





Description of first demos

Deliverable D3.4.1

Programme	ITEA3			
Challenge	Smart Engineering			
Project number	17038			
Project name	Visual diagnosis for DevOps software development			
Project duration	1 st October 2018 – 30 st June 2022			
Project website	Iteavisdom.org			
Project WP	WP3 – Visualization			
Project Task	T3.1,T3.2,T3.3			
Deliverable type	Χ	Doc	Textual deliverable	
		SW	Software deliverable	
Version	1.0			
Delivered	14/01/2020			
Access	Χ	Public		
		Abstracts are public		
		Confidential		

Version history

Version	Date	Author	Notes
0.1		Kari Systä (TAU)	Initial draft
0.2	13.12.2020	Henri Bomström (UO)	Added Oulu part
0.3	14.01.2020	Kari Systä (TAU)	Added statements about Qentinel and TIOBE; added template stuff.
1.0	14.01.2020	Kari Systä (TAU)	Moved version to 1.0 for upload

Descriptions of the first VISDOM demos

This document describes the first demos that are targeted to the first review 29.01.2020.

TAU demo

The first TAU demo is based on technology created in earlier projects, but the particular demo has been created in early months of VISDOM project.

The demo shows a dashboard about an internal development project in Tampere University. The dashboard includes five timeline visualizations





- 1. Work and progress with issues/tickets
- 2. Number of tasks (open issues) per developer
- 3. Number of tasks (open issues) in different states (open, doing, in review ...)
- 4. Number of tasks (open issues) with different labels (bug, feature, documentation, ...)
- 5. Execution of the CI pipeline.

The data is collected from an internal gitlab-ci system using the data-collector that has been published as deliverable D2.1.2.

University of Oulu demo

The first demo by University of Oulu presents a dashboard for visualizing a teaching case. The case focused on teaching object-oriented programming through the use of Git and test automation. The course featured weekly pre-assignments, assignments and exercises. Students submitted their work to Git by tagging a commit for each assignment. Jenkins was used to automatically retrieve, build and test each assignment submitted. The dashboard utilizes data from these builds and test cases to visualize how the course is progressing, what are the concepts students are having trouble with and who are the students at risk for dropping out. The dashboard allows teachers to pinpoint problems in teaching and navigate to code repositories for a more in-depth view of code. The presented dashboard is a technical demo and will include more advanced visualizations at a later time.

The dashboard presents the following information:

- 1. The number of registered students.
- 2. Test cases with the most failures.
- 3. Student participation in weekly programming assignments.
- 4. Scores for each assignment per student and averages for all students per assignment.
- 5. Assignment submission timeline for each assignment.
- 6. Build failure rate per assignment.
- 7. Test coverage for each file per build result.
- 8. The number and status of assertions and test cases per build result.
- 9. Build results for each student and assignment.

The demo can be found at https://pan0232.panoulu.net/visdom/

VISDOM personnel can use the following credentials.

- Email: projectvisdom@gmail.com
- Password: BIpNThzrPu9wpwlO

Qentinel demo

This demo shows how VISDOM ideas are already used in Qentinel tool set.

TIOBE demo

This demo shows how VISDOM ideas are already used in TIOBE tool set.