

# Training Day 9 Report

25 June 2024

Keys Takeways:

## Use of JSON in WebVOWL

- **Primary Format:** JSON is the main format used by WebVOWL to visualize ontologies.
- **Benefits:**
  - Simplicity and readability.
  - Broad interoperability across platforms.
  - Efficient parsing and performance.
- **Function:** Captures ontology structure and elements (classes, properties, relationships) in a VOWL-compliant JSON format for interactive visualizations.

## Use of XML in WebVOWL

- **Ontology Creation:** Ontologies are often created in OWL (XML format) using tools like Protégé.
- **Conversion to JSON:** OWL (XML) files are converted to JSON for compatibility with WebVOWL.
- **Visualization Workflow:**
  1. Create/Edit ontology in XML.
  2. Convert XML (OWL) to JSON.
  3. Load JSON into WebVOWL for visualization.

## Creating a Smart City Architecture on WebVOWL

- **Ontology Design:** Define key elements (e.g., buildings, transportation, utilities) and their relationships.
- **JSON Conversion:** Convert the designed ontology from OWL (XML) to JSON.

- **Visualization:** Load the JSON file into WebVOWL to visualize and interact with the smart city architecture.
- **Analysis:** Utilize WebVOWL's interactive features to analyze and refine the smart city ontology.

## **Hands-on Practice on WebVOWL**

- **Setup:** Install and configure WebVOWL.
- **Loading Ontologies:** Practice loading various JSON files representing different ontologies.
- **Interactive Exploration:** Use WebVOWL's tools to navigate, explore, and manipulate ontology visualizations.
- **Customization:** Modify and extend visualizations by editing the JSON ontology files and observing changes.