Release 1 Plan v3

Goals:

Modify OSRA application to support polymer diagrams.

- Add support to OSRA for recognition of parentheses in chemical diagrams.
- Design Data Model for representing polymers and multi-part chemical structures

Stories:

Sprint 1:

Story Points	User Story	Priority
13	As a Developer, I need an architectural overview of OSRA's processing, so I can understand the code base.	1
20	As a Developer, I need to review each aspect of OSRA's architecture, so I can understand the code base.	2
5	As a Developer, I need to get a basic grasp of O-Chem, so I can better understand use cases.	3
5	As a Developer, I need workflow and processes for the github repo, so I can collaborate on code	4
20	As a Developer, I need a testing environment and test documentation, so I can better contribute to the codebase	5
13	As a Developer, I need to have consolidated documentation from other developers, so I can better contribute to the codebase	6

Sprint 2:

13	As a Developer, I need a testing environment and test documentation, so I can better contribute to the codebase	1
20	As a Developer, I need to understand SMILES notation and .SD file structure, so I can design the smile data structure.	2
5	As a User, I want to have a data structure for encoding polymers in "Smile Notation", so I can work with polymers	3
13	As a Developer, I need to research possible methods for detecting parenthesis, so I can find the best way to implement parenthesis	4
13	As a Developer, I need to research methods for submitting "end" and "repeating" groups for smile conversion, so I can know how to generate SMILES for different segments	5
5	As a Developer, I need to have a x32 based development environment, so I can modify, compile, and test the application	6

Sprint 3:

20	As a Developer, I need a testing environment and test documentation, so I can better contribute to the codebase	1
5	As a Developer, I need to understand SMILES notation and .SD file structure, so I can design the smile data structure.	2
13	As a User, I want to have a data structure for encoding polymers in "Smile Notation", so I can work with polymers.	3

13	As a Developer, I need to understand the POTRACE library, so I can understand how to leverage it and work around it	4
13	As a Developer, I need to understand the OpenBable library, so I can understand how to leverage it and work around it.	5
5	As a Developer, I need to have a x32 based development environment, so I can modify, compile, and test the application	6

Backlog:

As a User, I want to be able to detect “R-Notation”, so I can work with polymers
As a User, I want to be able to detect Par. in Chemical Diagram, so I can work with polymers
As a User, I want to be able to detect Brackets in Chemical Diagrams, so I can work with polymers
As a User, I need an .SD files from the diagram for each sub molecule in the diagram, so I can work with polymers
As a User, I want to be able to detect subscripts for polymer diagrams, so I can work with polymers