Software Product Lines

Lecture Topics

Thomas Thüm, Timo Kehrer, Elias Kuiter

December 1, 2021

Overview – Lecture Topics

Ad-Hoc Approaches for Variability

1. Introduction
2. Runtime Variability and Design Patterns
3. Compile-Time Variability with Clone-and-Own

Modeling and Implementing Features

4. Feature Modeling
5. Techniques for Embedded Software
6. Techniques for Application Software
7. Language-Based Techniques
8. Development Process

Quality Assurance and Maintenance

9. Feature Interactions
10. Product-Line Analyses
11. Product-Line Testing
12. Evolution and Maintenance

Overview – 1. Introduction

Overview – 2. Runtime Variability and Design Patterns

Overview – 3. Compile-Time Variability with Clone-and-Own

Overview – 4. Feature Modeling

Overview – 5. Techniques for Embedded Software

Overview – 6. Techniques for Application Software

Overview – 7. Language-Based Techniques

Overview – 8. Development Process

Overview – 9. Feature Interactions

Overview – 10. Product-Line Analyses

Overview – 11. Product-Line Testing

Overview – 12. Evolution and Maintenance