Software Quality and Testing
Lab for Teaching Assistants

CSE1110
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Delft University of Technology
Testing JPacman

Our own Java implementation of Pac-Man

It’s on GitHub: https://github.com/SERG-Delft/jpacman

We switched to a single repository and to Gradle
Lab

4 assignments
Similar to last year, new: security exercises

In pairs
Part 0: Get acquainted with the environment and tools.
Deadline: 03-05-2019, 5.00 pm - Review Deadline: 10-05-2019, 5.00 pm

Part 1: Unit tests and boundary tests.
Deadline: 17-05-2019, 5.00 pm - Review Deadline: 28-05-2019, 5.00 pm

Part 2: Structural testing and mock objects.
Deadline: 03-06-2019, 5.00 pm - Review Deadline: 10-06-2019, 5.00 pm

Part 3: System tests, state-based testing, and mocking.
Deadline: 21-06-2019, 5.00 pm - Review Deadline: 27-06-2019, 5.00 pm

https://se.ewi.tudelft.nl/cse1110-2019/
Peer reviewing

After submitting, review your own solution + someone else’s.
Learn about things you can improve and see different approaches to solving the problem.

Grades are based on reviews and manual checks.
Build using gradle

Test using

• JUnit 5
• AssertJ assertions
• Mockito
Static Analysis

Make sure everything works, run `gradle check`
## Continuous Integration

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Jobs 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
<td><strong>Job ID</strong></td>
</tr>
<tr>
<td>Test</td>
<td>#417536</td>
</tr>
<tr>
<td>passed</td>
<td>00:00:44</td>
</tr>
<tr>
<td>Static Analysis</td>
<td>#417537</td>
</tr>
</tbody>
</table>
Project Structure

Simple Java project, mostly default setup

- Pre-written tests, can serve as example
- Application code
- Student tests
Software Testing and Quality Engineering
STQE Labwork, CSE1110
Edition 2018/2019

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Delft University of Technology
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1 Introduction

In this document, you will find everything about your JPACMAN labwork.

The objective of this lab work is to help you learn how you can apply the various
tools and test strategies discussed during the lectures in practice.

You will apply these techniques to a simple game called JPACMAN, inspired by
Pacman and written in Java. The amount of coding that needs to be done is relatively
Your Job

Help students!

Work through the assignments
Helps in helping students and early detection of errors

(Manual) Grading