ECE 452 Demo 1: Restaurant Automation - Codename Adam

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Mission

- At CODENAME ADAM, we work to save the world, one restaurant at a time.
  - **Save Time:** Make placing and fulfilling orders easier using our Customer/Table mobile applications and website. Save more time for things that matter.
  - **Save Money:** With our streamlined Chef and Waiter mobile applications, business owners can hire less staff and help ease the workload of the employees.
  - **Save the Planet:** Eliminate traditional menus and reduce paper waste.

Features

- **Portable Mobile Applications:** Dedicated mobile applications for chef, waiter, customer, and table that streamline the ordering process for a smooth dining experience
- **Facial Recognition Account System:** Skip the login process with automatic facial recognition to seamlessly load your favorite dishes and enable the recommendation system
- **Recommendation System:** Having trouble picking what dishes to order? Based on your past ordering habits and your current preferences, we can recommend some for you!
- **Admin Console:** Easy restaurant management console that allows restaurant owners to see statistics about revenue and trends, and manage menu and prices all in one place
- **Ingredient Prediction System:** See trends in dish popularity and ingredient consumption to reduce costs and maximize revenue

Demo 1 - Use Cases

- UC - 1 (Order Food)
  - Customer places orders through customer/table app or website and Chef is notified
- UC - 3 (Order Complete)
  - Waiter is notified of completed orders
- UC - 4 (Assistance Needed)
  - Waiters receive notifications from customers that request assistance
- UC - 6 (Finish Order)
  - Chef notified of completed order once customers receive food

Algorithms & Technology Stack Used

- Restaurant Website (EJS, HTML5UP, Node.js)
- Android Applications (Java/Android Studio)
- Web Server (Node.js)
- Database (AWS MongoDB)
- Firebase for Push Notifications
- Ingredient Prediction System (Python - pandas/statsmodels)
- Recommendation System (Python - numpy)

Project Roadmap

	Start Date	End Date	Timeline	Status
RESTAURANT AUTOMATION - CODENAME ADAM	Mar 25, 2019	Apr 22, 2019		Active
Modularize Website Architecture	Mar 25, 2019	Mar 31, 2019		Active
Set up User Account System	Mar 25, 2019	Mar 31, 2019		Active
Rework Website Cart Logic	Mar 25, 2019	Mar 31, 2019		Active
Waiter Mobile App - Orders fragment	Mar 25, 2019	Mar 31, 2019		Active
Intergrate Recommendation System	Mar 25, 2019	Apr 7, 2019		Active
Integrate Ingredient Prediction System	Mar 25, 2019	Apr 7, 2019		Active
Setup Admin Console	Mar 31, 2019	Apr 14, 2019		Upcoming
Setup Facial Recognition	Mar 31, 2019	Apr 14, 2019		Upcoming
Setup Security System	Apr 7, 2019	Apr 22, 2019		Upcoming
Debugging/Tuning	Mar 25, 2019	Apr 22, 2019		Active
		Burndown		