

# Recipe Search Engine

By:

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# Project Programming Paradigm

Backend (database): MySQL

Middleware: Python (serves HTML and queries database)

Front : HTML, CSS

## Project Theme

Information Retrieval/Search Engine Based Project

## Introduction

Our groups database project will be a small webpage built to give the user the ability to search through recipes to make based on the contents of their fridge. We will make a small front end where the user can access their fridge contents and add/remove contents from their fridge. After detailing fridge contents, a database of recipes will be searched from showing the user good choices of recipes to make with what they have.

## Resources Hardware and Software

Hardware: Any hardware that can run the programming paradigm

Software : Python 3 , MySQL server, MySQL Workbench,

## Literature Sources

Youtube, Stack Overflow, Python 3 Documentation, MySQL Documentation

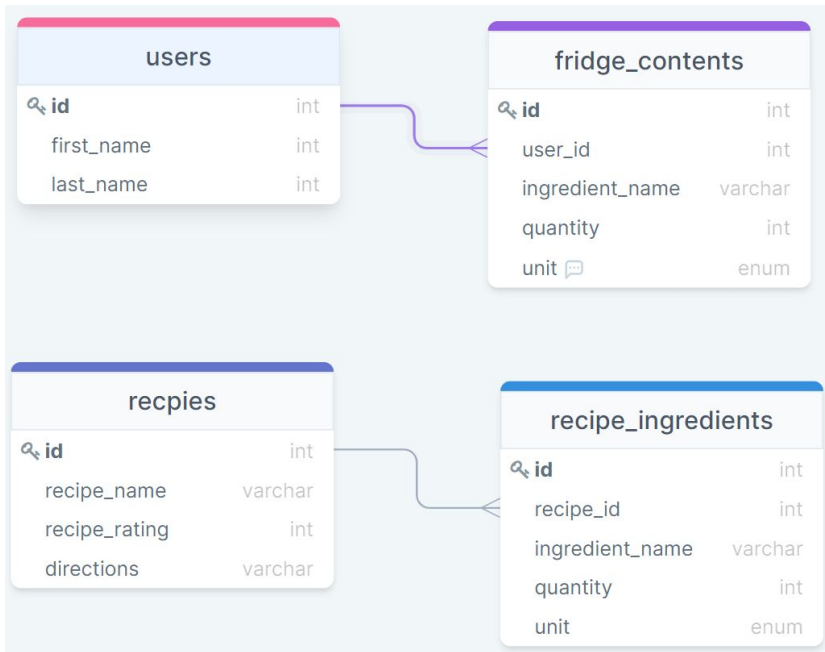
## Risks Involved

One of the risks involved in this project is that there may be some difficulty coming up with a way to decide how to standardize measurements and serving sizes from the data that will be gathered. Most recipes will give the amount of ingredients needed for a 4 or 3 person serving but we will have to standardize the data that we find so that a user will be recommended a dish that they can make 1 serving of rather than only 4 person meals.

## Define Data and Provide Data Source

The data in this project will be from one of two places. Firstly, users will enter some information such as their first and last name to gain access to their fridge\_contents data. This will allow the user to both add and remove items from their fridge, the fridge contents will later be used in the search engine process. The second data source in this project is the static data; this data is stored in the tables that refer to recipe information providing enough information to get together the ingredients and prepare the recipe. This data will come from either web scraping allrecipes.com for user submitted recipes or from a common recipe API.

## Data Model



## Purpose and Project Outcome

The purpose of the project is to let users know what delicious dishes they can make with what they have in their fridge. Most of the time people will search for specific recipes but not having all the ingredients to make them. This makes it easy and time efficient to let the user know what they can make with what they have in their fridge. The outcome of this project is to make a functional working recipe search engine that can show users the recipes they can make easily with what they have.

## Plans to implement front and back end:

The front end will be a simple html and css webpage where the user can search for and select their ingredients from the database. They will then be presented with a list of recipes to choose from. Python will be used as middleware to communicate between the database and the webpage. Backend will be a MySQL server containing recipes, ingredients, etc...

Project Schedule:

Schedule

