Skip to sidebar Skip to main content Spaces Analytics Create Help 0 Digital Transformation of MEMS Analytics SPACE SHORTCUTS DIGITMEMS Use Cases Digitalization at BST T&R DIGITMEMS Search PAGE TREE Digital Transformation Strategy Organization & PMO Training & Documentation Projects DIGITMEMS Use Cases Use-Case Description and Documentation CRISP-DM Tool - Requirements CRISP DM Tool DeQuMa Tool Digitale Musterbaumappe Gather data for single sensor Musterverfolgungsdatenbank VMPS/MMP NE-SE Knowledge Graph Online Project Information System OPI Online-Projekt-Information PoC for SensorTracking and DeQuMa based on Outsystems Portfoliomanagement PPQA-Audits Preventive Maintenance der Messstände Solution Architecture for Sensor tracking and DeQuMa based on Outsystems Technologie-Quadranten Resource Mgmt & Planning Tool Tracking Sensoren in der Charakterisierung List of Process Characteristics LRC Tool 2.0 - Requirements SMDB - SensorTracking NE-SE Product Database - Requirements NESE 8D Report Design-to-Layout Generator Use Case: Launchpad AE/NE-SE Peer Review PoC App Integration & Extensibility Use Case: TypankÃ!/andigung Use Case: MiniCRM Use Case: Hypothesis and Fact Sheet Analyses Use Case: Connected Tools Use Case: Sensor Chatbot Use-Case Implementation Exchange meetings use cases Reports Template User Stories MEMS Development Environment (MDE) Activity Big Data Analytics at BST and AE/NE-SE. Solution Architecture ConfigureSpace tools CRISP-DM Tool - Requirements Save for later Watch Share Pages â€| Use-Case Description and Documentation Analytics Created by Fahr Nicolas (AE/EAC), last modified on 2022, Sep 27 Current Version V 21 Page Info 1. Objective 2. Background and strategic fit 3. Assumptions and prerequisities 4. Roles 4.1. Infrastructure Layer / Authorization 4.2. Application Layer / Authentication 5. User Stories 6. Implementation Details 6.1. Technology Stack 6.2. Aggregates / Context Model 7. Questions 8. Out of Scope Sponsor Stammler Fabian (AE/EAC3)Â Epic Owner Miller Marco (AE/EAC3)Â Solution Architect mit exist or you don't have permission to view it. 1. Objective Create a new application for documenting and improving the the Data Science Process at AE/NE-SE, which is compliant to the Cross-Industry Standard Process â€" Data Mining (CRISP-DM). 2. Background and strategic fit Projects at AE/NE-SE have increased demand for the completion of tasks related to data science, such as: Â,,General data analytics & big data analytics Â, Development and deployment of statistical model or machine learning algorithms Â, Individuals and teams that work on these tasks have no aligned common set of rules and tools that frame how these tasks are to be completed, maintained and documented A, Hence there is a need to define and align a "Data Science Process" that ensures: Â, Compliance with the organization's rules and guidelines (e.g. CDQ 0302, AE DI G03) Â, Best practices are followed that enable high quality, reproducability, transparency and completeness of the work Â, Risk if there is no data science process: Â,,Results could become irreproducible Â,,Only one persons knows what was done Â,,Mistakes can occur and are hard to find Â,,No accountability Â,,Learning from past projects becomes harder Â,,Liabilty in legal questions ... 3. Assumptions and prerequisities Users are authenticated by Active Directory using SSO 4. Roles 4.1. Infrastructure Layer / Authorization CRISP-DM Administrator can access the CRISP-DM database and manage questionaires (full access) CRISP-DM User can access the CRISP-DM application 4.2. Application Layer / Authentication Data-Scientist (= authenticated CRISP-DM User): Project Owner Project Contributor 5. User Stories Name Story MoSCoW Acceptance Criteria Questions Name Story MoSCoW Acceptance Criteria Questions Manage CRISP-DM questionaire As an administrator of the CRISP-DM tool, I can manage the questionaire including its hierarchy and order, so that changes in the CRISP-DM Standard are reflected in new projects. Wish as of now, questionaires are administered exclusively through direct access to the database. Who is going to be the admin? AE/EAC or NE-SW? "My projects" overview As a Project Owner or Project Contributor, I can see a list of projects, for which I am assigned to as an owner or contributor, so that I can navigate to the details page of the project Must I can see a table with lists all projects where I am in the contributor or owner role (resource based access control) The table contains the following columns: Project Name Creation Date Overall Completion Status (number of unanswered questions; green if count = 0, otherwise red) Link to detail page The table is sorted by Creation Date DESC by default. Allow custom sorting by clicking on the table header columns. The result can be filtered by any property Create new project As a Data Scientist, I can create a new project, so that I can