Training	A2.Gen1 - Requirements Engineering

Keyfacts

Duration	3 days
Language	English or German
Setting	On-site or remote

Target Group

Engineers, Product Manager, Quality Manager and everyone who is affected by Requirements Engineering

Training Goals	The ultimate goal of this training is to learn and to practice how to develop good Requirements as basis for development and verification. Thus, the particular learning goals are as follows:

#1 - Understand Requirements Engineering as engineering discipline on it's own
Participants know the theoretic background of requirements engineering and the corresponding state of the art. A particular focus is put on the role of a Requirements Engineer in context of an engineering team

#2 - Differentiation between "Stakeholder Needs" and "Requirements"
Participants understand the difference between Stakehoder Needs and Requirements. They are able to understand the characteristics of good requirements and how to validate them.

#3 - Requirements Engineering Methods
Participants know different methods for elicitation, development, and management of requirements. They have first experiences with the practical application of these methods which provides the basis for their application in real projects

Training Content	**Introduction**
	• Requirements Engineering as engineering discipline on it's own
	• Reasons for poor requirements and the resulting consequences
	• Problem space vs. Solution space
	• Stakeholder Needs and Requirements
	• Big Picture of Requirements Engineering
	System and System Context Analysis
	• Importance of System Context Analysis
	• Methods for conducting a System Context Analysis
	• Relation with solution space
	Stakeholder Analysis
	• Different Stakeholder and their role
	• Divergent and convergent methods for Stakeholder Analysis
	• Stakeholder Assessment and Stakeholder Management
	Needs Elicitation
	• Different Methods for Elicitation
	Requirements classification and prioritization
	• How to cluster and structure requirements
	• Requirements as basis for product shaping

Training Content	**Requirements Development** • From "Stakeholder Needs" to "System Requirements" • Correlation with Architecture Concept Development **Requirements Quality and Requirements Specification** • What is a good Requirement? • How to specify Requirements? • Model-Based Requirements Specification **Requirements Validation and Negotiation** • Requirements Validation with customers • Requirements Negotiation: Identify, classify and resolve existing conflicts **Requirements on the lower levels** • Outlook: The link with architecture and design • Requirements validation with upper levels and Requirements verification **Requirements Management** • What's it all about • Tool-support for Requirements and Management: Shortcomings and outlook **The Role of a Requirements Engineer** • Personality of a Requirements Engineer • Competence of a Requirements Engineer • The Requirements Engineer as part of an engineering team

move to improve

Learning Methods and Didactics	Theory Inputs combined with examples and practical exercises to practice learned methods
Your Benefit	Most people in engineering projects get in contact with requirements, everyone is aware of the importance but only a few have ever learned how to do it. This training gives you an overview on the existing methods and represents the starting point for developing good and verifiable requirements in your project!
Your Trainer	

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Christian is Professor at the School of Information Technology and Digitalisation at Salzburg University of Applied Sciences. As head of the "Center for Dependable Systems Engineering" he is an expert in this field and has profound knowledge on the matter.

Asides his academic role, Christian has 10+ years of experience as consultant and trainer

at the Successfactory Consulting group with a particular focus on Leadership, Software, and Systems Engineering related topics.