

## The Lab Sessions

### Scenario

Your *mission* is to develop a software system. See below for further details. Unfortunately you are not the only one who got that idea. Several competitors try to be first on the market with better products and to kick you out. You apply an agile approach to win the race.

### Session 1

- All participate in identifying what kind of software system should be build. A default option is available if no other viable option can be found.
- Next, agile development teams are formed. Group size is as close to six students as possible.
- Each team agrees on a team name, e.g. the *code crunchers*, *transaction tigers* or similar.
- Each team agrees on which programming language, preferred C++ or Java, and development tools to use.
- The use of an automated unit testing tool such as *JUnit* is strongly recommended.
- Get familiar with the selected tools and technologies. Later on, you won't have time for it.

### All further sessions

- All teams develop the same kind of system.
- Think about the lab as a reflection of the real world, and each lab session as a development cycle.
- Teamwork counts more than a lone hero attitude.
- Each team starts each session with a briefing (max. 15 minutes) where each member of the team answers shortly three questions: *What did you do in the last session?* *What will you do in this session?* and *Which impediments to our progress do you see?*
- Use index cards to manage the requirements, or in agilese: the *user stories*.
- All production code is written by pairs of two. Duration no longer than 35 to 45 minutes per pair per lab session.
- Writing automated unit tests before production code is strongly recommended.
- Productive time = lab time – numTeams \* 10 minutes.
- In the remaining time, each team has 10 minutes to present their system to the other teams, who are temporarily assigned the role of a customer.
- Each customer team assesses the usability of the presented system with an integer score between zero and ten, where zero means *Absolutely unusable!* and ten means *Fantastic! Their developers have read my mind.*
- The scores get published and accumulated to the scores of the previous lab session.

### Miscellaneous

- Participation on all lab sessions is mandatory to be eligible for taking the exam. If sick, get a medical certificate.