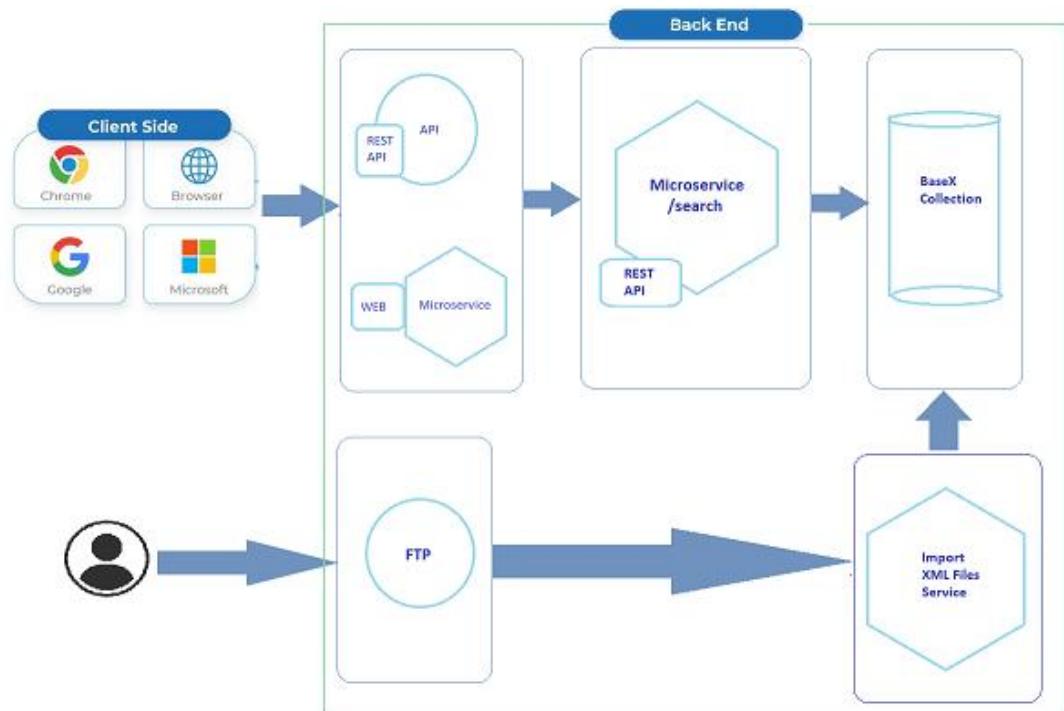# Software Architecture Documentation for StratML

1. Introduction

The purpose of this document is to provide a detailed architecture design of the StratML Project.

2. Functional Requirements

The basic purpose of this project is to keep collection of XML files and provide search functionality among these files by using different parameters.

3. Architecture Overview

In backed we have different modules as explained below.

BaseX Collection: We have collection of 5700+ XML files.

Import XML File Service: We have one service to import more XML files in this collection. For this user have to upload one **sitemap.xml** file on specific location of FTP . Structure of this xml file is fixed as given below.

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
       <url><loc>https://stratml.us/carmel/iso/ML3.xml</loc></url>
       <url><loc>https://stratml.us/carmel/iso/TEAAA.xml</loc></url>
</urlset>
```

This service will download files from this urls, validate the files for importing in BaseX collection. And then import file in the collection.

Micro-service API: Micro-service for search API. Details are given below.
Service name : <u>search</u>
Method: POST
Request type: json
Response type: json
Request format :

```
{
    "fullText": ".gov",  "stakeholderName": "", "goal": "", "valueName": "",
    "reportName": ""
}
```

Response format :

```
[
    {
        "organisation_name": [
            "18F",
            "Take our code: 35 reusable projects from 18F"
        ],
        "link": "https://stratml.us/docs/18FP.xml#",
        "identifier": [
            "_c904da0a-0024-11e6-8e29-ac7087122820"
        ],
        "new_description": null,
        "new_otherinformation": null,
        "description": "to transform government",
        "otherinformation": null,
        "urlstr": null,
        "date": [
            "2016-04-06",
            "2016-04-11"
        ],
        "reportName": "18FP.xml"
    },…………….
    ]
```

4. API details

URL: https://search.aboutthem.info/stratmlapi/search
Method: POST
Request type: json
Response type: json
Request format :

```json
{
     "fullText": ".gov",  "stakeholderName": "", "goal": "", "valueName": "",
     "reportName": ""
}
```

Response format :

```json
[
    {
        "organisation_name": [
            "18F",
            "Take our code: 35 reusable projects from 18F"
        ],
        "link": "https://stratml.us/docs/18FP.xml#",
        "identifier": [
            "_c904da0a-0024-11e6-8e29-ac7087122820"
        ],
        "new_description": null,
        "new_otherinformation": null,
        "description": "to transform government",
        "otherinformation": null,
        "urlstr": null,
        "date": [
            "2016-04-06",
            "2016-04-11"
        ],
        "reportName": "18FP.xml"
    },…………….
    ]
```

This is open API so no credentials required to call this API.
You can directly call this API from POSTMAN or any tool, you will get the response for all files in the collection.