Day-4

Learned about RDF and applied it on a real life example.

The Semantic Web is basically an upgrade to the internet we use today. It's designed to make information on the web more understandable by machines, not just humans.

Here's the gist:

- Right now, web pages are full of text and images, but computers can't really grasp the meaning behind it all.
- The Semantic Web adds extra information, kind of like labels or tags, that machines can understand.
- This lets computers analyse information on the web more like humans do, connect things together, and even answer our questions in a more comprehensive way.

This is done through special formats and technologies like:

- **Resource Description Framework (RDF):** A way to structure information using a subject-predicate-object format (like a sentence).
- **Web Ontology Language (OWL):** Creates a kind of dictionary for these terms, defining their relationships and properties.
- **Linked Open Data (LOD):** Makes data interoperable by following specific guidelines, allowing different datasets to connect seamlessly.

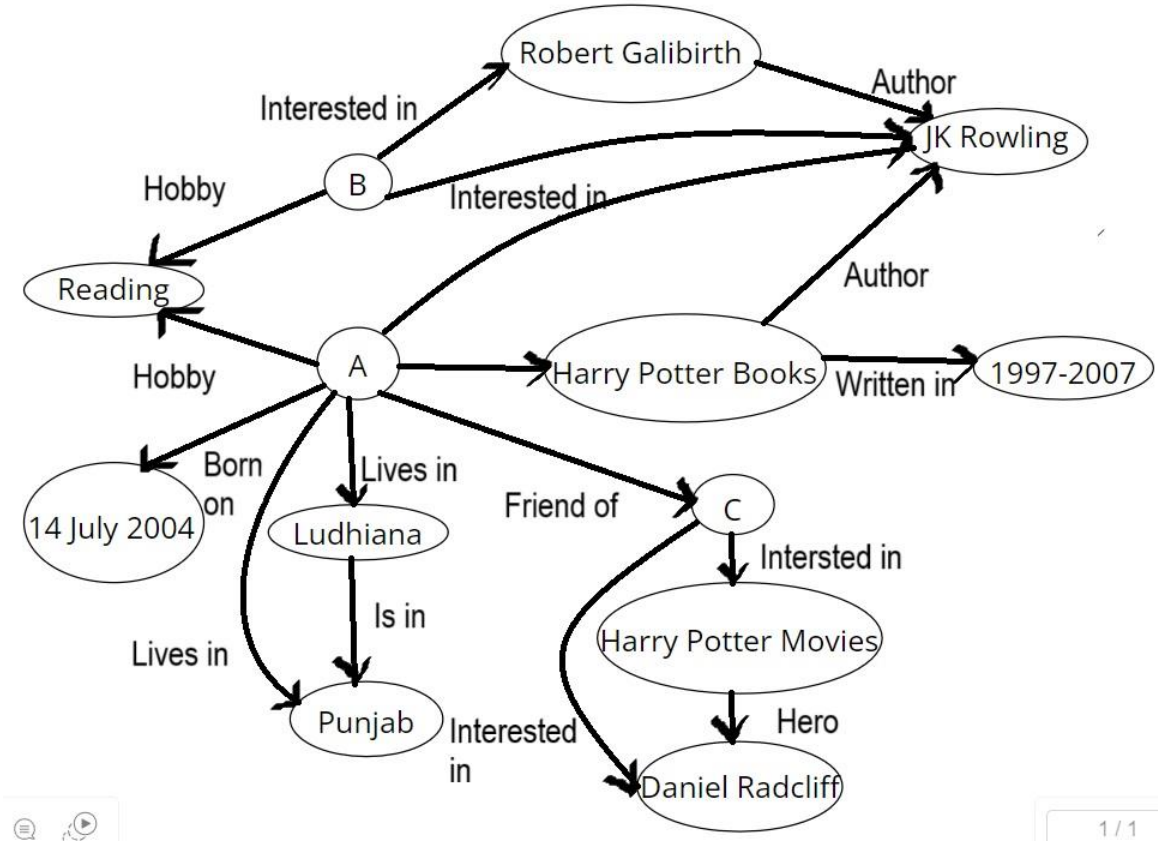
RDF, or Resource Description Framework, is the foundation upon which the Semantic Web is built. It acts as the data model, specifying how information is structured and described. Here's a breakdown of RDF:

The Building Blocks: Triples

- RDF represents information using statements called "triples." These triples consist of three parts:
    - **Subject:** The resource being described (e.g., a book, a person)
    - **Predicate:** The relationship between the subject and the object (e.g., "is author of," "has genre")
    - **Object:** The value associated with the predicate (e.g., an author's name, a genre type)

For example, the statement "Charles Dickens wrote Oliver Twist" can be represented as an RDF triple:

- Subject: Charles Dickens (identified by a URI)
- Predicate: wrote (a relationship defined in a vocabulary)
- Object: Oliver Twist (identified by a URI)



This a simple RDF made by me on the topic social media.