

Software Testing — Progressive Class **Content Preview** 





### INTRODUCTION

### Who is this workshop for?

This workshop targets product teams who know the foundational software testing techniques and metrics and want to further extend their skills to other testing methodologies and tools that can foster better team and process integrations, especially the involving of non-developers.

### What can you expect from this Workshop?

This workshop will give you a deep dive into higher level approaches to software testing and tools that support those methodologies.

It will show you software testing from different angles and explain how you can involve non-developers from your product team into the testing process.

This workshop comes in **three sessions** à four hours.

In the first session it will guide you through the **theoretical basics** of Test Driven Development (TDD), Behaviour Driven Development (BDD) and visual end-to-end testing, as well as an introduction to **tools and their setup** which then will be used throughout the following two practical sessions.

The second session will show you how to write tests before you write actual code, how you can let non-developers write tests and whole scenarios that must be satisfied by code later and how this automatically implements a progress bar and change log for your product.

The third session will introduce you to visual **testing of whole user-workflows** in your application. The last part will discuss test results and **newly emerged metrics** and how you can interpret, but more importantly, use them to increase & maintain the quality of your software.

### What will be the takeaways?

As we do this workshop **individually on your codebase**, you'll learn on **real-world examples** you already know.

We will write tests for a new feature, conduct scenarios and test actual user-workflows. You can directly integrate those to your code via **pull/merge requests**. You will be able to extend these tests and scenarios by yourself to add confirmation to more layers of your software.

You will be able to **involve non-developers** into the process of testing by introducing presented methodologies. This fosters team focus and speeds up development.





### **SESSIONS**

#### First session

- Theory: What is Test Driven Development (TDD)?
- Theory: What is Behaviour Driven Development (BDD)?
- Theory: What is visual end-to-end testing?
- Tooling: Chosen testing tools for your project
- Tooling: Setup of testing tools

#### Second session

- Testing a new feature before it exists with TDD
- Satisfying the test by implementing the feature
- Composing behavioural expectations (scenarios) for a new feature
- Implementing the scenarios step by step
- Extracting implementation progress as status report

#### Third session

- Gathering expectations for a visual user workflow
- Setting up a visual test for that workflow to check the expectation
- Checking for regressions
- Discussing results, metric interpretation and usage

## **Topics covered**

Acceptance criteria Gherkin language 3 Amigo sessions Team communication Self documenting tests Test case pass rate Exemplary test data Test code generation Implementation status No-code / low-code tests Feature stability Feature conditions





# **REQUIREMENTS**

#### **Access**

- We need access to your software in a version controlled manner
- We need the authorization to create branches and pull/merge requests

#### **Time**

- We need **5 days of preparation** in advance to the first session
- We need 2 days of post-processing after the third session in order to hand over the workshop results
- Each session of 4 hours takes place on a separate day, preferably 3 days in a row

#### **Participants**

- We need at least 2 participating developers and at least one person with a quality assurance role in the team
- Each participant needs a computer with a running development environment and the authorization to install new tooling to this environment
- Each participant needs access to the software in a version controlled manner
- Each participant needs the authorization to create branches and pull/merge requests

## **Equipment** (only if workshop is on-site)

- Beamer & canvas or a large screen with HDMI connector
- Power outlets for computers
- Internet connection



### **IMPRINT & LEGAL NOTES**

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