

**MICHIGAN STATE**  
**UNIVERSITY**

# Beta Presentation

SmartCook:

Smart App For Induction Cooktop Cooking

The Capstone Experience

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

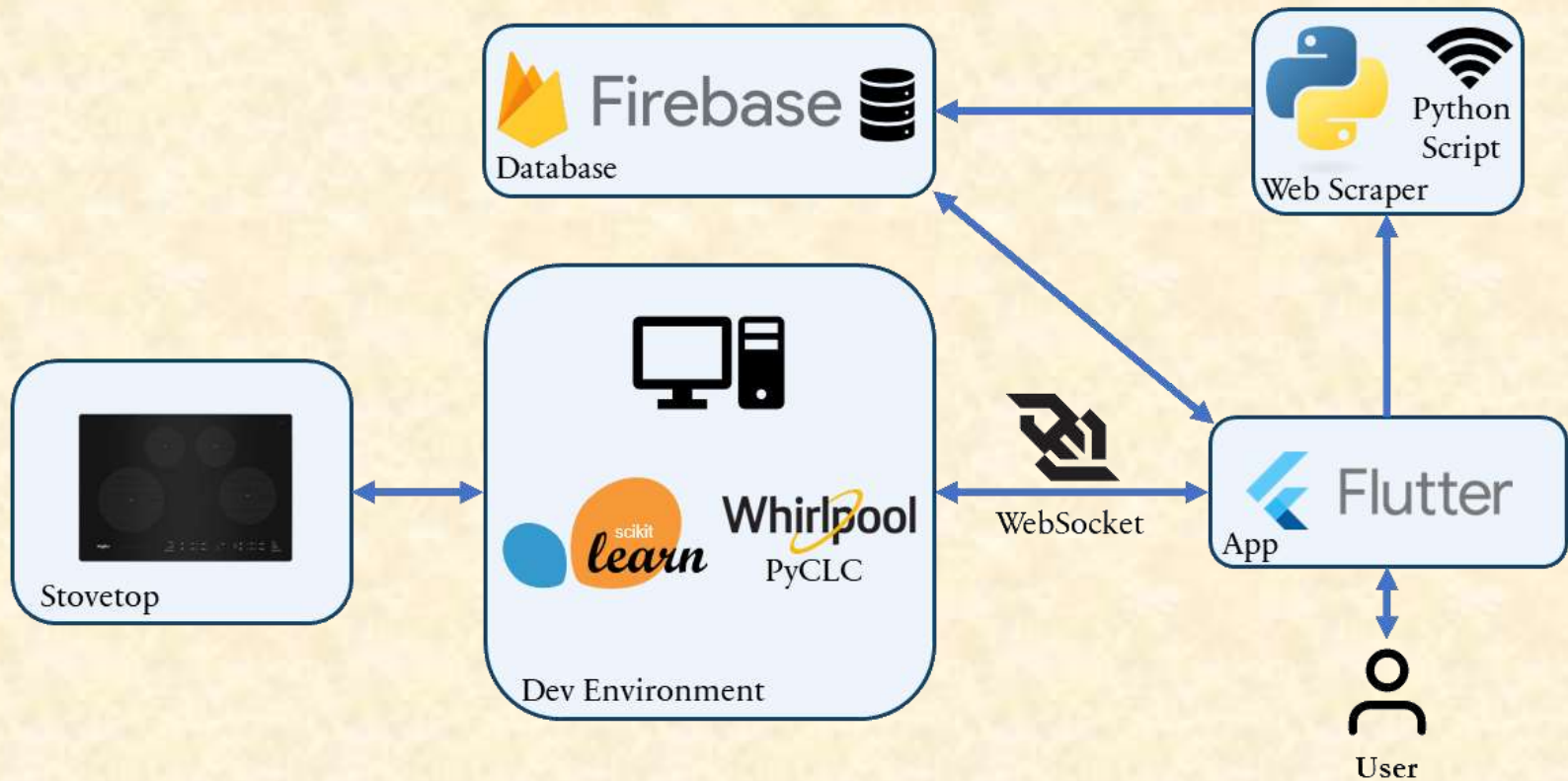
# Project Overview

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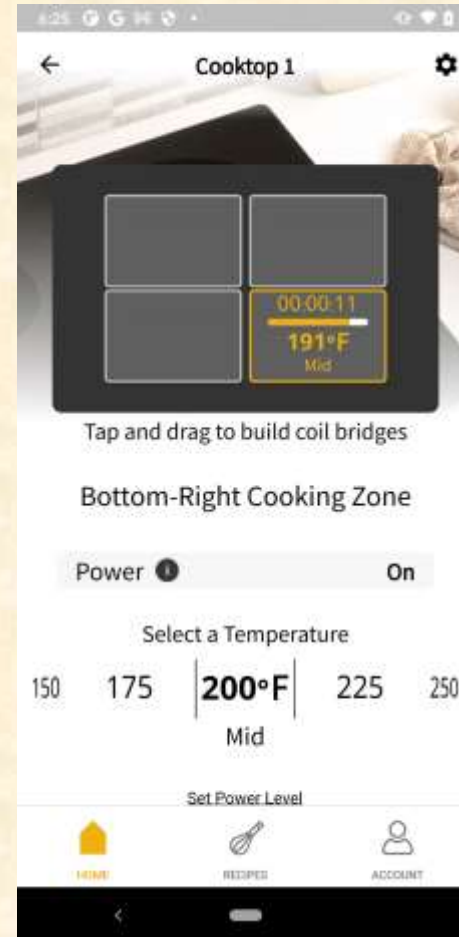
