ISO/IEC 29110

An Introduction

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Outline of this session I

PAYAP
UNIVERSITY

Human nature

- Distractable
- Forgetful
- Mind fills in the holes

`https://www.youtube.com/watch?v=xcUOTrlpSuI`

ISO Standards

Version 14.5b 14-May-2009 CJ/TK/EJ (US)

ISO Standards for Lifecycle Management

System Context Processes | Software Specific Processes

Agreement Processes
- Acquisition Process (Clause 6.1.1)
- Supply Process (Clause 6.1.2)

Organizational Project-Enabling Processes
- Life Cycle Model Management Process (Clause 6.2.1)
- Infrastructure Management Process (Clause 6.2.2)
- Project Portfolio Management Process (Clause 6.2.3)
- Human Resource Management Process (Clause 6.2.4)
- Quality Management Process (Clause 6.2.5)

Project Processes
- Project Planning Process (Clause 6.3.1)
- Project Assessment and Control Process (Clause 6.3.2)
- Decision Management Process (Clause 6.3.3)
- Risk Management Process (Clause 6.3.4)
- Configuration Management Process (Clause 6.3.5)
- Information Management Process (Clause 6.3.6)
- Measurement Process (Clause 6.3.7)

Technical Processes
- Stakeholder Requirements Definition Process (Clause 6.4.1)
- System Requirements Analysis Process (Clause 6.4.2)
- System Architectural Design Process (Clause 6.4.3)
- Implementation Process (Clause 6.4.4)
- System Integration Process (Clause 6.4.5)
- System Qualification Testing Process (Clause 6.4.6)
- Software Installation Process (Clause 6.4.7)
- Software Acceptance Support Process (Clause 6.4.8)
- Software Operation Process (Clause 6.4.9)
- Software Maintenance Process (Clause 6.4.10)
- Software Disposal Process (Clause 6.4.11)

SW Implementation Processes
- Software Implementation Process (Clause 7.1.1)
- Software Requirements Analysis Process (Clause 7.1.2)
- Software Architectural Design Process (Clause 7.1.3)
- Software Detailed Design Process (Clause 7.1.4)
- Software Construction Process (Clause 7.1.5)
- Software Integration Process (Clause 7.1.6)
- Software Qualification Testing Process (Clause 7.1.7)

SW Support Processes
- Software Documentation Management Process (Clause 7.2.1)
- Software Configuration Management Process (Clause 7.2.2)
- Software Quality Assurance Process (Clause 7.2.3)
- Software Verification Process (Clause 7.2.4)
- Software Validation Process (Clause 7.2.5)
- Software Review Process (Clause 7.2.6)
- Software Audit Process (Clause 7.2.7)
- Software Problem Resolution Process (Clause 7.2.8)

Software Reuse Processes
- Domain Engineering Process (Clause 7.3.1)
- Reuse Asset Management Process (Clause 7.3.2)
- Reuse Program Management Process (Clause 7.3.3)

Growing support for ISO 29110

Countries Teaching ISO/IEC 29110

- Argentina
- Belgium
- Brazil
- Canada
- Czech Republic
- Finland
- Germany

- Haiti
- Ireland
- Japan
- Mexico
- Peru
- Thailand
- Uruguay

Support for ISO29110

CMMI vs ISO29110 Project Management

CMMI	ISO 29110
Project planning	Project planning
Project monitoring and control	Project plan execution
	Project assessment and control project closure
Requirement management	Change requests
Configuration management	Version Control Strategy Configuration
Process and product quality assurance	Software quality assurance
	Implement validation and review task performed
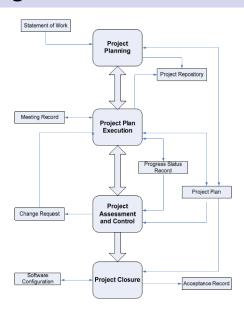
CMMI Engineering vs ISO29110 Software Implementation

| CMMI	ISO 29110
Project planning	Software implementation
Requirements management	Software requirements analysis
Requirement development	
Technical solutions	Software architectural and detailed design
	Software construction
Requirements management	Prodcut delivery
	Traceability to requirements
Verification	Software integration and tests
Validation	

Project Management
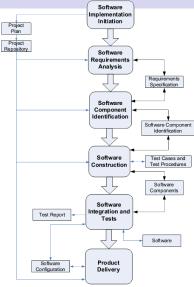
Project Management

- PM Input Products
  - Statement of Work
  - Software Configuration
  - Change Requests
- PM Internal Products
  - Change Requests
  - Meeting Records
  - Progress Status Record
- PM Output Products
  - Project Plan
  - Acceptance Record
  - Project Repository
  - Meeting Record
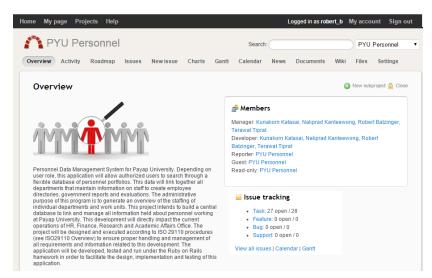 - Software Configuration

Software Implementation

Software Implementation

- SI Output Documents
  - Requirements Specification
  - Software Component Identification
  - Test Cases and Test Procedures
  - Software Components
  - Software Configuration
  - Software
  - Test Reports
  - Product Delivery
  - Acceptance Record
- SI Internal Documents
  - Change Request
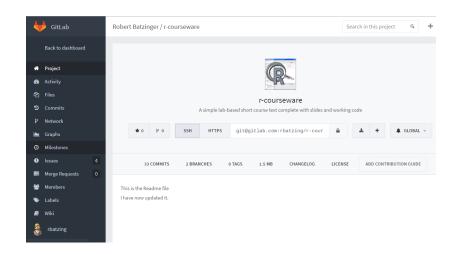 - Meeting Record
  - Progress Status Record

www.hostedredmine.com

www.gitlab.com

www.github.com