Part I
Meta Data Handling

1 Goal

The goal is to store meta data efficient and easy accessible within the repository.

2 Requirements

To achieve the mentioned goal the following requirements must be fitted:

- New meta data must get added easily,
- Meta data must be searchable,
- Meta data has several categories (name, timestamp, description ...)
- Meta data must be easy readable
- Meta data and data set must be linked
- Meta data is structured.

3 Solution

Due to the above listed requirements, we came up with the solution to use a JSON-file to store the meta data. To have easy access for searches through the repository and its data set's meta data, we decided to use one single file to store the meta data in. This centralised spot containing the meta data has the following structure:

```
{
    "repository":{
                "version":"0.1",
                "timestampe:"2014-09-18T13:40:18",
                "datasets":
                [
                        {
                                "id":1,
                                "name":"big folder",
                                "timestamp":"2014-09-18T13:41:35",
                                "description":"Some files",
                                "filecount":35,
                                "size":9369436,
                                "filename":"myWork",
                                "filetype":"directory"
                        }
```

```
                ]
        }
}
```

This meta data JSON-file is located in the root of a repository.
For each data set that is added to the repository, an entry in the meta data file is created as well as a folder. The folder's name has the format `DataSet_ID` where the ID is corresponds wit the ID in the meta data file.