



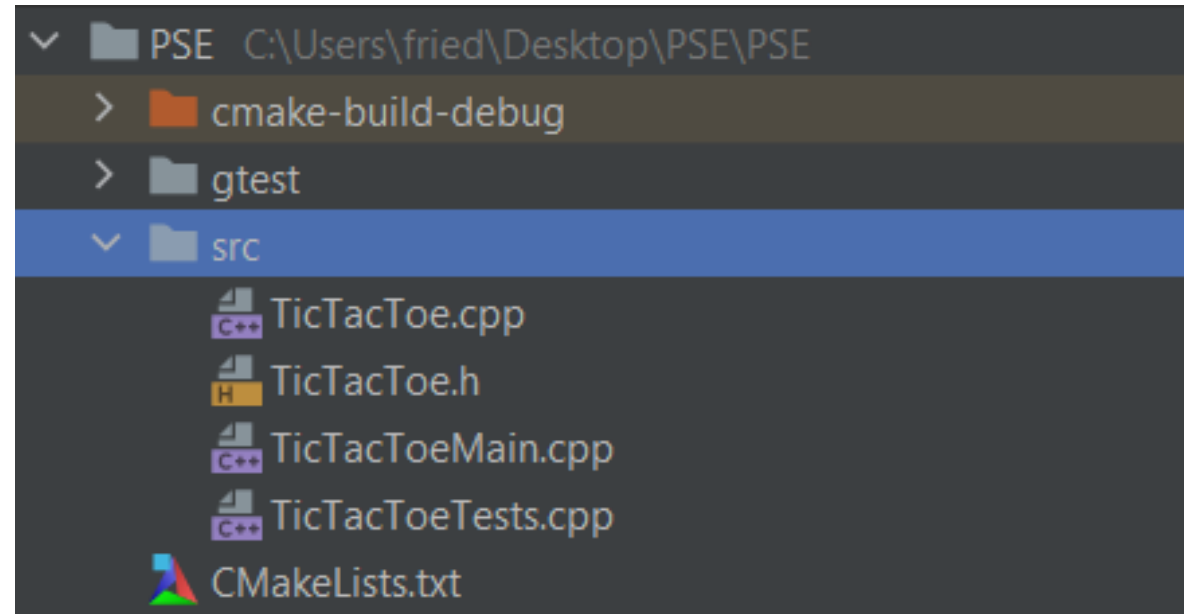
University of Antwerp  
| Faculty of Science