start documenting the process steps Must After clicking on the new-button, I dialog is displayed. Input fields: Project Name (mandatory) Contributor Selection: I can select one or more additional contributors (optional) Questionaire Version (mandatory, preselect the latest version) Projektkontierungsnummer (optional) One or more Tags (optional). Select from a list of suggestions or allow manual input. Example Tags: "XGBoost Model" "Tensor Flow" "Supervised Learning" "PCA" "Scarif" "BMI482" I am automatically assigned as owner of the project. The owner cannot be changed. When clicking on the save-button, the project aggregate including all (empty) answers is saved into the database. Then I get redirected to the Edit Project page. When clicking on the cancel-button, the dialog is closed and I get redirected to the my projects overview page. Different categories of questionnaires for different algorithms Project Main Page As an owner or contributor of a project, I can fill out the questionaire to comply with CRISP-DM standards Must The Project Main Page contains 2 sub-pages, which are grouped into a tab: Tab 1: Questonnaire Page Main project page shows the CRISP-DM steps (e.g. "1. Business Understanding") and their substeps (e.g. "1.1 determine business objectives", 1.2, 1.3 ...) Steps and substeps are displayed hierarchically as in the following mock: When clicking on a substep (2nd hierarchy level), I can see a list of questions along with its most recent answer with following properties: Answer text creation date last edited additional notes baseline (screen is just a mock and not accurate) For each question, I can see a history of existing previous answers I can create a new answer for a question. When entering an answer to a question, a new history entry is written.... I can edit an existing answer Additional notes: Questions can be answered in any order Questions can be answered and edited multiple times Questions can be answered by all who have "write†(=contributor) privilliges in a project When the project status is CLOSED, I cannot create or edit any answers I can only edit answers in the current baseline (see also baseline section below) Steps and substeps are colorized by its status: grey: not yet answered within the current baseline (see more details below) blue: question has an answer within the current baseline Additional notes: When all questions in a substep have an answer, the parent step turns blue Tab 2: Configuration Page Questionaire Configuration Projektkontierungsnr. ... OPEN Save New Baseline Current Baseline There is a tag to navigate to the configuration page of the project. On the configuration page, it is possible to change: Project Name Contributors (at least one contributor must be selected) Projektkontierungsnummer Tags Note: it is not possible to change the questionnaire Version There is a toggle button to change the Status Add new baseline As an owner of a project, I can create a new baseline, so that major changes in the project scope can be taken into account Should Background info: An (unfortunately) common occurrence in many projects: new information comes to light or the topic of focus shifts in a major way, such that previous answers to the questions are no longer applicable To deal with this we introduce the notion of "baselines†Projects begin at baseline "1â€ Should a major change as described above occur, contributors can increase the baseline by +1 Increasing the baseline resets all fields back to "grey†and the questions need to be answered again Previous answers are still available, under the previous baseline's number Edits only possible in current baseline Clone project tbd. Could Instead of introducing a new Baseline, another allowed approach would be to close this CRISP-DM project and open a fresh one. In that case the tags of the project should be the same so that I know to which main project this

CRISP-DM project belongs e.g. Tag: Main Project BMP5 – CRISP-DM Project Name: xgboost model Tag: Main Project BMP5 – CRISP-DM Project Name: CNN model 6. Implementation Details 6.1. Technology Stack to be decided OutSystems (Low Code) external MSSQL Database 6.2. Aggregates / Context Model n n 1 n n Project Baseline Answer Contibutor Tag Project Aggregate * Questionnaire Questionnaire Aggregate Tag Tag Aggregate Steps n Question Substep n Owner 1 n Steps Question Substep n 7. Questions Question Answer 8. Out of Scope UI for questionnaire versioning is not included in this working package, but the DB schema must support this feature in the initial revision. UI for managing questionnaire is not included. Instead, questionnaires are managed exclusively in the database by the CRISP-DM Administrator. Like Be the first to like this No labels Edit Labels © Robert Bosch GmbH Docupedia 7.19.11.0 Powered by Atlassian Confluence and Scroll Viewport Node: doc-P-SI0VM4410 Docupedia Community Support Legal