

## Grammars

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### **How to complete an exercise successfully?**

Follow the rules as described in the Lecture!

### **How to get additional information?**

You are encouraged to discuss past and present exercise sheets with the teaching assistants. Either approach the teaching assistant during the exercise session, or visit us during the weekly office hours. We are also available through e-mail or on the StudIP forum. We try to reply as quickly as possible and in general, you should get a reply the next weekday, but we cannot guarantee this.

# Grammar and Parser for C++

To achieve our goal of writing a compiler, we first need to understand how to specify the grammar of the source language. In this exercise, you will therefore demonstrate that skill by defining a grammar according to a given textual description of a subset of C++.

## Tasks

**Exercise 0.1** Navigate to the course book's homepage<sup>1</sup> and gradually build a grammar for BNFC that corresponds to the textual description there. For a perfect score, the generated BNFC code should correctly parse all programs in the test suite, not contain any reduce/reduce conflicts, and not more than 10 shift/reduce conflicts.

## Deadlines of open tasks

- a) Installation: 21.04.2016, 13:14 (Demonstrate during exercise)
- b) Grammar: 26.05.2016, 13:14 (Upload to StudIP and demonstrate)

**Note** that in this course, your homework assignments will overlap. Make sure you keep track of the deadlines!

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<sup>1</sup><http://www1.digitalgrammars.com/ipl-book/assignments/assignment1/assignment1.html>