Training Day10 Report:

26 June 2024

Keys Takeways:

1. Downloading Apache Jena Fuseki

- Visit Official Website: Go to the Apache Jena website at jena.apache.org.
- Navigate to Downloads: Find the download section for Fuseki.
- **Select Version**: Choose the desired version of Fuseki. The latest stable release is recommended.
- **Download Archive**: Download the zip or tar.gz archive suitable for your operating system.
- Extract Files: Extract the downloaded archive to a preferred directory on your

system. 2. Java Version Requirements

- Java Compatibility: Ensure that you have Java installed on your system. Apache Jena Fuseki requires Java 8 or later.
- Check Java Version: Open a terminal or command prompt and run the command java
 - -version to verify your Java version.
- Install/Update Java: If needed, download and install the latest Java Development Kit (JDK) from the <u>Oracle website</u> or use an open-source alternative like OpenJDK.

3. Uploading Data Over Apache Jena Fuseki

- Start Fuseki Server: Navigate to the directory where Fuseki is extracted and run the server using the command ./fuseki-server (Linux/Mac) or fuseki-server.bat (Windows).
- Access Fuseki UI: Open a web browser and go to http://localhost:3030 to access the Fuseki user interface.
- Create a Dataset:
 - o Click on "Datasets". o Click on "Add new dataset".

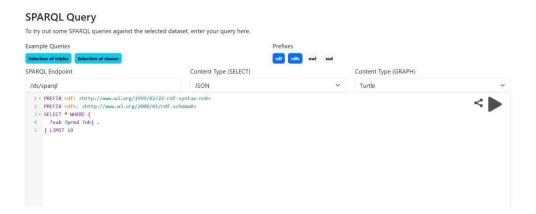
- Enter a name and select the dataset type (e.g., in-memory or TDB).
- Upload RDF Data:

 Select the newly created dataset.
 Go to the "Upload" tab.
 Choose the RDF data file (e.g., .ttl, .rdf) from your local machine.
 Click

 "Upload" to load the data into the dataset.

4. Writing and Executing a Query

• SPARQL Query Execution:
Select the dataset you want to query from the Fuseki interface.
Go to the "Query" tab.



• Writing a Query:

o Use SPARQL, a query language for RDF data. Example query:

o This query selects the names of all persons in the dataset.

• Running the Query:

o Enter the SPARQL query into the query text area. o Click "Run Query" to execute. o View results in the results pane, which displays the query output in tabular form.

