# K10 - Project assignment

buil<mark>dpassi</mark>n

#### Requirements

- GNU Compiler Collection
- GNU Make

### Compilation

```
make
make test # Optional: Executes the unit tests
```

#### Execution

```
./build/project.out
./build/project.out -seed 1454857303 -n 10 -nsegs 5 -k 10 -percent 30
./build/project_test.out # Optional: Executed by `make test`
```

### Cleaning

make clean

## Methodology

A detailed description of the entities and the relationships can be found at <u>docs/Specification.md</u>.

The <u>behavior-driven development</u> process was used in which, based on the specification, <u>unit tests</u> were written first and then the corresponding entities were being implemented. The unit tests were implemented using the <u>Google Test</u> library.

<u>Git</u> was used as the <u>version control system</u> along with <u>GitHub</u>. New features were being developed in separate branches that were merged into the master branch afterwards using a pull request. In addition, <u>Travis CI</u> was used as the continuous integration service.

#### **Operating systems**

- Fedora 23
- OS X 10.11.2
- <u>Ubuntu</u> 15.10

#### **Tools**

- Clang 3.7.0
- Git 2.5.0
- GNU Compiler Collection 5.3.1
- GNU Make 4.0
- Google Test
- Travis Cl
- <u>Valgrind</u> 3.11.0

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