

**MICHIGAN STATE**  

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**UNIVERSITY**

# Alpha Presentation

# AI Recipe Converter

The Capstone Experience

Team Whirlpool

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*From Students...*  
*...to Professionals*

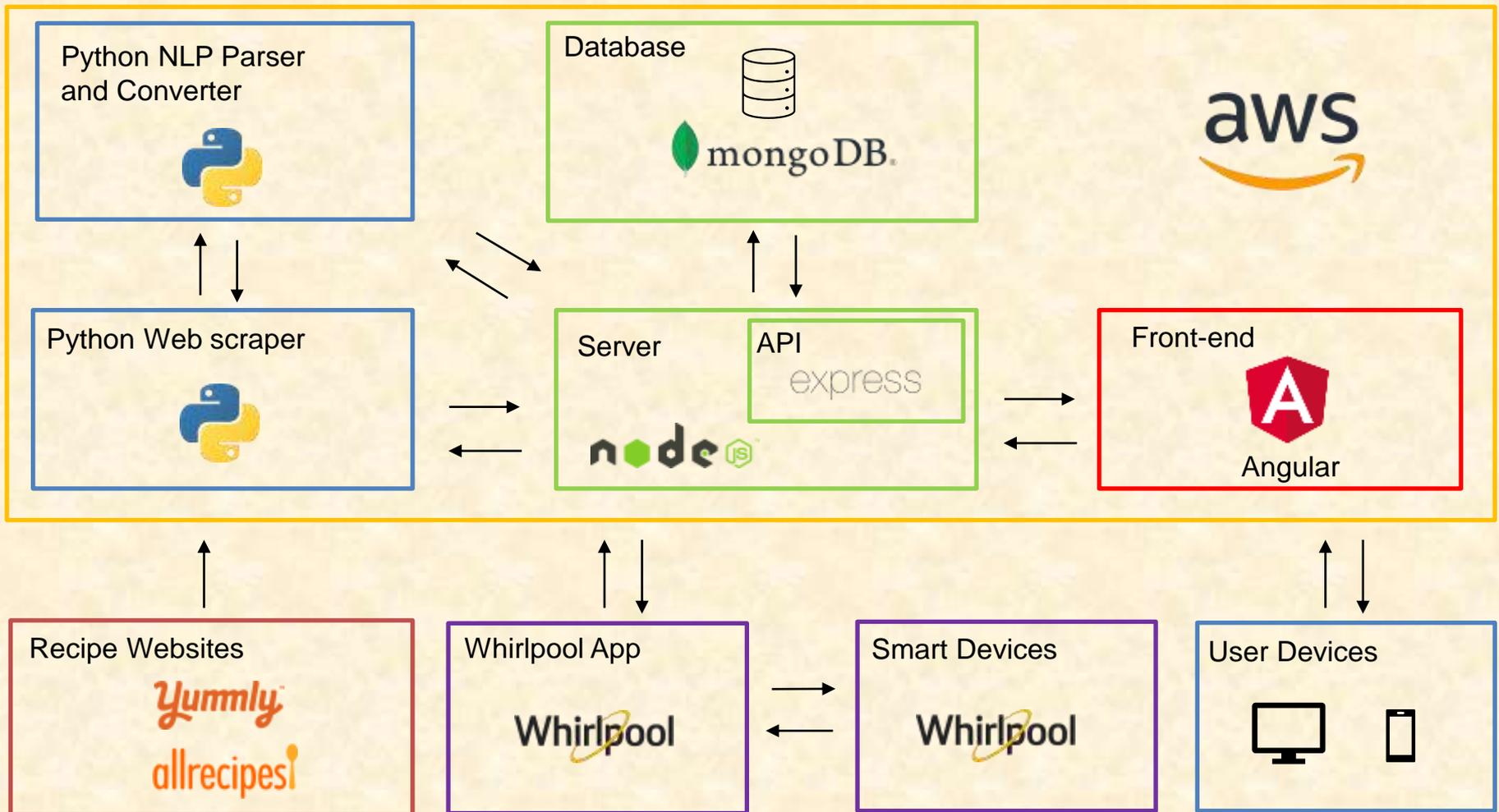
