P2: Exercise Introduction

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The Team

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Course Materials

- SCG website (scg.unibe.ch/teaching/p2)
- Piazza forum (piazza.com/unibe.ch/spring2019/p22417/home)
- 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 Thursday afternoon
• Use git to submit your solutions
Logistics

• Deadline: Thursday at 13:00
  - Exception: First week, Friday at 13:00
• Be punctual. We will look at the last commit before the deadline.
• Can’t make it? Ask for an extension before the deadline.
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
  piazza.com/unibe.ch/spring2019/p22417
- 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. [https://piazza.com/class/jr20fcsghi01wt?cid=6](https://piazza.com/class/jr20fcsghi01wt?cid=6)

• Exercise slides will be available at scg.unibe.ch/download/lectures/p2lab/. Check piazza post [https://piazza.com/class/jr20fcsghi01wt?cid=7](https://piazza.com/class/jr20fcsghi01wt?cid=7)

• Follow the instructions to obtain your git repository [https://piazza.com/class/jr20fcsghi01wt?cid=8](https://piazza.com/class/jr20fcsghi01wt?cid=8)
Exercise 1: Warmup

- Establish workflow for exercises
- Set up environment
  - 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
dpublic  void starDotTxtShouldMatchFnameDotTxt() {
    FilePattern pattern = new FilePattern("*.txt");
    assertTrue(pattern.matches("fname.txt"));
}
```
Tasks

1. Read the Piazza post
   https://piazza.com/class/jr20fcgshiho1wt?cid=8

2. Wait for your repository

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

4. Read the detailed exercise description