

Pandas Express

Personalized Recipe Recommendations and More

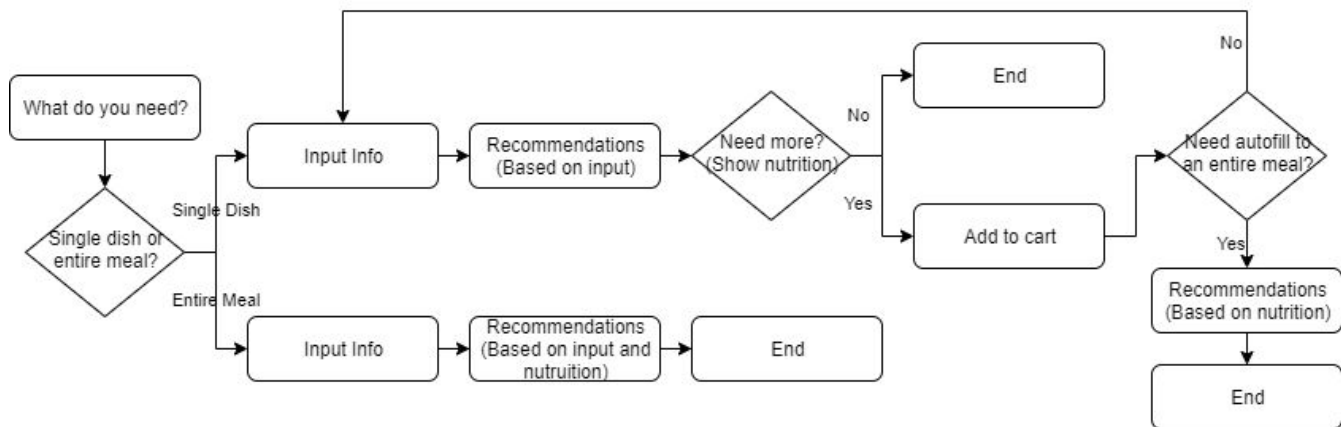
Team AttributeError

Kaixin Wang, Siqi Fan, Yincheng Gao and Jiwei Cheng

Project Summary

Our team aims at providing an interactive platform in which users can receive personalized food recipe recommendations which fulfill their daily nutritious requirements. Our platform allows users to look for suggestions on either one single dish or the entire meal. Our platform will factor both the user preferences and daily nutritional needs to offer an optimized recommendation.

Basic Features & User Flow



User Inputs

Note: “xx” means that users can choose certain requirements to be included either in one single dish of a meal or every dish of that meal.

Category	Subcategory	Example	Single dish	Entire meal
Basic information	Budget	<\$10 per person	x	x
	Time	<30min	x	x
Ingredients	General categories	Vegetables, seafood	x	xx
	Specific ingredients	Broccoli, cod	x	xx
	Condiments	Soy sauce, ketchup	x	xx
Method of cooking	Kitchenware	Microwave oven, skillet	x	xx
	General methods	Roasting, grilling	x	xx
Cuisines	General categories	Asian, Cajun	x	xx
	Specific tags	Chicago-style	x	xx
	Taste	Spicy, sour	x	xx

Dishes	General descriptions	Steak, Fried Chicken	x	
	Specific requirements	Medium rare fillet mignon, buttermilk deep fried chicken wings	x	
Nutrition	Nutritional needs	High protein, low fat	x	x
	Detailed cutoffs	Sugar < 20g	x	x
Others	Atmosphere	Casual, fine dining	x	x
	Special occasions	Thanksgiving, anniversary	x	x
	Dietary restrictions	Gluten-free	x	x
	Ingredient exclusions	No lamb	x	x
	Diets	Vegetarians, pescetarian	x	x
	Difficulty level	Beginners, Intermediate, Advanced	x	x

Advanced Features (Preliminary)

- Favourites: Users can mark certain dishes and meals to be their favourite.
- Recently Viewed
- Recent Searches
- Surprise Me: Randomly present single dishes or entire meals
- Dislike: Blacklist
- Community: Post images or video clips of food users make; follow accounts
- Feeds: Individualized content feeds (recipes and KOL's posts)
- Food Rank: Low GI fruits, low cal food
- Shopping: We sell diet meal, kitchen food scale

Data Sources

Source	Website	Purpose
U.S. Department of Agriculture	https://fdc.nal.usda.gov/	Ingredients, nutrition, dietary guidelines
Allrecipes.com	https://www.allrecipes.com/recipes/	Recipe based on food input
Foodnetwork.com	https://www.foodnetwork.com/recipes	Recipe based on food input

Timeline

- Week 4 - Proposal and Presentation
- Week 5 - Writing web-crawler and conducting initial data collection
- Week 6 - Programming basic backend, analytical functions
- Week 7 - Designing user interface
- Week 8 - Testing Backend and User Interface
- Week 9 - Adding Advanced Features based on Project Progress
- Week 10 - Finalize Program + Final Presentation