

EE/CprE/SE 492 GROUP PROGRESS REPORT

Group number: sdmay22-19

Project title: Underground Cable Packing Web Tool

Client: Professor Mathew Wymore, EPRC, Alliant Energy

Advisor: Professor Mathew Wymore

Team Members: Name - Leadership Position (below)

Alexander Young - DevOps and System Engineer

Brevin Wapp - Scrum Master

Haadi Majeed - Quality Assurance Engineer

Matthew Hoskins - Team Lead

Nate Tucker - Tech. Lead

Tom Sun - User Experience and Requirements

Quinten Sorice - Client Point of Contact

o Project Summary:

This project's goal is to develop a web tool/site that will function similar to the executable software the project is based on while adding new features and improved primary functionality such as: enhanced algorithm, mobile support, and ease of use. This web tool will also allow for more readily available functionality being an application available on EPRC's website for immediate use while being hosted on Iowa State University's servers. To this, the direction or scope of this project has not undergone any change from original ideation and planning.

o Accomplishments

The team as a whole has continued weekly meetings with individual meetings between collaborating members (i.e. those working on the communication together, those working on the algorithm together, etc.) have other meetings focused on work rather than administrative and whole project infrastructure/technical issues. The team has continued software development progress on the team gitlab issue boards.

Individual work: (Team member - Description/list of work, when/week)

- Alexander Young - Working closely with ETG in order to have the server open to public access over the internet - not just vpn and on campus (week 14). Improved upon the communication with the newer frontend functionality (week 11-14). Worked with Nate Tucker and Matthew Hoskins in improving the calculator portion of the site on the communication end (week 11). Setup CI/CD for the frontend code base (week 13-14). Got the frontend code base actively working on the server along with the already setup backend (week 14).
- Brevin Wapp - Worked on the frontend aspects of getting a login/account creation/recover pages setup in order to facilitate the stretch goal of a user being able to create an account that will preserve a list of cables and bores that can be loaded into the calculator (Week 11-14). Worked on the frontend communication of these functions in conjunction with Alex Young who managed the backend portion (week 13-14).

- Haadi Majeed - Tested site reliability on the backend by creating tests that would be emulating a login/account creation process (week 12). Worked on documentation for final presentations and reports (week 13). Worked on backend refactoring and cleanup to preserve a clean code base as the last issues are getting resolved (week 14).
- Matthew Hoskins - Worked with Nate Tucker and Alex Young in improving the calculator portion of the site on the communication end (week 11). Made further improvements to the bore generation portion of the algorithm (week 12). Cleaned up some of the backend code base, and wrote some additional tests with minor edits to the code to route out the identified problems (week 13). Setup and started working on the end of semester and project documentation and presentations (week 13-14).
- Nate Tucker - Worked with Matthew Hoskins and Alex Young in improving the calculator portion of the site on the communication end (week 11). Made a large clean up of the frontend code base to improve functionality, readability, and compilation (week 13). Led a code and branch cleanup on the tech side of the project to reduce potential problems from continued out of hand development processes (week 14). Updated and reiterated the focuses and goals on the frontend design focuses to ensure a more clean product (week 14).
- Tom Sun - Setup and started testing the functionality of preserving a cable link/render for sharing purposes (week 12). Worked on getting a basic email function for sharing a cable render via automatic button press on the frontend of the site (week 13). Improved site navigation and session preservation to make it easier to use and more intuitive to the user (week 13-14).
- Quinten Sorice - Consulted with Alliant for small functional changes to the application and updated git issues accordingly (weeks 11-14). Performing reviews for merge requests for final feature implementations (weeks 11-13). Updating final report (weeks 13+14). Creating final poster (weeks 13+14). Created a help page for new app users (week 13).

o **Pending issues**

At this time there are not any pending issues for any aspect of the project, and the team is just progressing with the expected development work.

o **Advisor Input/Signature:**

Please select one of the options below and sign.

I am pleased with the progress the team is making.

The team's progress could use some minor improvements which I will discuss with them.

The team's progress has some major concerns that I will discuss directly with Dr. Bigelow (bigelow@iastate.edu , 515-294-4177)

Signature:
