the battery can be made if necessary.

The app is very visual with vivid animations to keep it engaging.

Future plans:

We plan to make the graph easier to use with filters and averages of the data calculated by the app. The app should be able to make educated guesses on user’s consumption to give power saving tips.