

EE / CPR E / SE 492 - sddec20-22

DNA to Feature Models

Biweekly Status Report 4

9/29/2020 - 10/12/2020

Client: Dr. Myra Cohen

Faculty Advisor: Dr. Myra Cohen

DNA To Feature Models

The following report presents the progress of the senior design team for the project, DNA to Feature Models, in the past two weeks. This progress report also entails a partial recap of where the team left off from last semester.

Team Members:

- Abdul Rahman El Moughrabi - Developer/Documentation Management
- Ahmad Nazar - Team Leader/Developer
- Ahmed Alketbi - Developer/Debugger
- Hyegeun Gug - Developer/Web Management
- Prathik Nair - Debugger/Developer

Past Week Accomplishments:

The frontend plugin interface foundation has been established and a bridge between the frontend and backend has been completed.

Pending Issues

- Merging a plugin within FeatureIDE's plugin interface
- Using data to implement features in frontend with respect to FeatureIDE
- Refining output in frontend and adding more entities from backend to frontend

Individual Contributions:

Abdul Rahman El Moughrabi

In the past 2 weeks, I created the framework and foundation of our plugin and made sure everything will be ready for when we connect it to our database. I also learned how to play around with plugin development and me along with 2 other team members made a connection between frontend and backend. We presented our work to the client and she was happy with our progress.

Ahmad Nazar

For the past 2 weeks, I have been working on refining the backend data for the frontend plugin data. The backend needed some stress-testing to make sure Maven does not fail on successive updates to the database and the frontend; that was an issue I noticed with the backend but I have formulated why this is happening which is due to Maven needing to rebuild the backend.

Ahmed Alketbi

During the past 2 weeks, I worked on fixing some edge cases with translational units because they had inconsistent parameters, unlike Plasmids or Primers. Due to the inconsistency, I might have to try another approach to parse XML data which I am already testing. I also worked on the frontend to establish a connection with the backend and display the parts obtained from the database in the plugin.

HyeGeun Gug

For the past 2 weeks, I have been working on the plug-in and parsers. Found an issue with table columns for file parsers and had to inactivate some of features in order to test the database for the plugin. For the plugin, we have set up login features, menus, popup menus, and catalog from Biobrick repository. Started to connect to a database to grab information and will try to move on from here for next week.

Prathik Nair

This week I had to organize and edit files from various parts from the iGem repository. This task was complete a while ago but I had to finish some additional categories; as well as edit some previous categories. The final and updated version will be sent to Abdul by Sunday. Alongside my work organizing data, I have completed all of the weekly and biweekly requirements for the course.

Team Member	Weekly Hours	Total Hours
Abdul Rahman El Moughrabi	7	21
Ahmad Nazar	5	21
Ahmed Alketbi	6	22
HyeGeun Gug	5.5	30.5
Prathik Nair	4	12

Plans of Action:

- Complete more experiments with plugin development
- Refine output for frontend
- Integrate live data from shell and curl commands to be used with frontend
- Filter data going into frontend based on desired user category