Pflichtenheft

# Zielbestimmung

○ **Musskriterien**

Entwickeln eines Empfehlungssystems für einen Geodatenkatalog auf Basis von räumlicher Ähnlichkeit und Ähnlichkeit der Metadaten.

○ **Wunschkriterien**

○ **Abgrenzungskriterien**

# Produkteinsatz

○ **Anwendungsbereiche**

# Produktfunktionen

FE001 Supported geospatial (meta)data formats: GeoPackage, NetCDF, GeoJSON, Shapefile, CSV on the Web, ISO 19xxx, GeoTIFF

FE002 A CLI tool to extract geospatial extend at different levels of detail (bounding box or a single feature, i.e. polygon, line, point) from a single file

FE003 A CLI tool to extract the temporal extend from a single file

FE004 A CLI tool to extract geospatial and temporal extend from a directory of files

FE005 Metadata extraction for a specific record can be triggered via an API call by all logged-in users, which immediately updates the record’s metadata

FE006 Metadata extraction is automatically triggered for new uploaded records to the base software

FE007 Metadata extraction during creation of a new record runs as an independent process (i.e. it does not need to complete for record creation to complete)

API

FA001 All user-facing functionality is available via RESTful HTTP API endpoints

FA002 API endpoints return valid JSON in responses, including errors

FA003 API endpoints use appropriate HTTP status codes

FA004 Geospatial data in the API is encoded using GeoJSON (RFC 7946)

FA005 Enhanced metadata, i.e. including the temporal and geospatial information extracted from files, are included in the regular metadata for records (no special endpoint)

FA006 With the parameter similar=n added to a request to read a record, the response is enhanced with ids and similarity scores for n many similar records Similarity calculation

FS001 API endpoint providing the similarity score of two records based on the bounding box of all data in the record; records are provided as their repository-specific ID

FS002 API endpoint providing a sorted list of similar records for a repositoryspecific record ID; the length of the returned list can be defined by the user, a maximum length can be configured server-side

FS004 The similarity value is normalised in the interval [0, 1[

FS005 The input record is never included in the list of similar records

FS006 The similarity value takes the data type into consideration for the types vector, raster, or timeseries, i.e. a similarity value for two records with same extend is higher if data types match as well

UI

FU001 A configurable number of similar records is displayed on a page for viewing a single record (must not be integrated with existing UIs for the base software) Configuration

FC001 All configuration of additional functionality is possible via plain text files, e.g. YAML format, and ideally integrated with configuration mechanisms of the base software

FC002 The configuration is at least active after restarting the service

# Produktdaten

# Produktleistungen

# Qualitätsanforderungen

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Produktqualität** | **Sehr Gut** | **Gut** | **Normal** | **Nicht Relevant** |
| **Funktionalität** |  |  |  |  |
| Angemessenheit |  |  |  |  |
| Richtigkeit |  |  |  |  |
| Interoperabilität |  |  |  |  |
| Ordnungsmäßigkeit |  |  |  |  |
| Sicherheit |  |  |  |  |
| **Zuverlässigkeit** |  |  |  |  |
| Reife |  |  |  |  |
| Fehlertoleranz |  |  |  |  |
| Wiederherstellbarkeit |  |  |  |  |
| **Benutzbarkeit** |  |  |  |  |
| Verständlichkeit |  |  |  |  |
| Erlernbarkeit |  |  |  |  |
| Bedienbarkeit |  |  |  |  |
| **Effizienz** |  |  |  |  |
| Zeitverhalten |  |  |  |  |
| Verbrauchsverhalten |  |  |  |  |
| **Änderbarkeit** |  |  |  |  |
| Analysierbarkeit |  |  |  |  |
| Modifizierbarkeit |  |  |  |  |
| Stabilität |  |  |  |  |
| Prüfbarkeit |  |  |  |  |

# Benutzeroberfläche

# Nichtfunktionale Anforderungen

# Technische Produktumgebung

○ **Software**

# Spezielle Anforderungen

# Ergänzungen