P2: Introduction

Pooja Rani
26 Feb 2021
The Team

- Pooja Rani
- Lorenzo Wipfli
- Julius Oeftiger
- Pascal Andre
- Marcel Zauder

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

• SCG website ([P2 course website](#))
• Q & A Forum ([ILIAS P2 Q&A Forum](#))
• Podcast on ILIAS ([P2 Podcast Channel](#))
• Your git repository (later)
Logistics

- Group 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, 14:30–16 (In the lecture Q&A session: [zoom Q&A session](#))

- Pool support: Tuesday 16-18 on [Discord](#)

- Ask questions on ([ILIAS P2 Q&A Forum](#))

- Email us for extra meetings ([p2-staff@list.inf.unibe.ch](mailto:p2-staff@list.inf.unibe.ch))
Before you get started

- Register on ILIAS
  - Announcements, Q&A, deadline reminders
- Find a project partner
  - If you can't find anyone:
    - mention in your text file (about ssh key)
    - post on ILIAS
    - let us know at p2-staff@list.inf.unibe.ch
Before you get started

- Read the post “Rules for passing P2 exercises” on ILIAS to know about rules to pass p2
- Follow the instructions “Exercise 01: Getting started with Git” to obtain your git repository
- Send your ssh key as described in the “Required data” in the P2 Exercise tab on ILIAS.
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 test cases
  - You should come up with your own
@Test
public void starDotTxtShouldMatchFnameDotTxt() {
    FilePattern pattern = new FilePattern("*.txt");
    assertTrue(pattern.matches("fname.txt"));
}
JUnit

• Testing framework
  • Covered in more detail in lecture 4
• Goal: Make sure program behaves as expected
• JUnit: Individual, independent tests.
Get the exercise

The exercise comes with some existing tests for reference.

More in exercise_01.md
git pull p2-exercises master
Tasks

• Read the instructions “Exercise 01: Getting started with Git”
• Wait for your git repository
• Follow the remainder of the post to clone your repository
• Read the detailed exercise description
• Submit it via git.
Thank you