ENOLA

Ontology Fundamentals with Cameo Concept Modeler

February 2025

About US

WE ARE A TRAINING, COACHING, AND CONSULTING FIRM DEDICATED TO THE RAPID EVOLUTION OF OUR CLIENTS WITHIN THE DIGITAL UNIVERSE. OUR SERVICES ARE DIRECTED TOWARDS:

- DIGITAL ENGINEERING/TRANSFORMATION
- MODEL BASED SYSTEMS ENGINEERING
- ENTERPRISE ARCHITECTURE
- SOFTWARE ARCHITECTURE
- DATABASE ARCHITECTURE
- ONTOLOGIES
- COLLABORATION SERVER MANAGEMENT

LEAVE THE PAST IN THE PAST

IT'S TIME TO EVOLVE, DIGITALLY

MISSION

Enola WILL train, coach, and mentor your staff to be independently successful as quickly as possible.

Yes, our mission is to work ourselves out of a job!

Course DESCRIPTION

Ontology Fundamentals with Cameo Concept Modeler is a three-day course designed to provide an understanding of ontologies, knowledge graphs, and their application in Protégé and Cameo Concept Modeler.

This course provides a mix of module-based lectures, instructor demonstration, and hands-on labs. Our trainers are all experienced practitioners who understand the balance of theory and practicality.

Prerequisites:
   None

Required Software:
   TBD

Take-Aways:
- Knowledge of the purpose of ontologies
- Understanding the benefits of knowledge graphs
- Working knowledge of Protege and Concept Modeling

AGENDA

DAY 1:

- Introduction
- Ontologies
- Protege

DAY 2:

- Cameo Concept Modeling
- Querying the Data

DAY 3:

