

The Connected Things group at Fraunhofer AICOS applies several Quality Assurance processes to guarantee high-quality standards on the systems developed in-house. We have prepared a set of training series on Quality Assurance, ranging from basic concepts/procedures and expanding to all the development and maintenance lifecycle.



A lot of technical competence and an excellent vision of what a client is. A very good communication with the client. They understand our language... Of all the institutions we have worked with, and we have worked with some throughout the years, it is the most competent and most professional team with whom we have ever worked in the development of new products.

*Ricardo Carvalho, Tekon Electronics*

**FORMAT**

Webinars and Workshop with theoretical and hands-on sessions

**STARTING**

Regularly and upon request

**DURATION**

According to client's needs

**AUDIENCE**

Available courses range from beginner, intermediate to advanced

**COURSE FEE**

Contact us for a quotation

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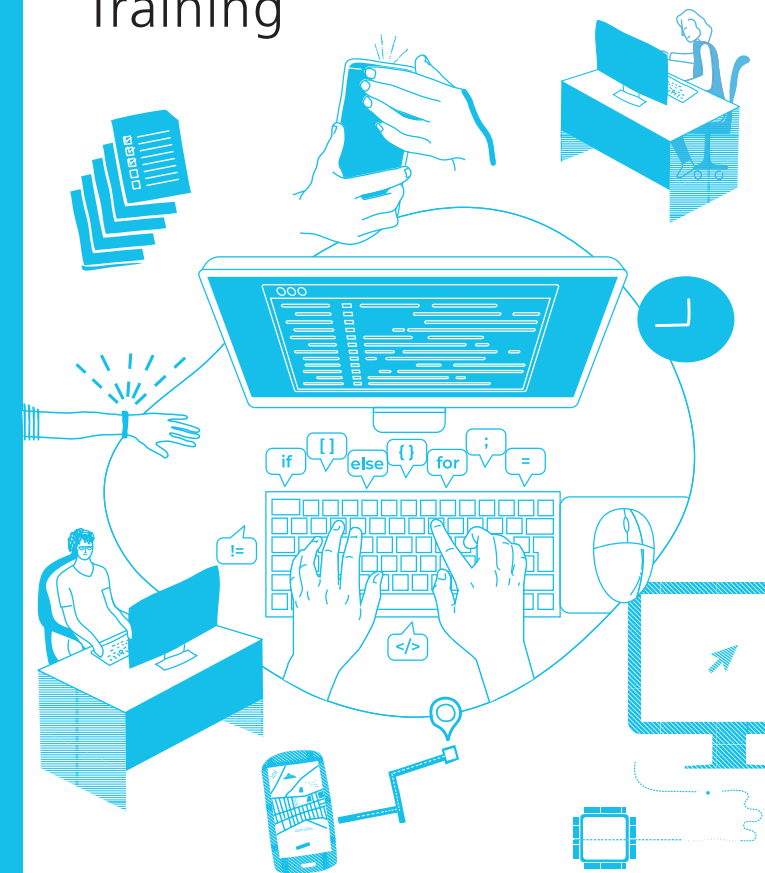
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# SOFTWARE DEVELOPMENT GOOD PRACTICES Training



## Overview

With the emergence of new technologies, new platforms, and the increasing demand for high-quality standards, multidisciplinary software development teams are pushed for the fast delivery of features with quality. The product owners of these software development teams tend to ask for utopian bug-free software, fast delivery of software with all features, and the developed software to have the same behaviour on different platforms.

Thanks to several years of experience in dealing with fast-paced and complex multidisciplinary projects, Fraunhofer AICOS can provide advanced training on various topics associated with best product development practices, following quality assurance procedures. The program helps clients understand how to maximise their development teams' productivity and the quality of the work they produce.

## Key benefits

- Custom training sessions based on the client's profile and objectives;
- Learning practical solutions for everyday problems in software development;
- Learning quality assurance and testing basics to empower the development team and maximise the confidence in the developed product;
- Consultancy in the best development procedures and tools, based on the client's products and goals.

## Contents

### Introduction: Quality Management in the Product Lifecycle

- Inception, Development, Closing, and Maintenance Phases.

### Requirements Specification

- Gathering requirements from the stakeholders;
- Creating and maintaining a requirement specification document;
- Maintaining a requirements traceability matrix.

### Testing procedures

- How to fit testing procedures in the development methodology: issue and pull request management;
- Deploying and maintaining a CI / CD server;
- Creating a test plan;
- Designing and managing test cases;
- Running a test case and reporting the results;
- Release management.

### Development procedures

- Issue lifecycle;
- Code versioning branching strategy.

### Managing the client

- Managing bug reports;
- Managing feature and change requests;
- Client communication.



**Filipe Sousa** is the Head of Connected Things at Fraunhofer AICOS, conducting research on mobile computing, embedded intelligence, and wireless communications. He holds a PhD in Telecommunications from the Faculty of Engineering of the University of Porto and was a researcher in INESC Porto where he actively participated in several EU projects.



**Eduardo Barbosa** received his MSc in Informatics and Computing Engineering from the University of Porto in 2014. Since then, he has been working as a researcher at Fraunhofer AICOS, developing expertise in software testing and quality assurance. He has worked on several different projects consisting of complex mobile software solutions. His research interests include software test automation, security testing, and methodologies for medical device development.



**Paulo Silva** obtained a MSc in Informatics and Computing Engineering from the Faculty of Engineering of the University of Porto in 2013. Since then, Paulo has been focusing on applying Software testing principles on Mobile and development and obtained the Foundation Level Certification from the International Software Testing Qualifications Board in December 2017. His main tasks are requirements specification, test planning, test case specification and revision, test case execution, test case automation, user acceptance tests specification, continuous integration server deployment, and management.