Tárgyleírás

Tárgy neve: Advanced Software Technology

Tárgyfelelős neve: Dévai Gergely

Tárgyfelelős tudományos fokozata: PhD

Tárgyfelelős MAB szerinti akkreditációs státusza: AR

Az oktatás célja angolul / Aim of the subject:

Knowledge

- Students learn a balanced mixture of theoretical knowledge, technical and soft skills on how to run a software development project in a startup-like team environment. This includes learning about execution, tooling, architecture and sustainability as well.

Abilities:

- Students completing the class will be able to make sensible architectural decisions and project execution plans, being able to serve as a manager, architect, lead developer in a software project. They will also be able to judge between the usefulness of certain development processes, management practices and tools based on the actual product goal or innovation target.

Attitude:

- Students have to plan ahead, follow their plan, write reports and be critical to themselves in the form of retrospectives. The goal is to set them to think in a product- and innovation mindset.

Autonomy, responsibility:

- We are coaching students to make their own innovation ideas, form their own teams, take team responsibility, evaluate and improve themselves during the whole time of the development process.

Az oktatás tartalma angolul / Major topics:

The course covers a broad range of topics following through the whole software development process containing:

- Idea forming, MVP drafting
- Project execution and development methodologies
- Tools and techniques for sustainable processes
- Creating maintainable architecture
- Achieving innovation potential

A számonkérés és értékelés rendszere angolul / Requirements and evaluation:

Although there are some individual minimum criteria for everyone (participating on sessions, knowing material), grading is done continuously by coaches based on the whole team’s

performance. Team members will be able to influence their own final grading based on their individual contribution in the team’s achievements.

Irodalom / Literature:

- R. C. Martin: Clean Code: A Handbook of Agile Software Craftsmanship, Prentice Hall 2008.
- J. Humble, D. Farley: Continuous Delivery: Reliable Software Releases through Build, Test, and Deployment Automation, Addison-Wesley 2010.
- E. Gamma, R. Helm, R. Johnson, J. Vlissides: Design Patterns: Elements of Reusable Object-Oriented Software. Addison-Wesley, 1994.
- M. R. Blaha, J. R. Rumbaugh: Object-Oriented Modeling and Design with UML, Pearson, 2004.
- L. Bass, P. Clements, R. Kazman: Software Architecture in Practice. 3rd ed. Addison-Wesley Professional, 2012.