IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

EE / CPR E / SE 492 - sddec20-22 DNA to Feature Models

Biweekly Status Report 1

8/17/2020 - 8/31/2020 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:

- Reviewed Team Progress
- Assigned Tasks to Members
- Experimented with a Simple Plugin
- Identified bugs within XML parser

Pending Issues

- Adding data through an XML parser
- Initializing the plugin
- Analyzing FeatureIDE's source code

Individual Contributions:

Abdul Rahman El Moughrabi

I spent the past two weeks looking over what we did during the first senior design class and trying to figure out how to connect the backend with the frontend. I also looked at how to develop/implement/edit a plugin to be able to later make our own. Making a plugin will be difficult but it is a necessary step to finish this project and connect the backend with the frontend. Each team member has been assigned a task for the next 2 weeks and hopefully tackling the plugin one step at a time will show results.

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

College of Engineering Department of Electrical and Computer Engineering

Ahmad Nazar

Over the past two weeks, I completed a review of the project's progress to recap what has been completed and needs improvements. A list has been distributed among team members which entails the aforementioned details. Also within the past two weeks, I experimented by creating a simple "Hello World!" plugin for Eclipse and adding minor modifications to experiment on the console existing within Eclipse. The tasks seems trivial but requires lots of detailed code to complete.

Ahmed Alketbi

In the past two weeks of the semester, We met with our advisor to discuss the current state of our project and we demoed our work so far from CPRE 491. I also worked on fixing some bugs and edge cases in the XML extractor where some parts didn't have any information on things like the origin, resistance... etc by setting these fields to null. I still need to add support for more part types and automation. I also noticed some useful information about feature types that could make categorizing parts easier when we export to XML files to use in FeatureIDE.

HyeGeun Gug

For the past two weeks, We had meetings with the client and advisor to discuss the progress of our project. I am working on figuring out how the feature IDE's source code is acting when an XML tree is added to create a feature. This will help us to connect the frontend and backend. It will take some time to analyze how it will react with our data when added to feature IDE.

Prathik Nair

For the start of the semester- my team was able to meet with our advisor to develop a plan of action for the remainder of the semester. Last semester, we were able to get some level of an MVP working. My understanding is that I will be helping debug and parse through files (similar to last semester). While I was not able to attend meetings this week (due to schedule issues), I plan to be more focused on this project in the upcoming weeks.

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

College of Engineering Department of Electrical and Computer Engineering

Team Member	Weekly Hours	Total Hours
Abdul Rahman El Moughrabi	5	5
Ahmad Nazar	3	3
Ahmed Alketbi	3	3
HyeGeun Gug	3	3
Prathik Nair	2	2

Plans of Action:

- Complete more experiments with plugin development
- Web scrape the rest of the BioBricks Repository to push to the project database
- Understand FeatureIDE's source code for seamless plugin integration
- Improve XML parser with more part types of support.