# TicTacToe voorbeeld inladen

Project Software Engineering

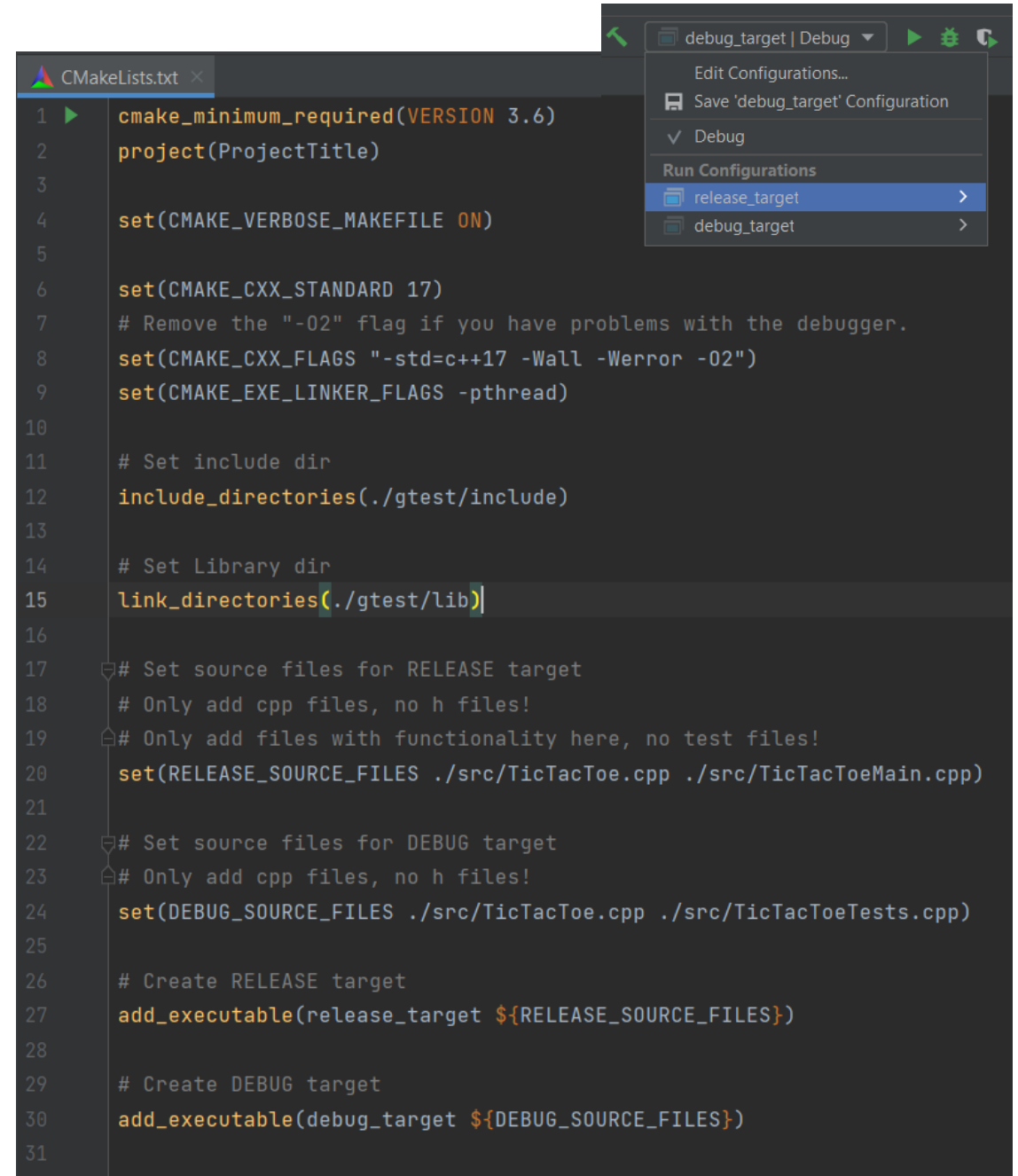
# Voeg de TicTacToe bestanden toe

- Download de [TicTacToe zip file](#)
- Plaats de .cpp en .h files in de een map genaamd "src" in jouw project



# CMakeLists anpassen

- Vervang of pas de huidige CMakeLists.txt aan door [deze CMakeLists.txt](#)
- Door deze CMakeLists.txt te gebruiken zal CLion automatisch twee run configurations maken:
  - een 'release\_target' die de Release versie bouwt en uitvoert
  - een 'debug\_target' die de Debug versie bouwt en uitvoert



The screenshot shows the CLion IDE interface. The main editor displays the CMakeLists.txt file with the following content:

```
1 cmake_minimum_required(VERSION 3.6)
2 project(ProjectTitle)
3
4 set(CMAKE_VERBOSE_MAKEFILE ON)
5
6 set(CMAKE_CXX_STANDARD 17)
7 # Remove the "-O2" flag if you have problems with the debugger.
8 set(CMAKE_CXX_FLAGS "-std=c++17 -Wall -Werror -O2")
9 set(CMAKE_EXE_LINKER_FLAGS -pthread)
10
11 # Set include dir
12 include_directories(./gtest/include)
13
14 # Set Library dir
15 link_directories(./gtest/lib)
16
17 # Set source files for RELEASE target
18 # Only add cpp files, no h files!
19 # Only add files with functionality here, no test files!
20 set(RELEASE_SOURCE_FILES ./src/TicTacToe.cpp ./src/TicTacToeMain.cpp)
21
22 # Set source files for DEBUG target
23 # Only add cpp files, no h files!
24 set(DEBUG_SOURCE_FILES ./src/TicTacToe.cpp ./src/TicTacToeTests.cpp)
25
26 # Create RELEASE target
27 add_executable(release_target ${RELEASE_SOURCE_FILES})
28
29 # Create DEBUG target
30 add_executable(debug_target ${DEBUG_SOURCE_FILES})
31
```

The Run Configurations menu is open, showing the following options:

- debug\_target | Debug
- Edit Configurations...
- Save 'debug\_target' Configuration
- Debug
- Run Configurations
  - release\_target
  - debug\_target

