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ITEA 3 is a EUREKA strategic ICT cluster programme

Exploitable Results by Third Parties

14009 MEASURE

Project details

Project leader:	Alessandra Bagnato
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Name: Hawk Measurement Tool		
Input(s):	Main feature(s)	Output(s):
Model directory or SVN reporitory (Accepted models: Modelio, UML2, BPMN, EMF, etc) Metamodel descriptor EOL queries	Create Hawk index of the model in entry and store it in Graph Database Perform fast and efficient EOL queries on the graph.	Model index stored in Graph Database (e.g. Neo4j, OrientDB, etc) EOL query results

Unique Selling Proposition(s):	Unique free and efficient open source tool that supports querying large models from different formats. Available on Windows, Mac and Linux
Integration constraint(s):	Supported models: Modelio, UML2, BPMN, EMF and IFC Must provide the metamodel descriptor Hardware requirements depend on model's size
Intended user(s):	Model designer, model analyst, quality assurance analyst
Provider:	Softeam, University of Aston
Contact point:	alessandra.bagnato@softeam.fr
Condition(s) for reuse:	This product can be reused under the "Eclipse Public License 2.0" license.
	Latest update: <21/05/2019>

Name: Quality Guard		
Input(s):	Main feature(s)	Output(s):
Metrics and Measurements Quality Rules	Monitor Software quality requirements Analysing the metrics to enable continuous improvements of software engineering activities and artefacts.	Metrics Quality Check Quality Dashboard
Unique Selling Proposition(s):	Aim to define quality approach based on quality rules of the companies. Monitor your software quality requirements in real time	
Integration constraint(s):	Extension of the Measure Platform integrated as Analysis Tool component Requires an SQL Database	
Intended user(s):	Quality assurance analyst, Project Manager	
Provider:	Softeam	
Contact point:	alessandra.bagnato@softeam.fr	
Condition(s) for reuse:	This product can be reused under the “GNU General Public License v3.0” license.	
	Latest update: < 21/05/2019>	

Name: Measure Platform		
Input(s):	Main feature(s)	Output(s):
Software's data sources SMM Metrics and Business Applications Measurements Tools	An integrated platform for managing the software development lifecycle by connecting measuring tools and analysis tools Easy to use platform: agile first, DevOps first, Security first Enable real time recommendations using advanced data analysis services.	Metrics and Measurements Quality Dashboards Integrated Analysis Services

Unique Selling Proposition(s):	The first open source platform that manages the whole engineering process of complex applications Enables the collection of a big set of metrics from different phases of Software Lifecyle Allows to provide real time recommendations and predictions based on external analysis tools running AI algorithms Provides a user-friendly interface with customizable dashboards that fits the corresponding business
Integration constraint(s):	Web based application packaged with an embedded web server Requires an SQL Database, Elasticsearch and Kibana
Intended user(s):	Project Manager, Quality Engineer, Developers
Provider:	Softeam
Contact point:	alessandra.bagnato@softeam.fr
Condition(s) for reuse:	This product can be reused under the "GNU General Public License v3.0" license

Latest update: <21/05/2019>

Name: SMM Measure Modeling		
Input(s):	Main feature(s)	Output(s):
Structured Metrics Model standard (Object Management Group)	Model driven approach to specify and implements metrics. Support of the SMM standard.	SMM Models SMM Metrics Implementation
Unique Selling Proposition(s):	Most successful modeling tools addressing the Structured Metrics Model standard. Allow to specify, develop, document and packages Metrics dedicated to the Measure Platform	
Integration constraint(s):	Extension for Modelio modelling tool dedicated to measure models in SMM standard. Required Modelio 3.8 (https://www.modelio.org/)	
Intended user(s):	Quality Engineers, Developers	
Provider:	Softeam	
Contact point:	alessandra.bagnato@softeam.fr	
Condition(s) for reuse:	This product can be reused under the “GNU General Public License v3.0” license	
	Latest update: <21/05/2019>	

Name: Measure Development Environment		
Input(s):	Main feature(s)	Output(s):
Metric Implementation project template Maven	Development environment and servcion	SMM Metrics Business Application

Unique Selling Proposition(s):	
Integration constraint(s):	Development Environment based on Maven and Java 8
	Quality Engineers, Developers
Provider:	Softeam
Contact point:	alessandra.bagnato@softeam.fr
Condition(s) for reuse:	This product can be reused under the “Eclipse Public License 2.0” license.

Latest update: <21/05/2019>

Name: EMIT		
Input(s):	Main feature(s)	Output(s):
MQTT brokers and clients settings	IoT Platform prototype for managing MQTT clients, MQTT callbacks and MQTT client status updates	Web services for managing: ▪ MQTT clients, ▪ MQTT callbacks, ▪ MQTT client status updates ▪ MQTT messages

Unique Selling Proposition(s):	Research Prototype
Integration constraint(s):	Deployable on JEE application containers (like Tomcat, Jetty, JBoss, GlassFish, etc) with few additional dependencies.
Intended user(s):	IoT Engineers, Researchers
Provider:	ICAM
Contact point:	jerome.rocheteau@icam.fr
Condition(s) for reuse:	EMIT is released under the Apache Licence 2.0
	Latest update: <21/05/2019>

Name: M-ELKI		
Input(s):	Main feature(s)	Output(s):
Active project on the MEASURE Platform with numeric measures	Clustering Algorithms integrated within the MEASURE Platform	Clustering results from 4 state-of-the-art algorithms