# Project Overview

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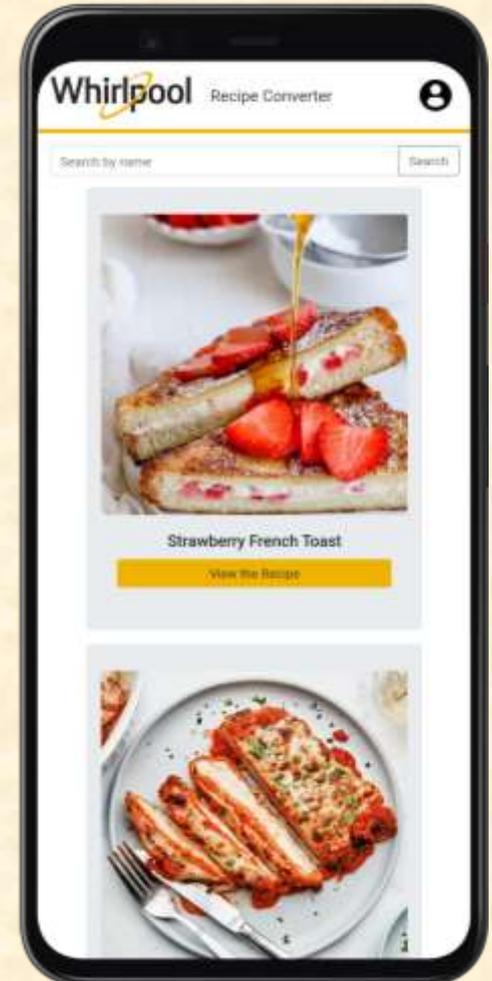
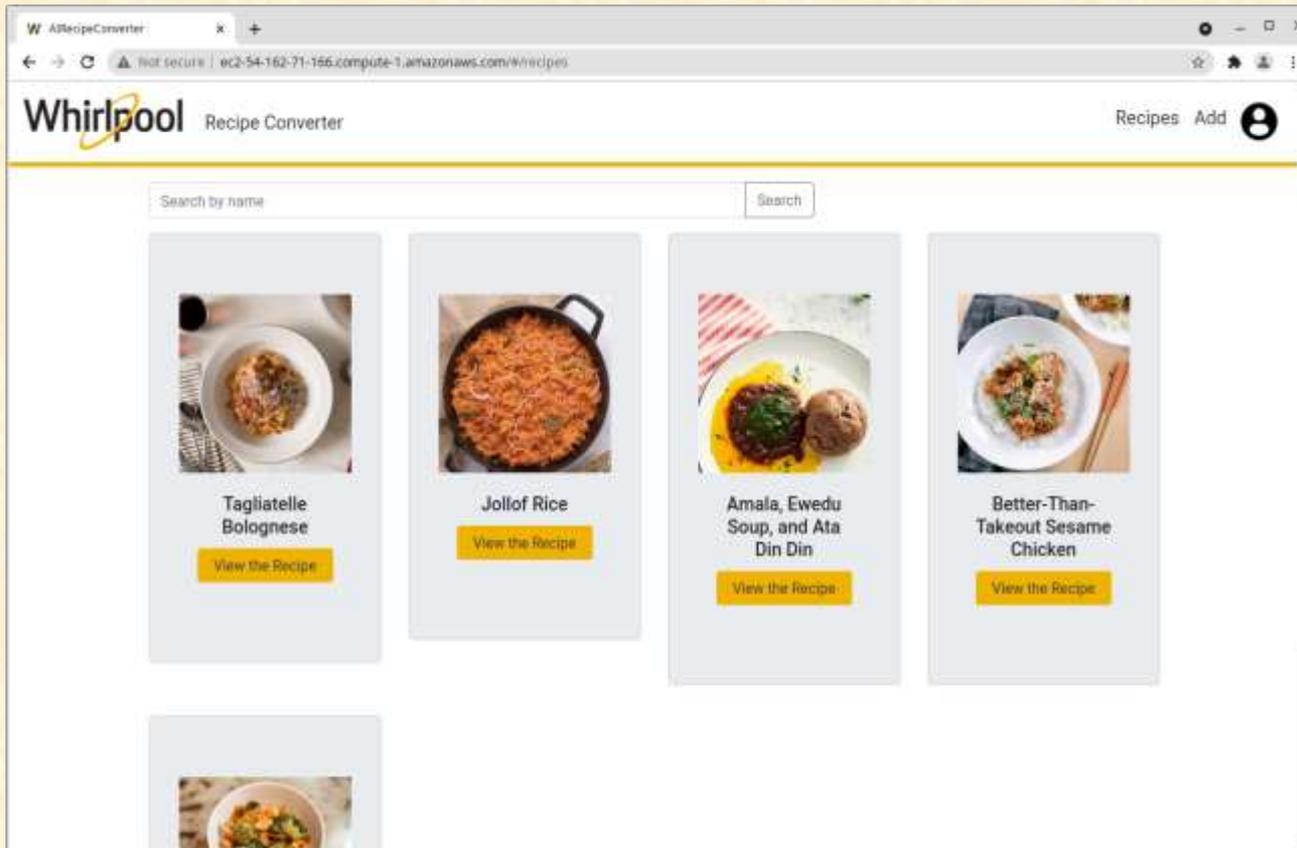
- Simplify user cooking experience by providing machine assisted cooking
- Recipes from popular cooking websites are converted to a machine-understandable format
- Users access a website to convert these recipes and make any changes



