

AGILE METHODOLOGY

STEP 1: Initiate the Project

Identify the domain of the project and the purpose of the ontology. The Domain of this project are Products, Customers, Orders, Payments and the basic purpose of this ontology is to handle the data of the customers, orders made and the payment made by the various customers in an efficient manner and we can fetch the data very easily.

STEP 2: Planning and requirement gathering

Next step is to gather all the required information and planning the relationship between various elements which are figured out before. For this the requirements are:

- Information about the types of the products available.
- Information about the customers
- Information about the payment modes
- Information about the orders made in a particular interval of time.

And we have to plan the relations between the classes.

STEP 3: Create a Product backlog

Collect and prioritize requirements and define a clear acceptance criteria for each requirement.

STEP 4: Sprint planning

Break down the project into the sprints, each with a specific focus:

Sprint 1: Define basic entities and relationships

- Tasks: Define RDF classes and properties, create a basic RDF schema.
- Goal: Create RDF classes for customer, product, order and payment.

Sprint 2: Add Detailed Relationships

- Tasks: Define properties for relationships, add sample data.
- Goal: Implement relationships like has placed, cost, ordered by, contains product.

Sprint 3: Develop SPARQL Queries

- Tasks: Create SPARQL queries to retrieve data, test queries.
- Goal: Implement queries to fetch customer details, product details, Payment methods, product id, and Customer id.

STEP 5: Develop ontology

Use ontology modeling tools (e.g. Protégé) to develop the ontology in small and manageable increments. Moreover, regularly review the ontology.

STEP 6: Conduct Daily Stand-ups

Hold daily meetings to discuss the progress, challenges and the next steps. Ensure open communication and collaboration within the team.

STEP 7: Document and Maintain

Create a comprehensive documentation for the ontology and plan for ongoing maintenance and update based on the new requirements.