

Project

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Due Friday by 11:59pm **Points** 100
Submitting a file upload

- Your **.g4** file and a zip file of your source directory, without the ANTLR-generated files.
 - Name the zip file after your team name.
- A written report (5-10 pp.) that includes:
 - A high-level description of the design of the compiler.
 - UML diagrams of the major classes are acceptable.
 - The grammar for your source language as syntax diagrams or in BNF.
 - Code templates that show the Jasmin code your compiler generates for some key constructs of the source language.
- Sample source programs to compile and execute on the JVM.
- Text files of the output from executing your source programs.

Compiler Project Rubric

Criteria	Ratings				Pts
Data types with type checking	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Basic arithmetic operations with operator precedence	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Assignment statements	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Conditional control statements	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Looping statements	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Procedures/functions with call and return	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Parameters passed by value or by reference	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Basic syntax error recovery	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Nontrivial sample source programs	10.0 pts Full Marks	7.0 pts Good	5.0 pts Basic	0.0 pts No Marks	10.0 pts
Generated Jasmin code.	10.0 pts Full Marks	7.0 pts Good	5.0 pts Basic	0.0 pts No Marks	10.0 pts
Execution of sample source programs with output	10.0 pts Full Marks	7.0 pts Good	5.0 pts Basic	0.0 pts No Marks	10.0 pts

Criteria	Ratings				Pts
No crashes	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Report: high-level description	5.0 pts Full Marks	3.0 pts Good	2.0 pts Basic	0.0 pts No Marks	5.0 pts
Report: syntax diagrams or other description of the grammar of major source language constructs	10.0 pts Full Marks	7.0 pts Good	5.0 pts Basic	0.0 pts No Marks	10.0 pts
Report: code templates for major language constructs	10.0 pts Full Marks	7.0 pts Good	5.0 pts Basic	0.0 pts No Marks	10.0 pts
Total Points: 100.0					