Computer Science
Engineering School

Software
Engineering

Lab 12
Code Generation II

Francisco Ortín Soler

University of Oviedo

Objective

- Generate code for
  - `While` and `IfElse` statements
  - Indexing (`[]`) expressions
  - Field access (`.`) expressions

Question

- What code functions should be defined for
  - While
  - IfElse
  - Indexing
  - FieldAccess

Question

- Define the `execute` code template for `While`

execute[[?]] = ?

Activity 1

- Write your **code templates** as multiline comments at the beginning of
    a. AddressCGVisitor.java for Address templates
    b. ValueCGVisitor.java for Value templates
    c. ExecuteCGVisitor.java for Execute templates
  - Be careful with the productions of the abstract grammar
  - Show the AG to the lecturer before its implementation (mandatory)

Activity 2

- You must have your code templates validated by the lecturer before the implementation
- **Implement** the code templates in your C-- compiler
  - At least test it with input.txt file provided
  - **Always run the generated code with MAPL**
    1. Making sure the execution is the expected one
    2. No errors or warnings are shown