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Questions 8. Out of Scope Sponsor Stammler Fabian (AE/EAC3) Epic Owner Miller Marco (AE/EAC3) Solution Architect mit NE-SW
abklären Development Team NE-SW Status SPECIFICATION Budget JIRA-Link to Epic DIGITMEMS-189 - Jira issue doesn't 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 "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: General data analytics & big data analytics
Development and deployment of statistical model or machine learning algorithms 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 Hence there is a need to
define and align a "Data Science Process" that ensures: Compliance with the organization's rules and guidelines (e.g. CDQ 0302, AE DI
G03) Best practices are followed that enable high quality, reproducibility, transparency and completeness of the work Risk if there is no data
science process: Results could become irreproducible Only one persons knows what was done Mistakes can occur and are hard to find
No accountability Learning from past projects becomes harder Liability in legal questions ... 3. Assumptions and prerequisites 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 questionnaires (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 Manage CRISP-DM questionnaire As an administrator of the CRISP-DM tool, I can manage the questionnaire
including its hierarchy and order, so that changes in the CRISP-DM Standard are reflected in new projects. Wish as of now, questionnaires 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) Questionnaire 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" "Scarf" "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
questionnaire to comply with CRISP-DM standards Must The Project Main Page contains 2 sub-pages, which are grouped into a tab: Tab 1:
Questionnaire 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) privileges 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 colored 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 Questionnaire 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 "1" 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 Contributor 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