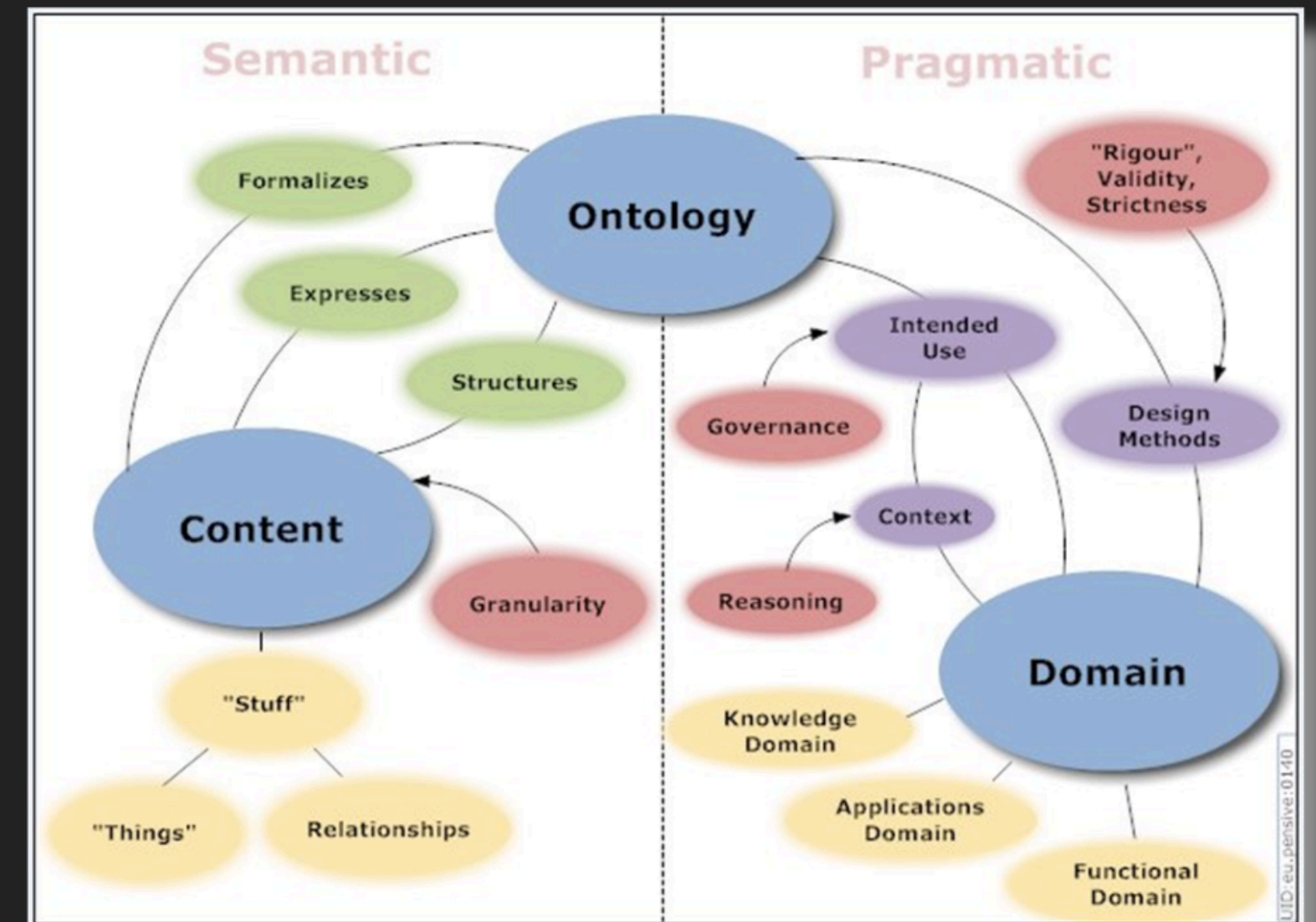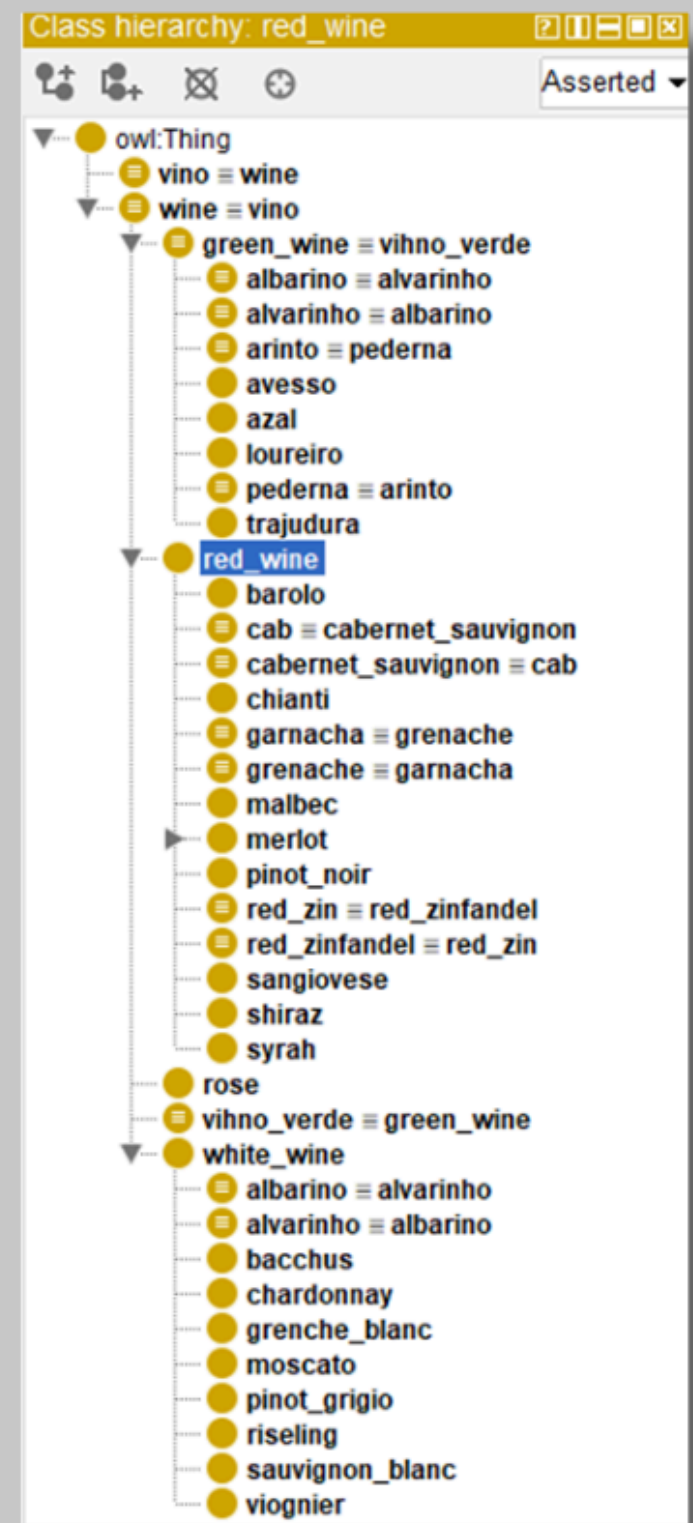- Data Visualization
- Knowledge Graphs

COURSE CONTENT

Ontologies

Ontologies define a common vocabulary for individuals who need to share information with human and machine-readable definitions of basic concepts in a specific domain with relations among them.

