

## EXPERIMENT 8 AI

### Q1.What is a semantic Net?

**ANS:**

The Semantic Web is a Web of Data — of dates and titles and part numbers and chemical properties and any other data one might conceive of. The collection of Semantic Web technologies (RDF, OWL, SKOS, SPARQL, etc.) provides an environment where applications can query that data, draw inferences using vocabularies, etc. Semantic networks became popular in artificial intelligence and natural language processing only because it represents knowledge or supports reasoning. These act as another alternative for predicate logic in form of knowledge representation. Semantic networks are graphs that are constructed from both a set of *vertices* (or nodes) and a set of directed and labeled *edges*.

### Q2.Is Semantic Net the same as AI?

**ANS:**

No, It's a part of AI. A semantic network is a graphic notation for representing knowledge in patterns of interconnected nodes. Semantic networks became popular in artificial intelligence and natural language processing only because it represents knowledge or supports reasoning.

### Q3.What is RDF?

**ANS:**

RDF is a standard model for data interchange on the Web. RDF has features that facilitate data merging even if the underlying schemas differ, and it specifically supports the evolution of schemas over time without requiring all the data consumers to be changed. RDF extends the linking structure of the Web to use URIs to name the relationship between things as well as the two ends of the link (this is usually referred to as a "triple"). Using this simple model, it allows

Team elite

structured and semi-structured data to be mixed, exposed, and shared across different applications.

#### **Q4.What is Open Graph Protocol?**

**ANS :**

The [Open Graph protocol](#) enables any web page to become a rich object in a social graph.

For instance, this is used on Facebook to allow any web page to have the same functionality as any other object on Facebook.

While many different technologies and schemas exist and could be combined together, there isn't a single technology that provides enough information to richly represent any web page within the social graph. The Open Graph protocol builds on these existing technologies and gives developers one thing to implement. Developer simplicity is a key goal of the Open Graph protocol which has informed many of [the technical design decisions](#).

#### **Q5.Compare FrameNet and CloudNet?**

**ANS:**

**FRAME NET:**

FrameNet is based on a theory of meaning called Frame Semantics, deriving from the work of Charles J. Fillmore and colleagues (Fillmore 1976, 1977, 1982, 1985, Fillmore and Baker 2001, 2010). The basic idea is straightforward: that the meanings of most words can best be understood on the basis of a semantic frame, a description of a type of event, relation, or entity, and the participants in it.

For example, the concept of cooking typically involves a person doing the cooking (Cook), the food that is to be cooked (Food), something to hold the food while cooking (Container), and a source of heat (Heating\_instrument). In the FrameNet project, this is represented as a **frame** called Apply\_heat, and the Cook, Food, Heating\_instrument, and Container are called **frame elements (FEs)**

**WORDNET:**

WordNet is a lexical database for the English language, which was created by Princeton, and is part of the NLTK corpus. You can use WordNet alongside the NLTK module to find the meanings of words, synonyms, antonyms, and more. **WordNet** is a lexical database of semantic relations between words in more than 200 languages. WordNet links words into semantic relations including synonyms, hyponyms, and meronyms. The synonyms are grouped into *synsets* with short definitions and usage examples. WordNet can thus be seen as a combination and extension of a dictionary and thesaurus. While it is accessible to human users via a web browser, its primary use is in automatic text analysis and artificial intelligence applications.