

DishClose (From Professor Rakesh Ranjan's Blog):

Project Team #1

Team Members: Aishwarya Saxena, Aprajita, Tong Wu, Zenobia Adnan Panvelwala.

Abstract

Description:

The ingredients that were used to prepare the dish will be identified by analyzing the image of the dish. Based on the ingredients, the recipe will be suggested. Image analysis and machine learning will be used to accomplish this.

Methodology:

A mobile app can be developed using the Ionic3 framework. When user clicks the image or uploads one from his/her phone memory, it can be sent for analyzing possibly to the Google Vision API (<https://cloud.google.com/vision/>), which returns a lot of information about the image. Based on that information, the recipes that go into the dish can be displayed to the user. Other resources that can be used directly or indirectly to accomplish this are:

- A. Image Processing, Analysis, and Machine Vision – EBook available online at - <https://books.google.com/books?hl=en&lr=&id=QePKAgAAQBAJ&oi=fnd&pg=PR11&dq=Image+analysis+and+machine+learning+to+identify+images&ots=96iH53HfB5&sig=NuQjXJPIJEM6m6EO Rs29cINmN7Q#v=onepage&q=Image%20analysis%20and%20machine%20learning%20to%20identify%20images&f=false>
- B. https://github.com/ageitgey/face_recognition
- C. Amazon Rekognition - <https://aws.amazon.com/rekognition/>
- D. Clarifai - <https://clarifai.com/demo>
- E. Calorie Mama - <https://dev.caloriemama.ai/>
- F. CloudSight API - <http://cloudsight.ai/pricing>

Franchise Management System

Project Team #1

Team Members: Aishwarya Saxena, Aprajita, Tong Wu, Zenobia Adnan Panvelwala.

Abstract

Description:

After marketing a franchise system successfully, a good franchisor will provide meaningful support and guidance to the new franchise partners on a consistent basis. The value of a franchise model should add up to much more than just the collection of a franchise fee. There should be substantial value 6 months, 2 years and even 10 years into the franchise relationship. Like any marketing or sales model, it is much more efficient and profitable for a franchisor to retain happy, profitable franchisees than to continue going out and looking for new ones.

Methodology:

A Web application can be developed using Javascript, node js or ibm-worklight . The application which has various features like creating a stand-alone web page for marketing, a section to manage royalties , etc. There will be users with different roles in the system as admin(franchisor) , normal user(franchisee).

Resources:

1. <https://www.javascript.com>
2. <https://angularjs.org>
3. <https://www.ibm.com/mobile>

ColorsInLife: Connecting artists and budding artists, art connoisseurs, and buyers around the world

Project Team #1

Team Members: Aishwarya Saxena, Aprajita, Tong Wu, Zenobia Adnan Panvelwala.

Abstract

Description:

Who doesn't love art? Art surrounds us or let's say art is in everything(). Designing a platform that connects artists, art lovers, buyers or casual browsers together to appreciate art together.

ColorsInLife primarily caters to three different user personas, 1) Artist, 2) Casual Browser, 3) Art collector. The artists will have an opportunity to upload their art, and also tag it with relevant keywords for easier and more relevant search experience. They will also be able to communicate to interested art collectors via the platform, as well as accept payments from them. The casual browser or the art collector will arrive at a home page that will be personalized to the visitor using machine learning to understand their preferences based on the type of art they usually browse on the website. They can also use the search functionality to search for specific type of art, and thus seeding the machine learning models in the process. The art collectors will also be able to communicate with the artists, and be able to buy the art. We expect the casual browsers to naturally grow into art collectors as they become more familiar with the platform, while some users might already start with a 'art collector' mindset.

Methodology:

Database Layer: MySQL

Business Logic Layer: Node.JS, java

Presentation Layer: React

Machine Learning Layer: Python