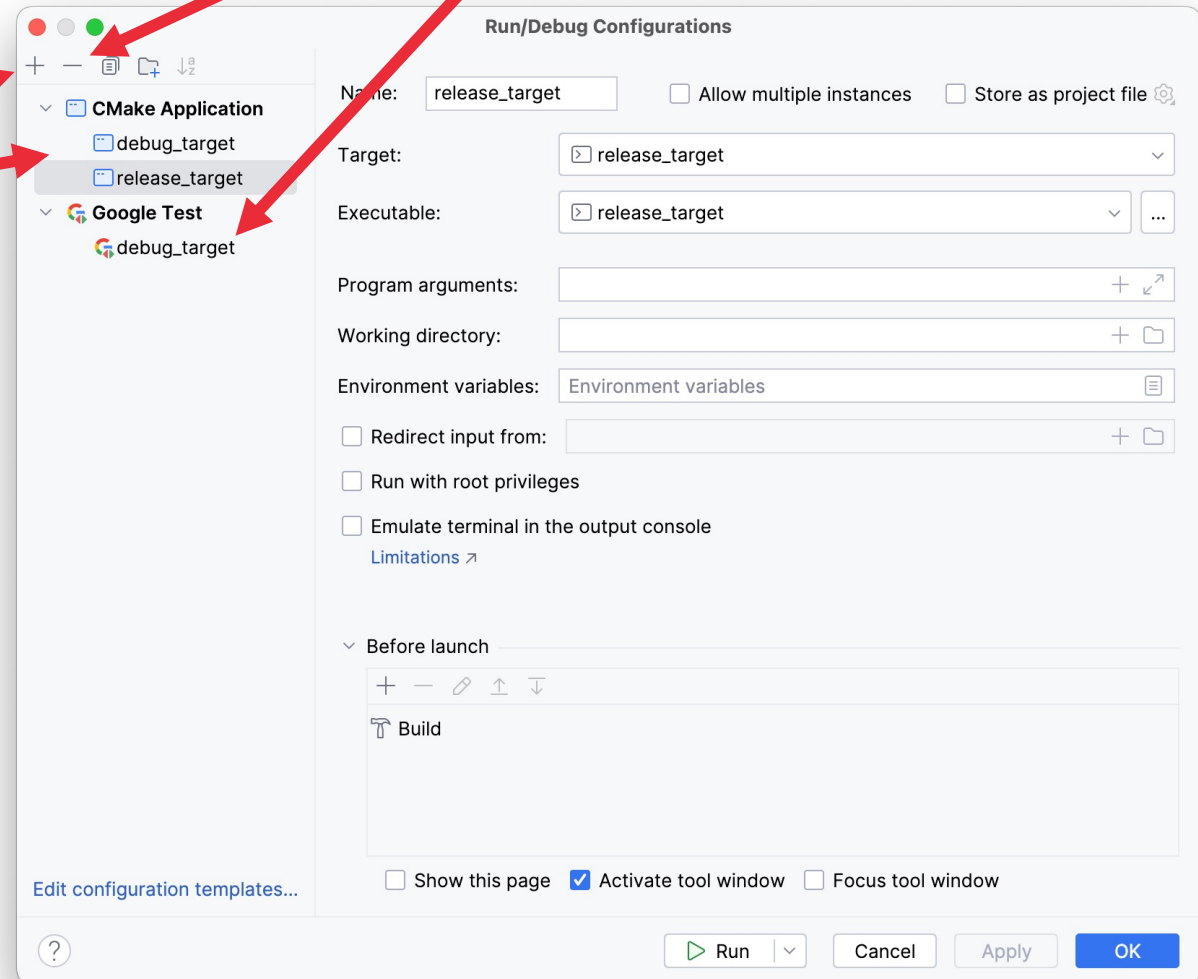
# Resultaat

# CLion configureren

- Open de project folder in CLion als een Cmake project
- Zet de run configurations juist:

**Toevoegen**

**Verwijderen**



# Build en run debug\_target

## Build output

```
essages: Build x
===== [ Build | debug_target | Debug ] =====
"C:\Program Files\JetBrains\CLion 2022.2.4\bin\cmake\win\x64\bin\cmake.exe" --build C:
[1/3] Building CXX object CMakeFiles/debug_target.dir/src/TicTacToe.cpp.obj
[2/3] Building CXX object CMakeFiles/debug_target.dir/src/TicTacToeTests.cpp.obj
[3/3] Linking CXX executable debug_target.exe

Build finished
```

## Run output

```
debug_target x
C:\Users\fried\Desktop\PSE\PSE\cmake-build-debug\debug_target.exe
[=====] Running 2 tests from 1 test case.
[-----] Global test environment set-up.
[-----] 2 tests from TicTacToeTest
[ RUN    ] TicTacToeTest.DefaultConstructor
[      OK ] TicTacToeTest.DefaultConstructor (0 ms)
[ RUN    ] TicTacToeTest.HappyDay
[      OK ] TicTacToeTest.HappyDay (0 ms)
[-----] 2 tests from TicTacToeTest (16 ms total)

[-----] Global test environment tear-down
[=====] 2 tests from 1 test case ran. (35 ms total)
[ PASSED ] 2 tests.

Process finished with exit code 0
```

# Build en run release\_target

## Build output

```
Messages: Build x
===== [ Build | release_target | Debug ] =====
"C:\Program Files\JetBrains\CLion 2022.2.4\bin\cmake\win\x64\bin\cmake.exe" --build C:
[1/3] Building CXX object CMakeFiles/release_target.dir/src/TicTacToe.cpp.obj
[2/3] Building CXX object CMakeFiles/release_target.dir/src/TicTacToeMain.cpp.obj
[3/3] Linking CXX executable release_target.exe

Build finished
```

## Run output

```
START: ttt.nrOfMoves() = 0
END: ttt.nrOfMoves() = 9

Process finished with exit code 0
```

