P2: Exercise Introduction

Pooja Rani
21 February, 2020
The Team

• Pooja Rani
• Manuel Schuepbach
• Julius Oeftiger
• Pascal Andre
• Marcel Zauder

p2-staff@list.inf.unibe.ch
Course Materials

• SCG website (P2 course website)
• Piazza forum (P2-Piazza)
• Podcast on ILIAS
• Your git repository (more later)
Logistics

- Groups of 2 students
- Both members must work
- Each student must have at least 20% of the total number of commits, spread out over the entire semester (not only at the end)
Logistics

• There are assignments throughout the semester
• Between 1 and 3 weeks to solve
• Exercises are mandatory
  - There are a few optional ones (announced later), but you can only skip one
• Made available via git, usually Friday afternoon
• Use git to submit your solutions
Logistics

- Deadline: Friday at 13:00
  - Exception: No exception

- Be punctual. We will look at the last commit before the deadline.

- Can’t make it? Ask for an extension **before the deadline**.

- 2 extensions in a row, 3 in total

- 2 revises in a row, one revision for one exercise
Solutions and Corrections

• No grades (only pass/fail)
  
  **Wow** very good solution
  **Ok** accepted solution
  **Revise** revision required by next week
  **Fail** failed
  **Deadline extended (not automatically!)**

• Available in your git repository at a later date (usually within one week)
Handing in solutions

- Do not copy solutions
- Ask for help if you can’t make it
- We can talk about everything, but do not accept copied solutions
- University rules apply
  http://www.unibe.ch/universitaet/organisation/rechtliches/rechtssammlung/reglemente_richtlinien_weisungen_der_universitaetsleitung/wissenschaftliche_integritaet/index_ger.html
Office Hours

- Exercise hour: Friday, 16–17
- Pool support: Tuesday 16–18 in ExWi A95
- Ask questions on Piazza (P2-Piazza)
- Email us for extra meetings
Before you get started

- Register on Piazza
  - Announcements, Q&A, deadline reminders, ...
  - Requires unibe.ch mail address!
- Find a project partner
  - If you can’t find anyone, let us know at p2-staff@list.inf.unibe.ch
Before you get started

• Read the first post on Piazza to know about rules to pass p2 “Rules for passing P2 exercises”

• Exercise slides will be available at ‘Lab slides’ under P2 course website. Check piazza post “Exercise slides”

• Follow the instructions to obtain your git repository “Exercise 1: Getting started with git”
Exercise 1: Warmup

• Establish workflow for exercises
• Set up environment
  – IntelliJ, Eclipse, Git, ...
• Implement simple program in Java, submit using git
Glob patterns

- Used to match filenames
  - E.g., when selecting files in a terminal (`ls * .txt`)
- Two special characters
  * Match any number of arbitrary characters
  ? Match one arbitrary character
# Glob patterns: examples

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>*.md</td>
<td>README.md, exercise_01.md, ...</td>
</tr>
<tr>
<td>exercise_???.md</td>
<td>exercise_01.md, exercise_02.md, ...</td>
</tr>
<tr>
<td><em>nas</em>anas</td>
<td>ananasananas</td>
</tr>
</tbody>
</table>
Tasks

- Parser for glob patterns
  - Initialization of pattern (e.g., "*.md")
  - Input: Filename (e.g., "exercise_01.md")
  - Output: Boolean answer whether the filename matches the pattern
Tasks

// Create new Pattern
public FilePattern(String pattern) {
    // your implementation
}

// Return whether the pathname matches the pattern.
public boolean matches(String filename) {
    // your implementation
}
Tasks

- Test cases
  - Make sure your implementation behaves as expected
  - We provide some
  - You should come up with your own!

```java
@Test
public void starDotTxtShouldMatchFnameDotTxt() {
    FilePattern pattern = new FilePattern("*.txt");
    assertTrue(pattern.matches("fname.txt"));
}
```
Tasks

1. Read the Piazza post “Exercise 1: Getting started with git”

2. Wait for your repository

3. Follow the remainder of the Piazza post to clone your repository

4. Read the detailed exercise description