

Facilities Management Project Spec

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FM - Facilities management

Facilities management (FM) is web application that can create, update and delete facilities. Facility can have multiple addresses, categories and contact data. Additionally, application must have feature for importing data from various formats: CSV, XML, JSON.

FM application must support complex search and overall statistical data.

FM CRUD

Facility has name and description fields. Each facility has multiple:

- Addresses
 - House number, street, postal code, city and country data.
- Contact data
 - Phone, email, website
- Categories
 - Category name

FM Data Import

Application will automatically detect type of importing file and append data to existing FM dataset.

FM Service

In addition to web app, system will also expose all functionalities as REST service.

FM Search

There will be two search types:

- First type will have one search box that will go through all fields and show results
 - This search type must support regular expression search
- Second type will have multiple search boxes that will search specific fields

FM Overall Statistics

Developer must define important types of statistics valuable for any type of source (i.e. number of records per city would be valuable for someone who wants to buy data for XYZ city).

Technical Requirements

- Web application must be Java 1.7 based running on Tomcat web server
- All OOP must be used
- Relational database design
 - Create SQL script
 - Create ERD design document
- Spring & Hibernate integration
 - Use Spring Transaction Proxy Manager and DAOs
 - Use annotations
- Maven
 - Use WAR export format to deploy on Tomcat
- Configurable parameters must be outside application (.properties file)
- Three layers application architecture: data, logic, presentation
- XML parsing will use XPath
- JSON parsing will use JSON Path
- Search implementation via Regular Expressions
- Code will be placed on Github
- Code must be well formatted and commented
- Automated builds
- Automated AWS deployment

Nontechnical requirements

- Project will be executed in kanban like fashion
- All stories will be tracked in online tool like trello.com