This module covers:
- Ontology Definition, Purpose & Use Cases
- BFO, OWL, RDF
- Semantic Web & Reasoners
- Types of Ontologies & Approaches
- Object Properties

PROTEGE

In this lab module, students get hands-on experience setting up Protege and creating an ontology for types of wines and the relationships between them.
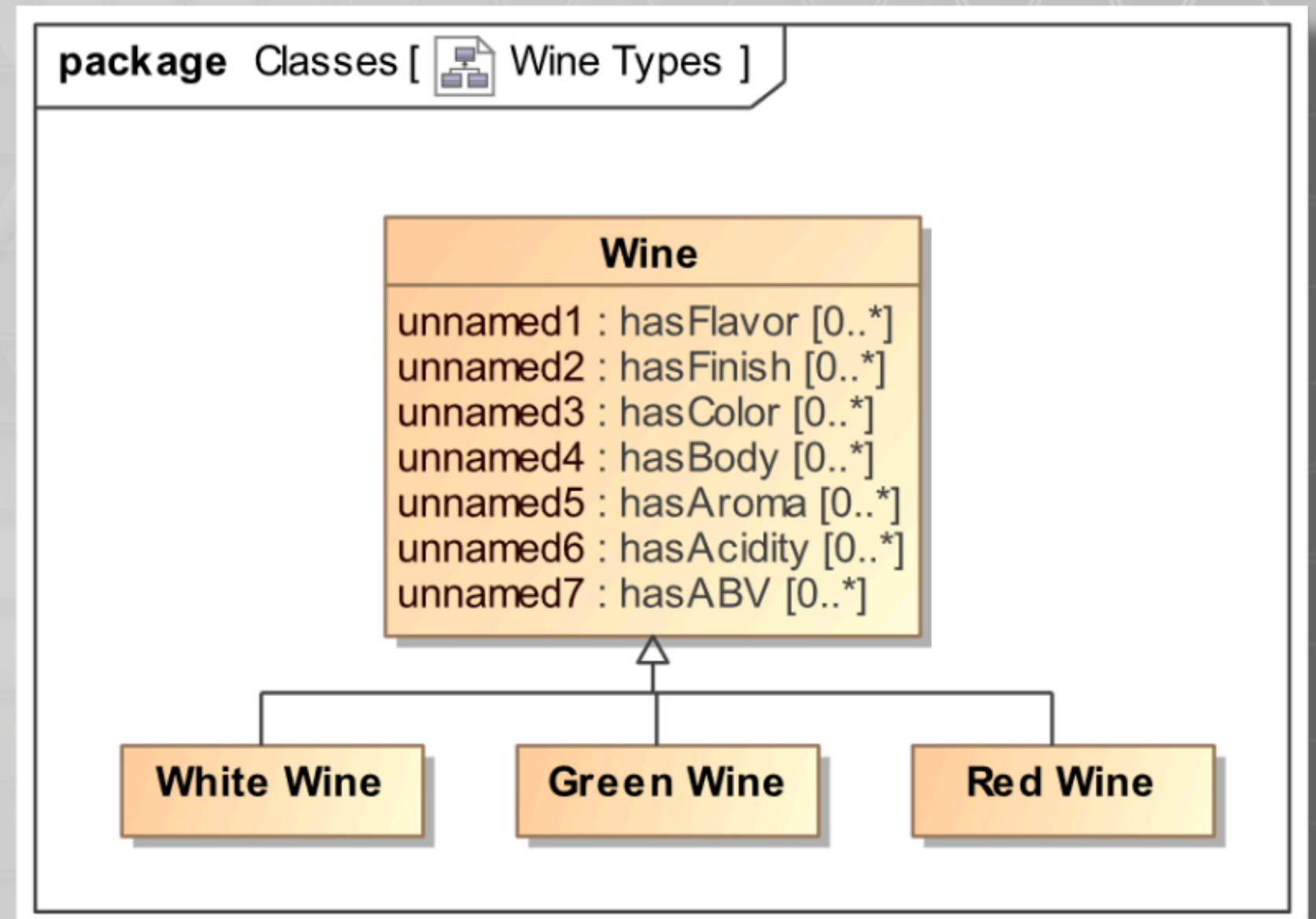
This lab module in Protege covers:
- Protege installation & setup
- Class Hierarchy
- Object Properties
- Object Restrictions
- Data Properties
- Debugging

Cameo Concept Modeling

Cameo Concept Modeler (CCM) is a MagicDraw plugin that provides a more informative source of domain knowledge and can import/export OWL files.

