Learning outcomes BA

1. You design and build user-friendly, full-stack web applications.

User friendly:

You apply basic User experience testing and development techniques.

Full-stack:

You design and build a full stack application using commonly accepted front-end (Javascript-based framework) and back-end techniques (e.g. Object Relational Mapping) choosing and implementing relevant communication protocols and addressing asynchronous communication issues.

2. You use software tooling and methodology that continuously monitors and improves software quality during software development.

Tooling and methodology:

Carry out, monitor, and report on unit integration, regression, and system tests, with attention to security and performance aspects, as well as applying static code analysis and code reviews.

3. You choose and implement the most suitable agile software development method for your software project.

Choose:

You are aware of the most popular agile methods and their underlying agile principles. Your choice of a method is motivated and based on well-defined selection criteria and context analyses.

4. You design and implement a (semi)automated software release process that matches the needs of the project context.

Design and implement:

You design a release process and implement a continuous integration and deployment solution (using e.g. Gitlab CI and Docker).

5. You recognize and take into account cultural differences between project stakeholders and ethical aspects in software development.

Recognize :

Recognition is based on theoretically substantiated awareness of cultural differences and ethical aspects in software engineering.

Take into account :

Adapt your communication, working, and behavior styles to reflect project stakeholders from different cultures; Address one of the standard Programming Ethical Guidelines (e.g., ACM Code of Ethics and Professional Conduct) in your work.

6. You analyze (non-functional) requirements, elaborate (architectural) designs and validate them using multiple types of test techniques.

Multiple types of test techniques :

You apply user acceptance testing and stakeholder feedback to validate the quality of the requirements. You evaluate the quality of the design (e.g., by testing or prototyping) taking into account the formulated quality properties like security and performance.

7. You analyze and describe simple business processes that are related to your project.

Simple :

Involving stakeholders, predominantly sequential processes with one or two alternative paths.

Related :

Business processes during which the software that you are developing will be used (business processes that the software must support by fully or partially automating them).

or

Business processes needed for the success of your software development project (e.g., product release, market release, financial assurance).

8. You act in a professional manner during software development and learning.

Professional manner :

You actively ask and apply feedback from stakeholders and advise them on the most optimal technical and design (architectural) solutions. You choose and substantiate solutions for a given problem.