**The Manchester Sushi Finder**

Initial Report

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**Abstract**

This document gives an initial idea about The Manchester Sushi Finder Project. The Manchester Sushi Finder is an interface which allows user to interact with an ontology, construct queries over that ontology and get results instantly. The purpose is to make this application more configurable and flexible by including the configurations in the OWL ontology as annotations, this project is introduced. Also, to aid students to see their ontologies and query on against that them during the development phase, and to explore more aspects of Web Ontology Language (OWL) like using reasoning and querying to drive the application.

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# INTRODUCTION:

In this project, an interface between the end-user and Web Ontology Language (OWL) ontology needs to be build. It will be build using java and it will communicate with the sushi ontology using OWL API. This interface will be configurable and flexible to allow the selection of sushi platters based on criteria taken from OWL ontology.

There is an application that provides similar functionalities to what is required in this project. This application is The Manchester Pizza Finder, which provide the same functionalities in a fixed and hardcoded way. It provides interface between one fixed pizza ontology and one pizza application in one to one relationship. The Manchester Sushi Finder will extend on that project and implement some functionalities that make it more flexible and configurable.

In this report, the drive behind this project shall be discussed. That is followed by the aims and objectives. Then, defining the scope of the project and the scope of items and functionalities. At the end, it will be concluded with detailed plan.

# MOTIVATION:

The motivation behind this project is to build java application to serve as end front for the sushi ontology. The Manchester pizza finder already do that, so why new java application? The Manchester sushi finder would be more flexible and configurable. The user interface (UI) would be configurable based on what end user preferences. Querying would not be hardcoded anymore link the pizza finder, it would be dynamic by specifying it in ontology annotations. Also, the new sushi finder should work with different ontologies in a condition that must have some standard annotations.

When we took Ontology Engineering and Semantic of the Web course unit, we had to build sushi ontology during the course. There was no way to check the ontologies during the development stage. Building sushi finder will ease this process for the students and they will be able to see something while they are developing.

# AIMS AND OBJECTIVES:

## Aims:

* An application for sushi selection, which allows the user to select sushi or sushi platter based on certain criteria.
* A set of user stories and acceptance tests for the sushi finder (satisfied by the application).
* An evaluation of the project.

## Objectives:

The user interface (UI) of the Manchester Sushi Finder application will be built using Java programming language using Swing components like Menus and Trees, etc. The Web Ontology Language (OWL) Application Programming Interface (API), which is Java API, will be used to create the channel between ontology and the application. OWL API can manipulate and serialize OWL Ontologies. Last part of this engine is the OWL Ontology which any ontology that contain some specific annotations. This application could have some dependencies, in this case Maven that manage dependencies will be used. Application will be able to query for certain type for sushi or sushi dish.

A set of user stories and acceptance tests for the project will be conducted and delivered. As a result, project functionalities will be captured. The user stories focus on gathering the user requirements and putting some acceptance criteria.

Evaluation can be conducted via different forms. A prototype will be evaluated by engaging the stakeholders like the supervisor, colleagues, and the personal opinion of the developer. The most important opinion for the people is the ones who will use it. User stories will help to evaluate the product too. The benefits of this project will play a role in the evaluation.

# SCOPE:

In this section, functionalities within scope are defined, and some functionalities that may fall in the scope depending on the time availability.

## Within Scope:

* The user interface will be built using java.
* User interface will be configurable for generic use.
  + Labels are configurable.
* Flexible query building.
  + Ontology driven interface via using annotations.
* Preferences of the user will be saved as configuration for reusability.
* The sushi finder will be a desktop application.
* The sushi finder should work for any ontology.
  + Only ontologies with standard annotations defined in them (Configuration will be stored in the ontology).
* User can load ontologies one at a time.
* User can decides which thing to query about (Sushi-Sushi dishes).
* User can query for specific sushi or sushi dish type based on wanted or unwanted ingredients.

## May fall in the scope:

* The sushi finder could be a web application for more accessibility.

- Basic prototype (Pizza finder).

# PLAN:

