

## TRAINING TR-102 DAY 12 REPORT

26 June, 2024

### 1. DOWNLOADING AND INSTALLING APACHE JENA FUSEKI:

#### Apache Jena Fuseki:

**Description:** Fuseki is a SPARQL server that provides REST-style SPARQL HTTP Update, SPARQL Query, and SPARQL Update for managing RDF data.

**Features:** Allows for the storage, querying, and management of RDF datasets using SPARQL.

#### Installation Steps:

**Downloading:** Obtaining the latest version of Apache Jena Fuseki from the official website.

**Setting Up:** Extracting the downloaded files and setting up the environment.

**Running the Server:** Starting the Fuseki server to serve SPARQL endpoints.

### 2. DOWNLOADING AND INSTALLING THE JDK (JAVA DEVELOPMENT KIT):

#### JDK Overview:

**Description:** The JDK is a software development environment used for developing Java applications and applets.

**Components:** Includes the Java Runtime Environment (JRE), an interpreter/loader (Java), a compiler (javac), an archiver (jar), a documentation generator (Javadoc), and other tools needed for Java development.

#### Installation Steps:

**Downloading:** Obtaining the latest version of the JDK from the official Oracle website or an open-source alternative like OpenJDK.

**Setting Up:** Installing the JDK by following the setup instructions and configuring the system environment variables (e.g., setting JAVA\_HOME and updating the PATH).

### CONCLUSION:

Day 12 was dedicated to setting up essential tools for RDF data management and Java development. Participants learned to download and install Apache Jena Fuseki, enabling them to

create and manage SPARQL endpoints for RDF datasets. Additionally, the session covered the download and installation of the Java Development Kit (JDK), providing the necessary foundation for Java-based application development. These installations are crucial for working with semantic web technologies and developing robust, scalable applications.