

EE / CPR E / SE 492 - sddec20-22
DNA to Feature Models
Biweekly Status Report 5

10/13/2020 - 10/26/2020

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. A problem regarding extending a feature in FeatureIDE arose however we quickly figured out what the files in FeatureIDE's source code were inferring,

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

The past 2 weeks I mostly focused on finishing preparing the rest of the files to be inputted into the file parser and formatting them to be used in the backend with Prathik. I also worked with Huegen to add more categories from BioBricks into the plugin and worked on frontend design/actions. Started the template for testing the plugin and will try it out as soon as we finish!

Ahmad Nazar

These past two weeks, I spent the time working with Ahmed Alketbi on understanding FeatureIDE's source code. We mainly worked on searching through implementation files on FeatureIDE's open source Git repository and found some interfaces and implemented classes related to the next task. In addition, I worked on updating the entities previously non-existing on the online database by writing a more refined file parser for a web scraped output.

Ahmed Alketbi

In the past two weeks, I worked on figuring out how to use FeatureIDE's source code in order to combine it with our plugin to construct features in a FeatureIDE's Feature Model project. Ahmed Nazar helped me with identifying the interfaces and classes that implement futures. I also did more testing on the backend for XML extraction because each part has different structure in some categories like Translational Units and Reporters.

HyeGeun Gug

For the past two weeks, I have worked on the frontend of our plugin adding more features and catalog. It would be able to fulfill the features of calling all the catalogs from the Biobrick repository. If Ahmad Nazar and Ahmed Alketbi find out how to deal with FeatureIDE, I would try to link our plugin with the FeatureIDE providing feature to show models for catalogs.

Prathik Nair

This week I had some more files to parse for our own personal database. The files I organized last week were not compatible with our frontend code so that was an issue that I had to fix within our txt files. This week I will be reaching out to Abdul for further tasks within our frontend code team

Team Member	Weekly Hours	Total Hours
Abdul Rahman El Moughrabi	5	26
Ahmad Nazar	6	27
Ahmed Alketbi	8	30
HyeGeun Gug	6	36.5
Prathik Nair	4	16

Plans of Action:

- Complete more experiments with plugin development
- Integrate FeatureIDE source code for adding feature using our database entities
- Build and export current product to see manifest options and dependencies
- Filter data going into frontend based on desired user category