

# Golang Compiler

## Milestone 2 Report

### Group 2

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Members: Shabbir Hussain  
Ossama Ahmed  
Michael Ho

## 1 Invalid Programs

All invalid programs pertaining to type checking can be found in the folder /TEST\_PROGRAMS/INVALID\_TYPECHECK. All tests are commented to describe the type check rule under test.

## 2 Features

### 2.1 Weeding Phases

The first feature implemented in this milestone was the weeder phase. In the weeder phase we've implemented

### 2.2 Type checking Phase

The main feature

## 3 Team Contribution

### 3.1 Shabbir Hussain

In the last milestone we lost a considerable amount of points due to our program failing a few test cases. In this milestone, I worked on creating as many test cases as possible both for invalid type check (to catch programs we shouldn't allow) and valid type check (to make sure we allow valid programs). The type checking test cases were based on the specification located at: <http://www.sable.mcgill.ca/hendren/520/2016/assignments/typechecker.pdf>. To test invalid programs we run

the program and expect an error. To test for valid programs we look run the program and expect to see no error. For test programs which are valid we force a situation that will cause an error to occur if our test case fails. For example, after a binary expression, we put the result on the right hand side of an assignment to check if the correct type is resolved by the binary expression.

### **3.2 Ossama Ahmed**

### **3.3 Michael Ho**