This module covers:
- CCM Overview, Classes, & Properties
- Information Modeling
- Natural Glossary Language (NGL)
- Synchronizing URIs and IRIs

package Classes [⬚ Wine Types]

Wine
unnamed1 : hasFlavor [0..*]
unnamed2 : hasFinish [0..*]
unnamed3 : hasColor [0..*]
unnamed4 : hasBody [0..*]
unnamed5 : hasAroma [0..*]
unnamed6 : hasAcidity [0..*]
unnamed7 : hasABV [0..*]

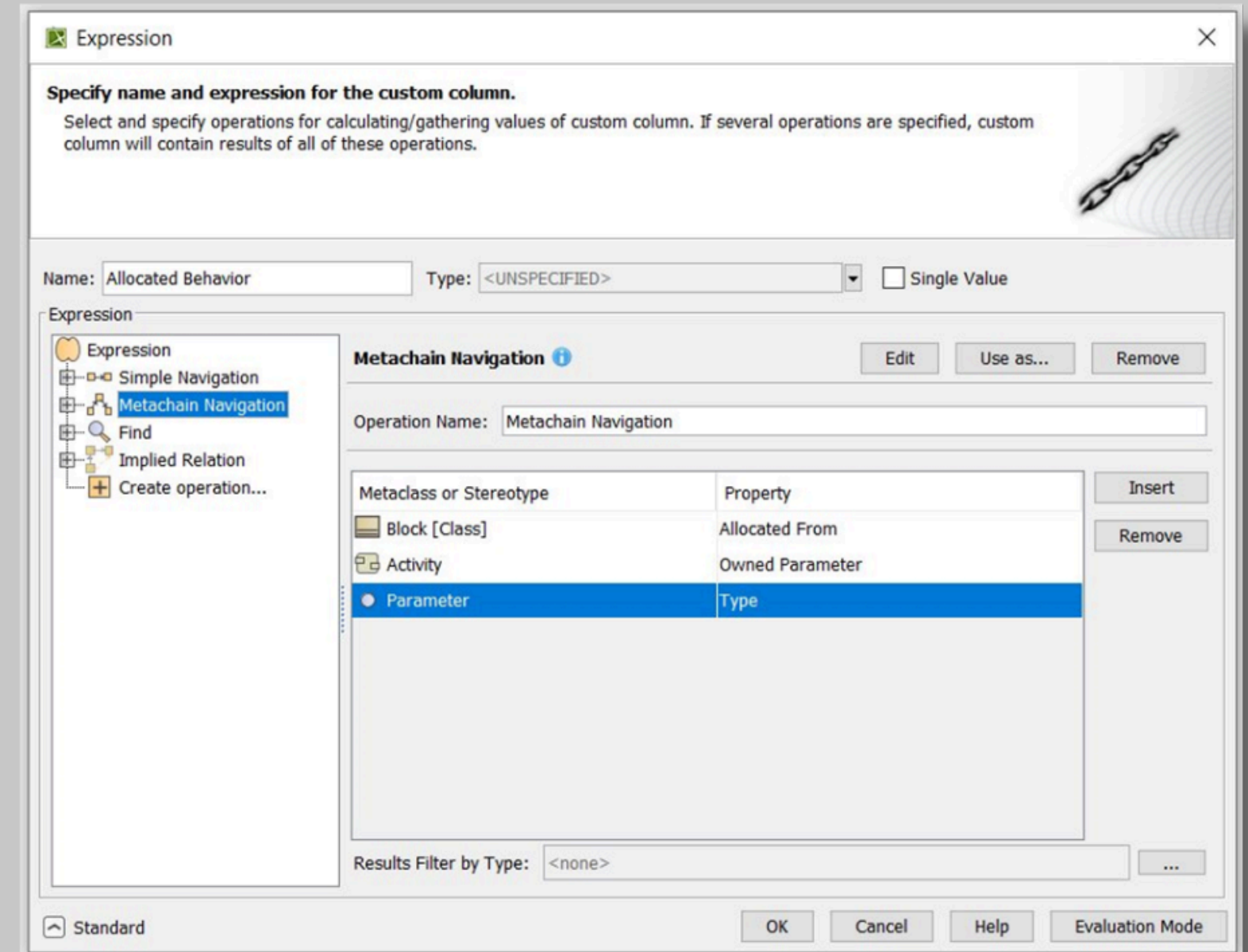**White Wine**   **Green Wine**   **Red Wine**

Querying the Data

Structured Expression are a reusable implementation of queries to take some object(s) as input and produce an output to build and maintain model analytics.