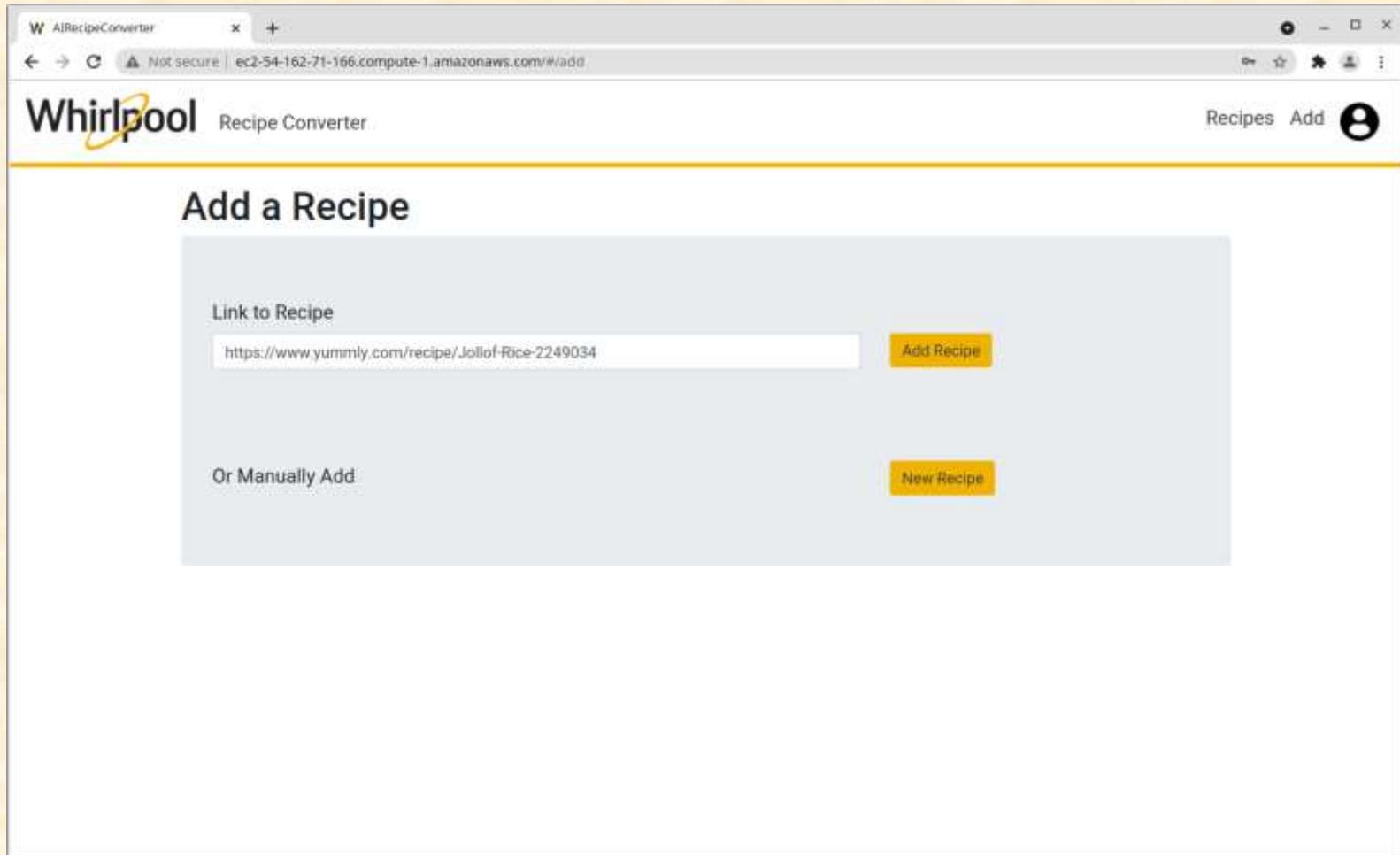
# System Architecture



# List of Recipes



# Adding a Recipe



The screenshot shows a web browser window with the URL `ec2-54-162-71-166.compute-1.amazonaws.com/#/add`. The page title is "Whirlpool Recipe Converter" and it includes a navigation menu with "Recipes" and "Add" (with a user icon). The main heading is "Add a Recipe". Below this, there are two options: "Link to Recipe" with a text input field containing `https://www.yummly.com/recipe/Jollof-Rice-2249034` and an "Add Recipe" button, and "Or Manually Add" with a "New Recipe" button.



# Viewing a Recipe

The screenshot shows a web browser window with the URL `ec2-54-162-71-166.compute-1.amazonaws.com/#/recipes/616723a8d48bd66c4a457902`. The page title is "Whirlpool Recipe Converter". The main heading is "Tagliatelle Bolognese" with a pencil icon. Below the heading are three yellow buttons: "Main Dishes", "Italian", and "Low Sugar". A description box contains the text: "Description: This iconic dish is quintessential Italian grandma food. You'll slowly build complex flavors from your finely-diced soffrito, a triple-threat of beef, pork, and pancetta, and umami-rich tomatoes." Below the description is a "Total Time" section showing "1 hour 20 minutes" and a yellow "Start Cooking" button. To the right is a photograph of a plate of tagliatelle bolognese with a glass of red wine. At the bottom, the "Ingredients" section lists "2 rib celery".

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← → ↻ ⚠ Not secure | ec2-54-162-71-166.compute-1.amazonaws.com/#/recipes/616723a8d48bd66c4a457902

Whirlpool Recipe Converter

Recipes Add

## Tagliatelle Bolognese

Main Dishes Italian Low Sugar

Description

This iconic dish is quintessential Italian grandma food. You'll slowly build complex flavors from your finely-diced soffrito, a triple-threat of beef, pork, and pancetta, and umami-rich tomatoes.