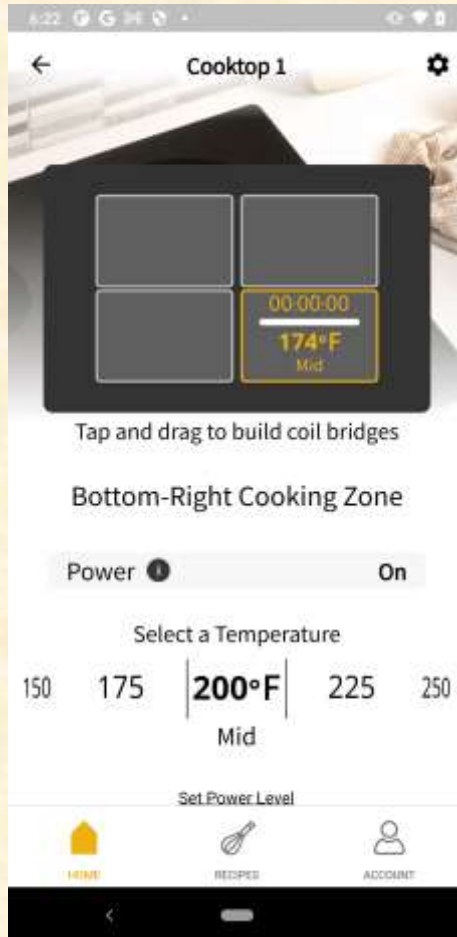
- Automatically detect what pan is being used for cooking
- Detect when ingredient has been added to pan using sensors and temperature
- Dynamically adjust recipe for user, improving auto progression
- Seamless and intuitive integration with app to make cooking easier for user
- Web scraper and database for easy recipe access



