

Abdul Rahman El Moughrabi
Ahmad Nazar
Ahmed Alketbi
Hyegeun Gug
Prathik Nair
Bi-Weekly Report 1 - CPR E 491
Professor Myra Cohen

DNA To Feature Models

A feature model is a representation of the building blocks for a software product line. A software product line is a collection of techniques and features used to build and classify topics or objects from the foundation up. A good example of a feature model is a phone; the high-level component is a device itself; a phone can have communication functionalities, capture photos, and have games available to download. Some features are a requirement, and some are optional. The tree representation of this idea can be implemented in different subject matters. This project is about implementing a plugin that creates feature models based on available models on an online open-source repository: BioBricks.

Hours worked for the week: 4 hours

Total Cumulative Hours: 4 hours

Abdul Rahman El Moughrabi:

The first couple of weeks of senior design started off well and we spent most of our time trying to understand and grasp the idea and concept of what we will be doing throughout the upcoming two semesters. During the first week, I met with my team and professor to try to get to know each other and get comfortable working with them. The following week was basically familiarizing myself with our project and I read a couple of research papers about our topic. Meeting with the professor and going over some lecture slides helped set our minds about what we will be doing, what roles there are, the resources and material we need, and finally how we will approach this project. The next step is assigning specific roles and brainstorming.

Hours worked for the week: 4 hours

Total Cumulative Hours: 4 hours

Ahmad Nazar

As a team leader and project manager, I assigned roles to everyone and made sure to have everyone's skill set be used in the best way possible. DNA to Feature Models is an exciting project and I am looking forward to working with everyone on it. As far as progress, we are all building a solid understanding of the project and its requirements to properly attack it with everything we have. The details matter and we are learning and understanding the needs and wants of the projects down to its bare bones.

Hours worked for the week: 4 hours

Total Cumulative Hours: 4 hours

Ahmed Alketbi:

For our first two weeks of our senior design project, we invested our time in accomplishing two main goals. The first one is acquiring a background about our project since it is related to DNA feature

modeling and almost all of us have no background on the subject. We established that by meeting with our client Professor Myra Cohen and she gave us a couple of lectures and a few research papers to establish a foundation on the project. Our second goal was to have efficient communication for our team, and we achieved that by making use of helpful online tools like slack, GitLab and google drive.

Hours worked for the week: 4 hours

Total Cumulative Hours: 4 hours

Hyegeun Gug:

As the first week of our senior design, I have started to work on the Senior design website and will maintain it until the end of the project. We had two meetings from 23rd and 28, Professor Myra gave us basic lectures on how we will approach the project. Since most of the members are not familiar with the DNA to feature model, i have gone through journals and related projects that the professor provided in order to understand the tasks. As DNA to Feature Model, we will have to build a plugin that could go through scrape the data we need to build feature ID.

Hours worked for the week: 4 hours

Total Cumulative Hours: 4 hours

Prathik Nair

As the only EE in the group, I wanted to be sure I understood the project, and spoke up about my strengths and weaknesses so when we do get to a point where we can delegate work; I can work on something that challenges me, but also something I am competent in so I can contribute. During the two meetings we had with our project mentor (Dr.Myra), I was able to get an understanding of what the project was, what the implications of the project in the real world are, and how I and my group are going to contribute. My understanding is that our group will build an eclipse plugin that brings together X and Y and outputs a unique reaction to X and Y (X and Y being given Data points).

Plan of Action:

1. By the next reporting, we will all have a strong understanding of building feature models and understand the concept behind software product lines to better attack this project.
2. Finalize the approach of our project management whether it would be agile software development cycle or in other formats
3. Develop our software project plan with a proposal, a business case, and hopefully a schedule.