P2: Introduction

Pooja Rani 26 Feb 2021

The Team

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Course Materials

- SCG website (<u>P2 course website</u>)
- Q & A Forum (<u>ILIAS P2 Q&A Forum</u>)
- Podcast on ILIAS (<u>P2 Podcast Channel</u>)
- 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 <u>Discord</u>
- Ask questions on (<u>ILIAS P2 Q&A Forum</u>)
- Email us for extra meetings (<u>p2-staff@list.inf.unibe.ch</u>)

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 <u>p2-staff@list.inf.unibe.ch</u>

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

Pattern	Match
*.md	README.md, exercise_01.md,
exercise_??.md	exercise_01.md, exercise_02.md
*nas*anas	ananasananas

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

```
// Create new Pattern
public FilePattern(String pattern) {
    // your implementation
// Return whether the pathname matches the pattern.
public boolean matches(String filename) {
    // your implementation
```

- 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

```
@Test The exercise comes with some existing
      tests for reference.
      More in exercise 01.md
      git pull p2-exercises master
```

- 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