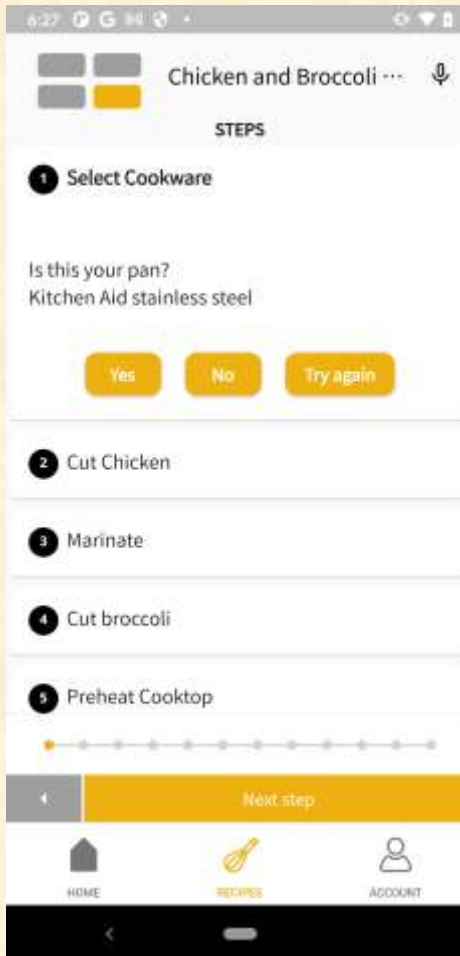
# System Architecture



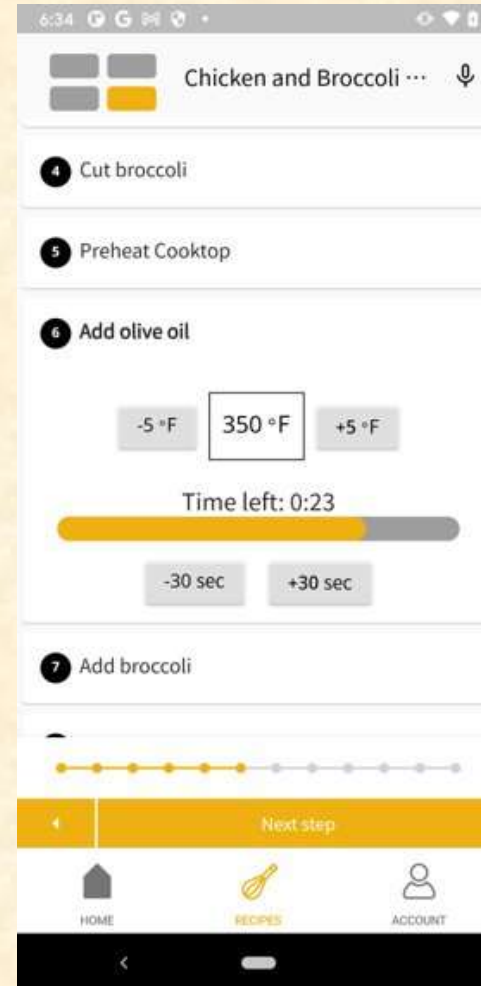
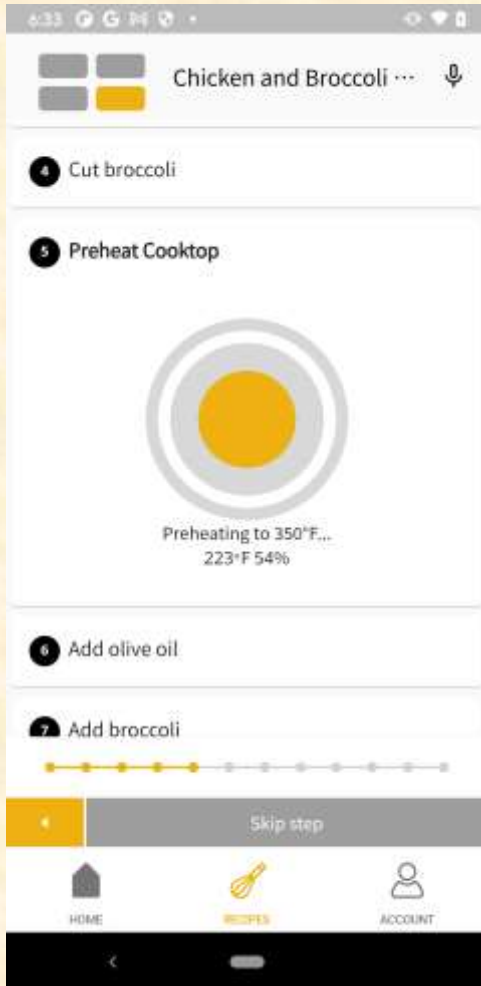
# Manual Control