Total Time  
1 hour 20 minutes

Start Cooking

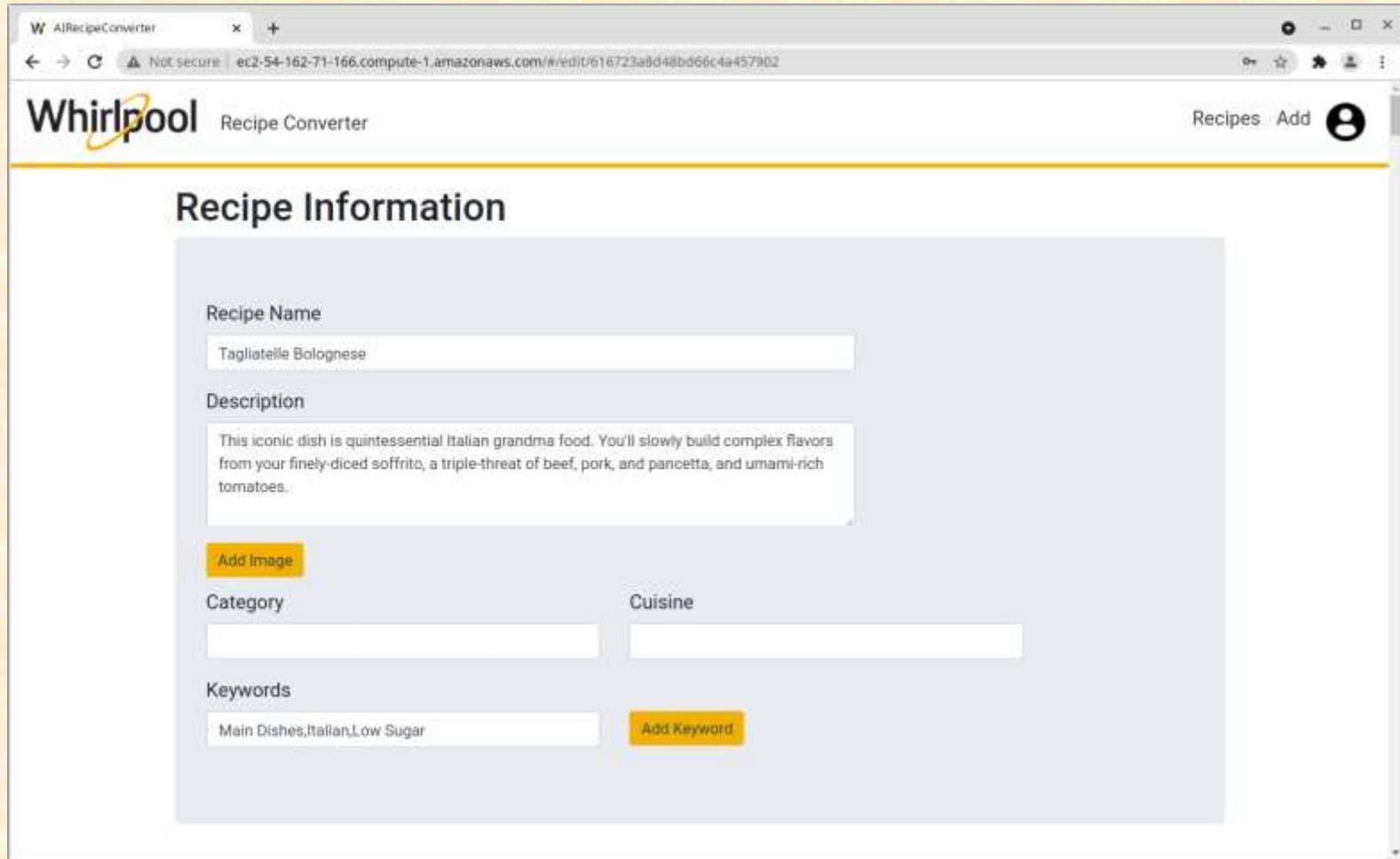


### Ingredients

- 2 rib celery



# Editing a Recipe



The screenshot shows a web browser window with the URL `ec2-54-162-71-166.compute-1.amazonaws.com/#/edit/616723abd48bd66c4a457902`. The page title is "Whirlpool Recipe Converter". The main heading is "Recipe Information". The form contains the following fields and buttons:

- Recipe Name:** A text input field containing "Tagliatelle Bolognese".
- Description:** A text area containing the text: "This iconic dish is quintessential Italian grandma food. You'll slowly build complex flavors from your finely-diced soffritto, a triple-threat of beef, pork, and pancetta, and umami-rich tomatoes."
- Add Image:** A yellow button.
- Category:** An empty text input field.
- Cuisine:** An empty text input field.
- Keywords:** A text input field containing "Main Dishes,Italian,Low Sugar".
- Add Keyword:** A yellow button.



# What's left to do?

- Finish the functionality of the website site
- Extend the web scraper
- Improve NLP
  - Improve the accuracy of the NLP model
  - Get parser to identify ingredients in recipe steps
- Test cooking a recipe on a Whirlpool smart cooktop



# Questions?

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