This Module Covers:
- Structured Expressions
- Custom Columns & Derived Properties
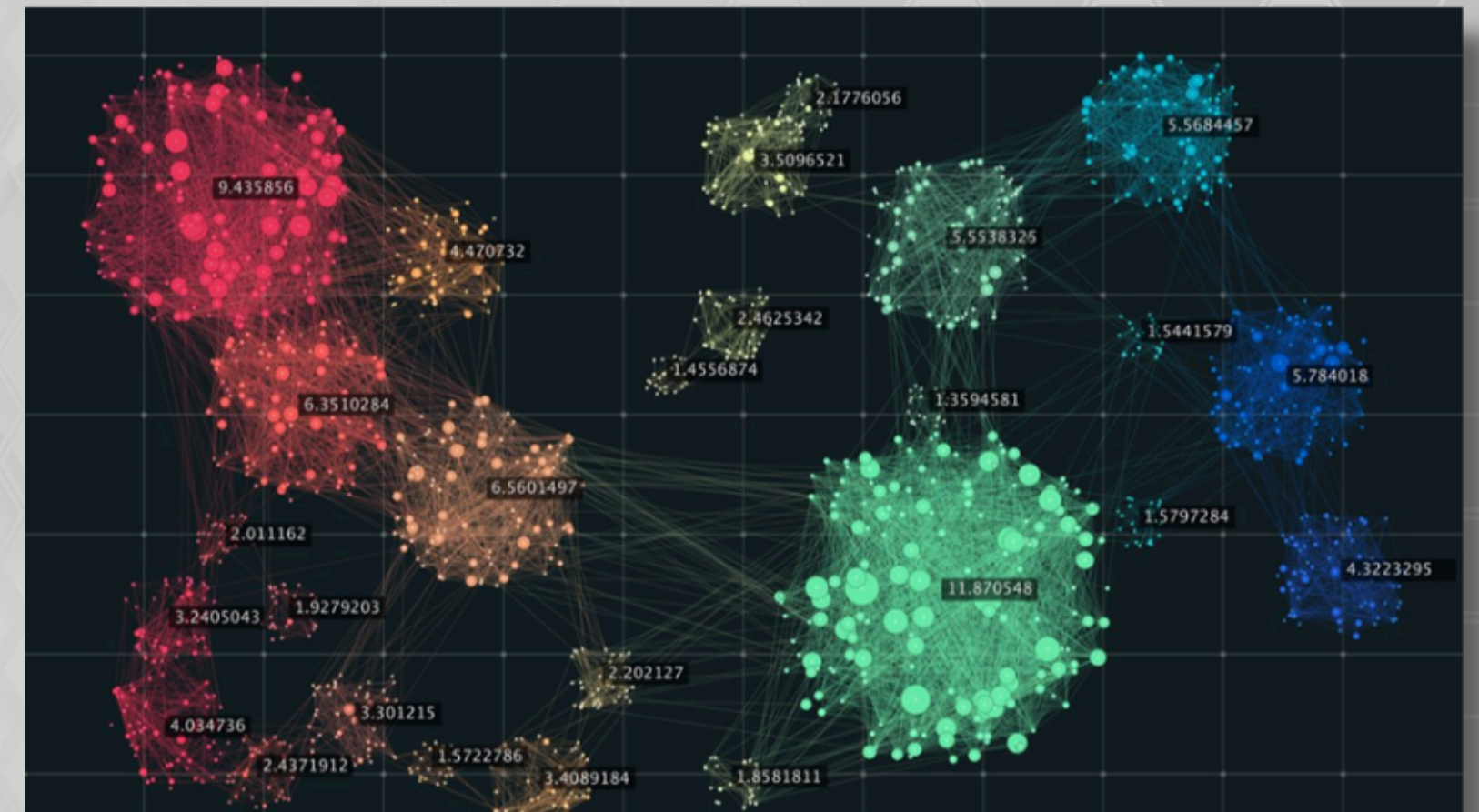- Smart Packages
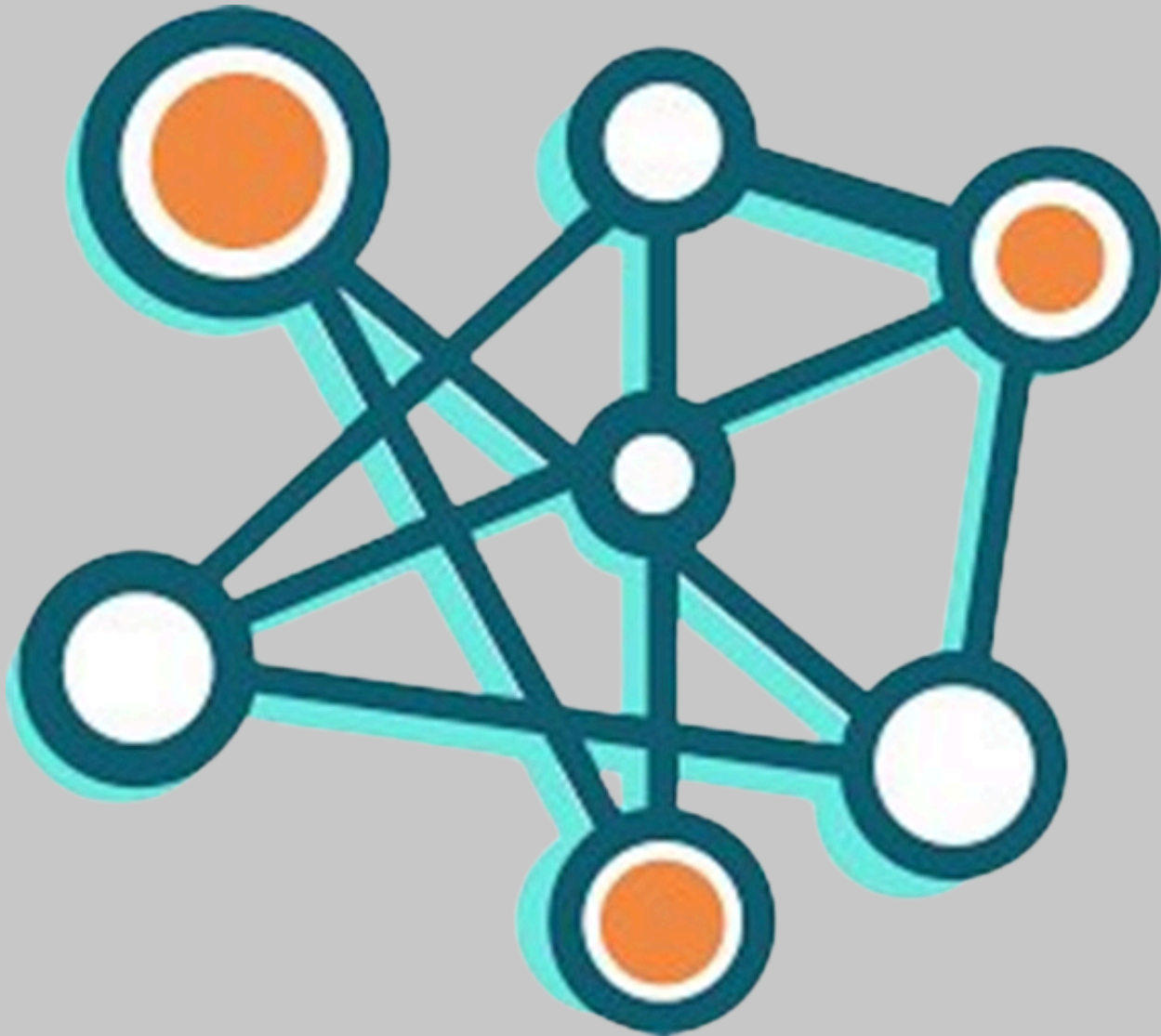- Options for Viewing Query Results

Data
VISUALIZATION

Graphic representation is known to be effective for human comprehension and communication, but only if symbols have an established and universally understood meaning.

Within this module we cover:

- Graph Theory & Types of Graphs
- Connectivity & Graph Traversals
- Graph Data Visualization
- Clusters and Outliers

Knowledge GRAPHS

Knowledge Graphs are structured representations of information that capture relationships between entities to enable a better understanding of the organization of data.

Within this module we cover:
- Overview of Knowledge Graphs
- Key Features
- Steps in Creating Knowledge Graphs

ENOLA

CONTACT US

www.enola.com

training@enolatech.com

+1 877 281 7341

linkedin.com/company/enolatech