Progress Report

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Assigned	Todo (0%)	Doing (0% - 100%)	Done (100%)
Sam, Ganesh, Mohammed			BNF
Sam, Ganesh, Mohammed			Denotational Semantics
Sam		Create Parser (90% done)	
Mohommed, Sam		Create Lexical Analyzer (20% done)	
Ganesh		Create Pseudo-compiler)	

1 Todo specifics

1.1 Create BNF

Come up with syntax for our language and write BNF/EBNF to specify it. Language should support all queue functions, including:

- ☒ line
- ☒ expression
- ☒ Add
- ☒ Remove
- ☒ Peek
- ☒ Get Length
- ☒ Is Empty
- ☒ Not Empty
- ☒ view
- ☒ If
- ☒ element

1.2 Create Denotational Semantics

Write a set of denotaional semantics detailing semantics of queue creation and function calls

1.3 Create Parser

Create a parser that will run through source code and return a list of all valid tokens found. Parser will:

- ☒ Take in the source code of the program
- ☐ Extracts Tokens
- ☒ Return an array of tokens for the program

1.4 Create Lexical Analyzer

Create a lexical analyzer that:

- ☒ Takes its input from our parser
- ☐ Checks the syntax against our BNF
- ☐ Checks semantics against denotational semantic rules
- ☐ Evaluates action to be taken
- ☐ Passes instructions to compiler to preform actions

1.5 Create Pseudo Compiler

Runs commands as specified by the lexical analyzer. This includes:

- ☒ Maintain state of program while lexical analyzer is working
- ☐ Take instructions from analyzer to adjust state and the queue
- ☒ Preform instructions using Java
- ☒ Run program