Milestone Log

Milestones	Dependencies	Description	Leading Team Member	Completion Status		
Initial Lexer	N/A	Simple lexer that takes into account all tokens that can be predicted at start of coursework.	TL319	8/3/21		
Initial Parser	Initial Lexer	Full parser structure by looking at C90 spec.	TL319	10/3/21		
Initial Data Structure	N/A	Basic data structure of a program with various classes.	PR2518	10/3/21		
Initial CodeGen	Initial Data Structure	Initial assembly generation, supporting the most basic of programs.	PR2518	10/3/21		
Makefile	Lexer/Parser / Data Structure / CodeGen	Script to bring all of the above together to actually create compiler.	TL319	14/3/21		
Basic working compiler	Lexer/Parser / Data Structure / CodeGen / MakeFile	A full compiler that brings together all of the above and can be used to compile the most basic of programs. (And debugging!)	PR2518 & TL319	14/3/21		
Constants and Integer Variables	Basic working compiler	Implement contants and variables into parser / codegen and any check any classes required.	PR2518 & TL319	14/3/21		
Binary Operators	Basic working compiler & variables	Implement operator class / implement into parser and codegen.	PR2518 & TL319	14/3/21		
Unary Operators	Basic working compiler & variables	Implement unary class / implement into parser and codegen.	PR2518 & TL319	14/3/21		
Testing	Basic working compiler	Make testing script to be able to readily check return value of files run.	TL319	15/3/21		
Loops	Basic working compiler	Implement loops into codegen / parser as well as classes.	PR2518 & TL319	17/3/21		
Function Calls	Basic working compiler	Implement function calls into codegen / parser	PR2518 & TL319	15/3/21		
Fully implemented Basic Compiler	All of the above	Have a fully working compiler that can be used to run basic arithmetic programs. (And debugging!)	PR2518 & TL319	18/3/21		
Parameters	Full basic Compiler	Implement parameters into the codegen / parser.	PR2518 & TL319	17/3/21		
Global Variables	Full basic Compiler	Implement global variables into the codegen.	PR2518	19/3/21		
Locally scoped Variables	Full basic Compiler	Implement local variables into the codegen.	PR2518	17/3/21		
Arrays	Full basic Compiler	Implement arrays into codegen as well as parser.	PR2518	21/3/21		
Break / Continue	Full basic Compiler	Implement break and continue into the parser and create classes for them.	PR2518 & TL319	18/3/21		
Fully implemented Intermediate Compiler	All of the above	Have a fully functional compiler that can be used to run the "intermediate" style programs.	PR2518 & TL319	21/3/21		
Floats / Doubles	Intermediate Compiler	Implement support for floats and doubles into codegen.	PR2518	23/3/21		
Pointers	Intermediate Compiler	Implement pointers into the parser, create pointer classes, implement into codegen.	PR2518	25/3/21		
Structs	Intermediate Compiler	Create classes, implement into the codegen and parser.	N/A	N/A		
Typedef	Intermediate Compiler	Implement into the codegen and parser.	N/A	N/A		
SizeOf	Intermediate Compiler	Implement into the codegen and parser.	PR2518 & TL319	25/3/21		
Strings	Intermediate Compiler	Implement into codegen and parser.	N/A	N/A		
Fully implemented advanced Compiler	All of the above	Have full functionality and compile the vast majority of programs. (And debugging!)	N/A	N/A		