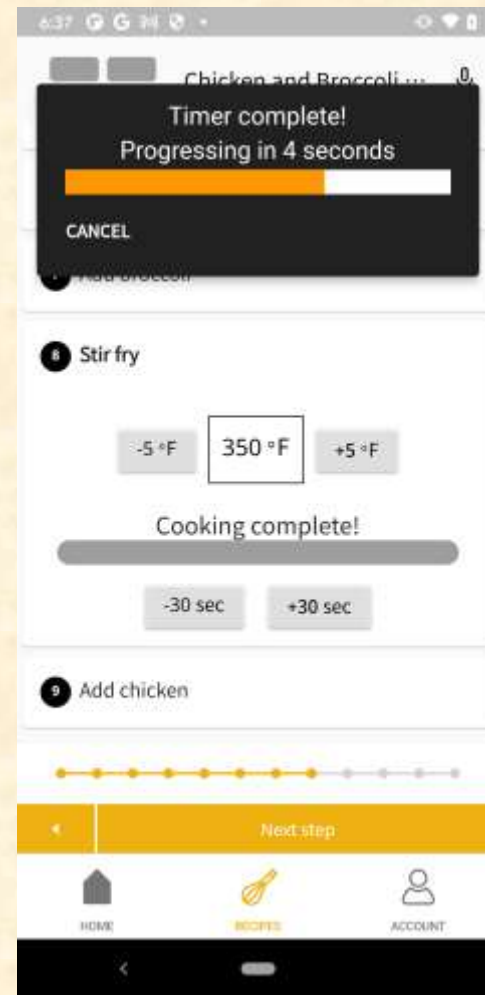
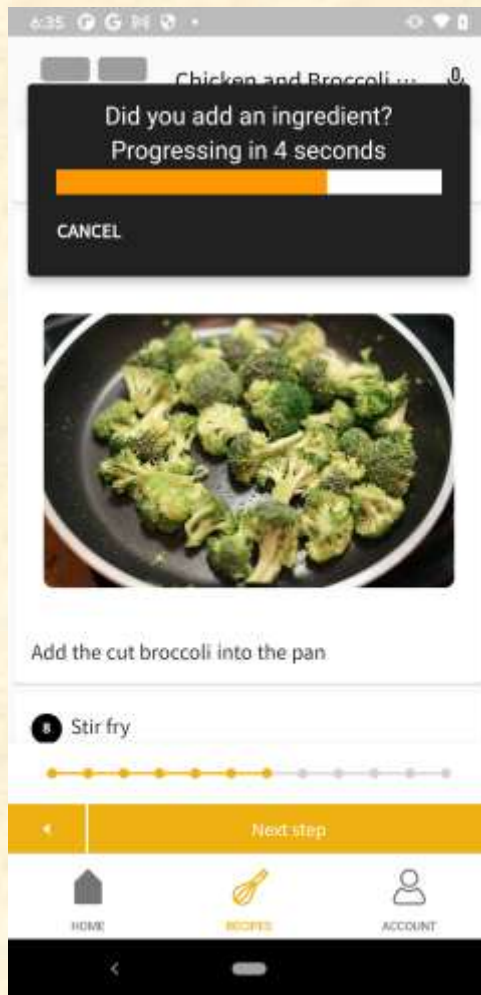
# Pan Recognition



# Timers and Preheating



# Recipe Auto Progression



# What's left to do?

- Features
  - Web Scraping Integration into App
- Stretch Goals
  - Sorting filters for recipes in app
  - Running pan recognition during recipe, instead of only once
  - Adding automation features to manual mode (ex. start timer on ingredient addition)
  - Saving recipe state when app disconnects from cooktop
- Other Tasks
  - Collect data from new pans to train model
  - Make timers smoother
  - Include box for pan ID
  - Create pan not on cooktop feedback box





# Questions?

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