PV 168
Seminar 03

Agenda

- Project topics
- Project assignment: Schedule and Instructions
- Seminar task
    - Working with branches in Git
    - Calculator refactoring
- Seminar task reflection

Project topics

- Timesheet for Freelancer (Evidence odpracované doby OSVČ)
- Food & Nutrition Assistant (Pomocník pro nutriční plánování)
- Hotel Reservation System (Systém pro rezervace v hotelu)
- Home Accounting (Domácí účetnictví)

This list may be extended

Project assignment: Schedule and Instructions

- Specification for all topics will be published before **22. 10. 2020 17:00**
- Establishing the teams until **24. 10. 2020 17:00**
  - Each team will have four members, one of them will be team leader
  - **Team leader will send list of team members to both seminar tutors via e-mail**
  - If you have no team, use course discussion forum (předmětové diskusní fórum) in IS
- Signing for topics **24. 10. 2020 17:00** – **26. 10. 2020 23:59**
  - Using Topic Lists (rozpisy témat) in IS
  - Only team leader from each team will sign up for topic
  - Up to two teams can sign up for the same topic in each seminar group (first come, first serve)

Seminar task

- You will be now split to teams consisting of four students
- Create and push the branch (see the next slides)
- Refactor the code (see the next slides)
- You have 50 minutes to solve all the tasks
- If you need any help, **raise your hand in Zoom**

Working with branches in Git

- Clone the project (if you has not do it yet)
- Create new local branch
  - based on commit **52d493a7** (current head of master branch)
  - with name **week03-group0X-roomY** (0X is seminar group, Y is breakout room number)
  - If you from group PV168/01 and breakout room 3, branch name is week03-group01-room3
- Pavel Hrdina or Petr Adámek will give you write access to calculator repository
  - Only one person per breakout room - the one who will use the computer for coding
  - Petr or Pavel will visit your breakout room to ask who is this person
  - In the meantime work on other tasks
- Push the branch to origin repository

Seminar task: Calculator refactoring

- Perform the steps from previous slide (create and push git branch)
- Do the following refactorings, commit and push each step (with reasonable granularity)
- **Do not forget to execute tests after each step!**
  - Keep in mind that `main(String[])` method is not covered with tests
- Find and solve occurences of these code smells
  - Mysterious name (s0, s1, s2, l, b?, te, f, p)
  - Duplicated Code (*with operation evaluation*)
  - Long function (actionPerformed(...), main(...))
  - Comments *(Note: some of them can be resolved together with other refactorings)*
  - Duplicated Code (*button creation in main method; do this as the last one*)

Conclusion

Any questions?