**SCRIPT – WINDFARM STP**

SUMMARY

Description:

Our application helps foreman on a job site to schedule their crew’s plan of the day with the ability to view all other crew’s daily plan. As a result, this gives a master daily plan view in which all team members can view and discuss the morning of, which allows for conflict resolution and plan alterations.

Motivation:

We arrived at this idea because while there are plenty of daily planning tools for construction, they are largely driven by a small group of schedulers that interpret more sophisticated planning logic and layouts and are planning for the entirety of the project. While this plan is still leveraged in the field, it doesn’t provide the flexibility to make quick alterations and an easy means for foreman to collaborate on more of a short-term plan. In addition,

Furthermore, projects are based on productivity. The issue with that thinking is that it neglects the mindset of plan. A Typical example might be a foreman stating to his crew, we need to complete two units a day. This can be problematic, as it neglects planning the right two turbine locations in a day. In general, we want to shift the field’s mindset from productivity to schedule optimization, and as a result, productivity should follow.

Result:

We ended up simplifying the application for our MVP product, where we assumed that we build the application for one project first with pre-populated crew names and turbine locations. We did end up using the openweathermap API for additional weather information to assist in the foreman’s plan. We also used the time table JavaScript library to create the Gantt chart visual displayed in the master view.

Team Efforts:

Paul generated the idea as it is applicable to his job at Mortenson. He initially laid out the general logic, the SQL database setup and flow behind the plan. Thereafter, we had a group planning session to scale back the current idea to an MVP product (which was a good thing). From there, we assigned html pages with corresponding JavaScript scripts. Jag created the homepage, Anh created the master plan page, and Jason created the plan inputs page.

Challenges:

Individually talk about Challenges

* Paul: having to acknowledge and realize the time constraints presented upon us, other team members made me realize that in order to deliver within the time constraints we needed to scale back and make an MVP.

Improvements:

Currently, this is geared as a starting point. For this to be successful in the future, we would need to add more functionality and inputs to generate the key metrics and application views that would provide insight to management and the crew team members themselves. The original database structure is much more complex than our current structure of one table, but we had to scale back given time constraints.