Software Engineer

Introduction to Software Engineering

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Learning Objectives

By the end of this video, you will be able to

• Enumerate common types of software engineers in a software project.
• Explain major attributes of great software engineers.
Stakeholders in Project Team

- Developer
- Program manager
- Management personnel
- Designer
- Tester
- Support engineer
- Operation engineer
- Usability engineer

(Zhang et al., 2013)
Software Engineers in Project Team

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(Zhang et al., 2013)
Shifting from Classroom to Real World

Customers

Users

Requirements:
Ambiguous, Evolving

Software:
Large, Existing, Evolving

Quality Assurance:
Substantial, Testing, In-Field Feedback
53 attributes of great engineers

Based on interviews of 59 experienced Microsoft engineers
Major Attributes of Great Software Engineers

• Personality
  • Continuously improving, open minded, ...

• Decision making
  • Updating decision making knowledge, handling complexity, ...

• Teammate interactions
  • Honest, creating shared understanding, ...

• The engineer’s code
  • Paying attention to coding details, elegant, ...

(Li et al., 2015)
References


The End