Unique Selling Proposition(s):	Research Prototype
Integration constraint(s):	Deployable on JEE application containers (like Tomcat, Jetty, JBoss, GlassFish, etc) with few additional dependencies.
Intended user(s):	IoT Engineers, Researchers
Provider:	ICAM
Contact point:	jerome.rocheteau@icam.fr
Condition(s) for reuse:	M-ELKI is released under the Apache Licence 2.0

Latest update: <21/05/2019>

Name: Metric Suggester		
Input(s):	Main feature(s)	Output(s):
- Measurement logs and training data set (for measurements classifications) - Measurement plan - List of software metrics	Provides dynamic measurement plans at runtime by analysis of the measures guided by machine learning techniques.	- Classified measurements - Measurement plans

Unique Selling Proposition(s):	An interesting tool allowing to determine (based on learning based analysis of collected data) and visualize relevant measures, metrics and measurement plans during a specific period of time.
Integration constraint(s):	It requires: ▪ Django==1.11.4 ▪ djangorestframework==3.6.3 ▪ gunicorn==19.7.1 ▪ numpy==1.13.1 ▪ pytz==2017.2 ▪ scikit-learn==0.19.0 ▪ scipy==0.19.1
Intended user(s):	Software engineers, project managers, software measurement experts
Provider:	Institut Mines-Télécom
Contact point:	Stephane.Maag@telecom-sudparis.eu
Condition(s) for reuse:	This product can be reused under the “GNU General Public License v3.0” license
	Latest update: <21/05/2019>

Name: RIVER		
Input(s):	Main feature(s)	Output(s):
- x86 binary files / executables	- it tests executables against common vulnerabilities (crashes, datatype and buffer overflows) with no knowledge about source code. - it uses smart fuzz testing, taint analysis and symbolic execution	- generated tests - list of crashes or vulnerabilities - coverage of the binary code

Unique Selling Proposition(s):	- it improves the performance using a special technique of reverse execution when exploring the program
Integration constraint(s):	- it works only for x86 code, no ARM
Intended user(s):	- security engineers
Provider:	University of Bucharest, Bitdefender
Contact point:	Alin Stefanescu alin@fmi.unibuc.ro
Condition(s) for reuse:	MIT License

Latest update: <21/05/2019>

Name: Stracker		
Input(s):	Main feature(s)	Output(s):
- software metrics, e.g. imported from Sonarqube or MEASURE platform	- it increases the quality of software development by tracking and suggesting values for various software metrics - it uses various machine learning and forecasting algorithms to learn from the historical values recorded so far and predict future values of the software metrics.	- predicted values of the software metrics different formats, e.g. json, that can be imported into visualization tools such as Kibana and Grafana

Unique Selling Proposition(s):	- forecasted future values of the software metrics are valuable to a project manager to understand how the project will evolve and then plan accordingly.
Integration constraint(s):	- plans to integrate Stracker with other popular software metrics or visualization tools (Sonarqube, Grafana, Kibana) via plugins
Intended user(s):	Software managers, software engineers, scrum masters
Provider:	University of Bucharest
Contact point:	Alin Stefanescu alin@fmi.unibuc.ro
Condition(s) for reuse:	MIT License
	Latest update: <21/05/2019>

Name: Automatic Test Case Generation		
Input(s):	Main feature(s)	Output(s):
- Text based requirements - Structured Requirement Model	Converting text written requirement comments automatically to running test cases.	- Test Case Generator - Test Scenarios
Unique Selling Proposition(s):	Support software development life-cycle process provides high quality and lower failed test results.	
Integration constraint(s):	Software Analyst should use the defined key words while creating the test case document.	
Intended user(s):	Software Analyst, system architect, Software testers	
Provider:	Ericsson Turkey	
Contact point:	Sinan.verdi@ericsson.com	
Condition(s) for reuse:	This product can be reused under the Ericsson's licensing methodology.	
	Latest update: <21/05/2019>	

Name: Anomaly Detection Tool		
Input(s):	Main feature(s)	Output(s):
- The log files of the run test cases	After analyzing the test logs of the developed software solutions, Turkgen's Big Data solution detects the results that shows anomaly characteristics. This data is useful to evaluate and understand possible bugs in the developed solutions.	- Alerts regarding to the test results

Unique Selling Proposition(s):	Instead of individually analyzed test results, a holistic approach can reveal unobserved failures in the test cases.
Integration constraint(s):	This solution should be connected to the test tools of the software testers.
Intended user(s):	Software Analyst, system architect, Software testers, Project Managers
Provider:	Turkgen
Contact point:	ahmet.sever@turkgen.com.tr
Condition(s) for reuse:	Anomaly Detection Tool is designed as a standalone product that can work with different infrastructures. So it will be sold as a Software as a Service. (SaaS)
	Latest update: <21/05/2019>

Name: Weka Measurement Adapter		
Input(s):	Main feature(s)	Output(s):
▪ Measureable ARFF formatted data set ▪ appropriate Machine Learning (ML) model and running parameters for WEKA application	Reads given data set to create proper model for given ML model with given running attribute on WEKA application. After ML model execution completed, predefined result model is saved to elastic search.	- Pre-defined ML prediction result

Unique Selling Proposition(s):	Creates a proper way to migrate Weka ML results to MEASURE platform
Integration constraint(s):	Software Analyst should use the defined key words while creating the test case document.
Intended user(s):	Software Analyst, System Architect, Data scientist
Provider:	Turkcell Technology, Bahçeşehir University
Contact point:	utku.apaydin@gmail.com, selami.bagriyanik@turkcell.com.tr
Condition(s) for reuse:	This product can be reused under the Turkcell Technology licensing methodology.

Latest update: <27/05/2019>