

Python Lab Project

PROJECT SYNOPSIS

OF END TERM PROJECT

BACHELOR OF TECHNOLOGY

COMPUTER SCIENCE AND ENGINEERING

SUBMITTED TO

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PROJECT TITLE

JSON-XML UTILITY

PROBLEM STATEMENT

To create a tool to make import of data from JSON and XML to SQL database simple and related uses.

TEAM MEMBERS

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OBJECTIVE

To create a tool in python to make the import of data from JSON and XML to a SQL database simple. Also use JSON to create its equivalent java class.

DESCRIPTION

This project is made on python programming language. The project contains Four major modules each of which accomplishes a specific task. The project runs on python command line or any python IDE and does not have a GUI, although user interaction happens using command line and related user input.

Modules

- 1. JSON to SQL Database**
- 2. XML to SQL Database**
- 3. JSON to Java Class**
- 4. XML to JSON**

All these modules can be run to convert mentioned file types to each other as per need.

We often need to work with databases to store data but we can't transfer database directly to other people or platform. We use JSON and XML as universal file types to transfer data over internet. Transferred JSON and XML files need to be imported into SQL database. Automating this process makes life of a programmer simple and makes development faster.

BRIEF OVERVIEW

We can understand the use of the first module i.e. JSON to SQL Database by a quick example.

```
{  
  "data" : [  
    {  
      "id" : 1,  
      "name" : "Tanuj",  
      "email" : "tanuj@gmail.com",  
      "phone" : "9876543210"  
    }  
  ]  
}
```

This JSON file can be imported directly to an SQL table as follows-

id	name	email	phone
1	Tanuj	tanuj@gmail.com	9876543210

PLATFORM AND TECH USED

- JetBrains PyCharm 2.4
- Python 3.7
- JSON and XML file types
- Git for Version Control
- GitLab for hosted shared project