

EE / CprE / SE 492 - sdmay23-06

Production Run Reports

Week 1-5 Report

January 16th - February 17th

Client: JEDA Polymers

Faculty Advisor: Dr. Stoytchev

Team Members:

Colton Carlson	-	Team Lead, Backend, Email API
Hayden Havelka	-	Backend, Database Querying
Jay Arnold	-	Backend, User Authentication
Connor Linn	-	Frontend, Login / Sign Up Pages
Noah Meyer	-	Frontend, Request Report / Display Report Pages

Past Week Accomplishments

- **Colton:** Backend Development
 - Created SMTP class that sends emails to a specified SMTP server.
 - Emails come from the client specified email address.
 - At midnight every night a method is called to send an email, this will later be filled in with the day's reports.
 - Created static log file object.
 - Plan to use this to log start and stop times of key events, such as pulling data, generating reports, or logging in. Development wise this can be used to keep track of any potential bottlenecks.
 - Can also use this to log any errors for referencing later.
 - Made sure to protect from two write requests at the same time by using semaphores.
 - Was able to run queries on the live canary database.
 - Manually looked around the Canary Database to obtain a better idea of the clients database schema.
 - Discovered only work order start time is logged.
 - Found and verified what ports are being used by the database.
 - Discovered ports by examining database settings.
 - Verified with netstat that the correct ports are being used.
 - Used postman to send get requests for data and was able to receive correct results.
 - Created a C# application to run queries and was able to validate results.

- Started with the Canary Historian .net dll's. But discovered that the dll's are outdated and only use Canary api v1, as our client has an updated version of Canary, they are on api v2.
 - Switched over to using the .net HTTP methods. Which resulted in a ssl error, as JEDA signs their own internal certificates.
 - Solved by creating a handler that always returns true and using that as the validator.
 - Translated previously written queries into C# GET requests and obtain correct results.
 - Results are currently being sent as a string formatted as a json file. But will be deserialized into a standardized object.
- **Hayden:** Backend Development
 - Kept in contact with client (JEDA Polymers) in order to troubleshoot remote desktop issues
 - Setup talks with client to setup RDP connection/file sharing between systems
 - Asked for additional server permissions to install necessary software
 - Discussed Canary database backend with client and figured out where/how specific data was stored within the system
 - Worked with Jay to help troubleshoot issues based around Mac M1 chip with setting up a ASP.NET development environment in Visual Studio Code
 - Attempted work on ASP.NET controller to make a HTTP get requests. Switched to a different service of the ASP.NET Web API before scrapping entirely.
 - Started work testing out users authentication using the ASP.NET core identity documentation provided by Microsoft
- **Jay:** Backend Development
 - Spent time troubleshooting project errors. Errors were due to the Mac M1 chip I believe. I am now working on Windows PC.
 - Played around with ASP.NET controller to make a basic HTTP get request.
 - Researched how to query the Canary database.
 - Working on the users authentication. Initial way of doing this was to use a tutorial we found online. After further investigation, we will most likely not use that.
 - Instead we will use the official ASP.NET core identity documentation.
- **Connor:**Frontend Development
 - Create the page template for most Frontend pages.
 - Created a Login Page to the specs of the client
 - Created a New User Page
 - Working on fixing issues between material ui and the router-dom
- **Noah:** Frontend Development

- Developed and finished the web page that prompts the user to enter the work order number and line number to generate the report
 - Once the backend team is done, I will be able to request the system to actually generate the report and log the data.
- Developed and finished the web page that displays a test generated report so that the user can either download or email the report.
 - Same as the previous page, no backend capabilities yet but that will be added in the next sprint.
- Investigated how to hook up all the individual webpages on the frontend using Router, a React JS library. Based on the research, I was able to finish its prototype development.

Pending Issues

- **Connor, Noah:** Connecting the frontend using the Router library is not as seamless as it appeared to be.
- **Colton:** Potential issue for queries is we only have the start date of the work orders. Will look into specific energy usage as JEDA told us we can use that to tell when an order is not being run.
- **Jay, Hayden:** User authentication documentation does not outline how the user authentication data should be stored. It outlines that we should use either an SQL database that we set up or we can implement “Azure Table Storage” which we will have to look into more.

Individual Contributions

Team Member	Contribution	This Report Hours	Total Hours (492)
Colton Carlson	Created STMP sender. Created log file. Successfully queried data from the clients Canary Database. Developed proof of concept application to query data.	45	45
Hayden Havelka	Kept contact with client Troubleshoot errors Research HTTP get requests and user authentication Started work on user authentication	30	30
Jay Arnold	Troubleshoot errors	28	28

	Research HTTP get requests and user authentication		
Connor Linn	Finished Login Page Finished New User/ Sign Up Page Error resolution with MUI and Router	29	29
Noah Meyer	Developed the Request Report & Display Report web pages, developed a working prototype React app that connects all of the web pages pages	30	30

Plans for Coming Two Weeks

- **All:** Meet with our academic advisor on Friday 24th. Meet with our client for the monthly check-in.
- **Colton:** Finish Query Development:
 - Create a basic canary static library that will be used.
 - Finalize what queries need to be executed for a report to generate.
 - Parse and store data from a query into a standardized object.
 - Integrate parsed data into pdf generation.
- **Hayden:** Finish User authentication
 - Setup additional storage system (ie SQL Database)
- **Jay:** Finish User authentication
- **Connor:** Finish Routing and Project integration
 - Make sure all of the Pages are complete
 - Move all of the individual pages into one cohesive project
- **Noah:** Finish Development of the Router Prototype
 - Make sure the styles of the webpages match the pages we have already created.
 - Add in the remaining page (sign up) so that the user can navigate through all webpages.
 - Make sure the functionality matches what the client desires.