Development of Web Interface for GH Farm Produce
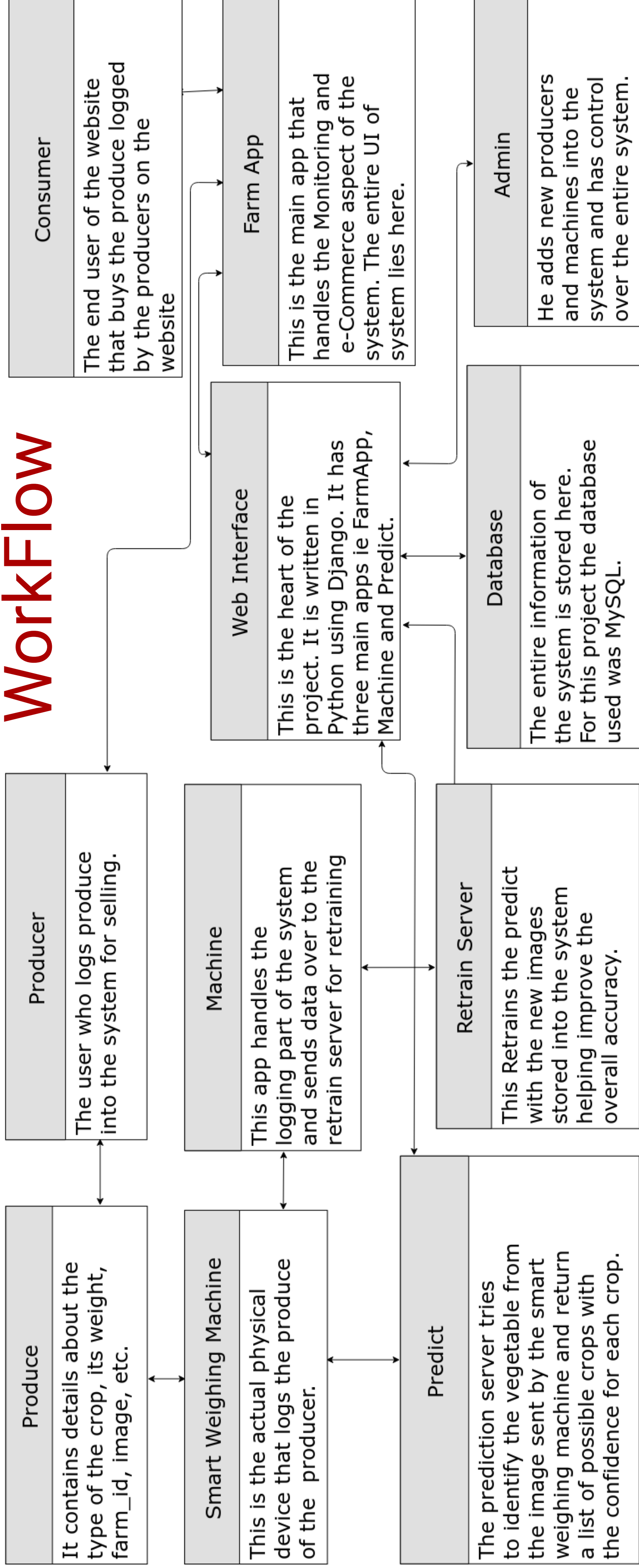
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Web Interface:

WorkFlow

Producer

The user who logs produce into the system for selling.

Produce

It contains details about the type of the crop, its weight, farm_id, image, etc.

Machine

This app handles the logging part of the system and sends data over to the retrain server for retraining

Smart Weighing Machine

This is the actual physical device that logs the produce of the producer.

Retrain Server

This Retrains the predict with the new images stored into the system helping improve the overall accuracy.

Predict

The prediction server tries to identify the vegetable from the image sent by the smart weighing machine and return a list of possible crops with the confidence for each crop.

Consumer

The end user of the website that buys the produce logged by the producers on the website

Farm App

This is the main app that handles the Monitoring and e-Commerce aspect of the system. The entire UI of system lies here.

Web Interface

This is the heart of the project. It is written in Python using Django. It has three main apps ie FarmApp, Machine and Predict.

Admin

He adds new producers and machines into the system and has control over the entire system.

Database

The entire information of the system is stored here. For this project the database used was MySQL.
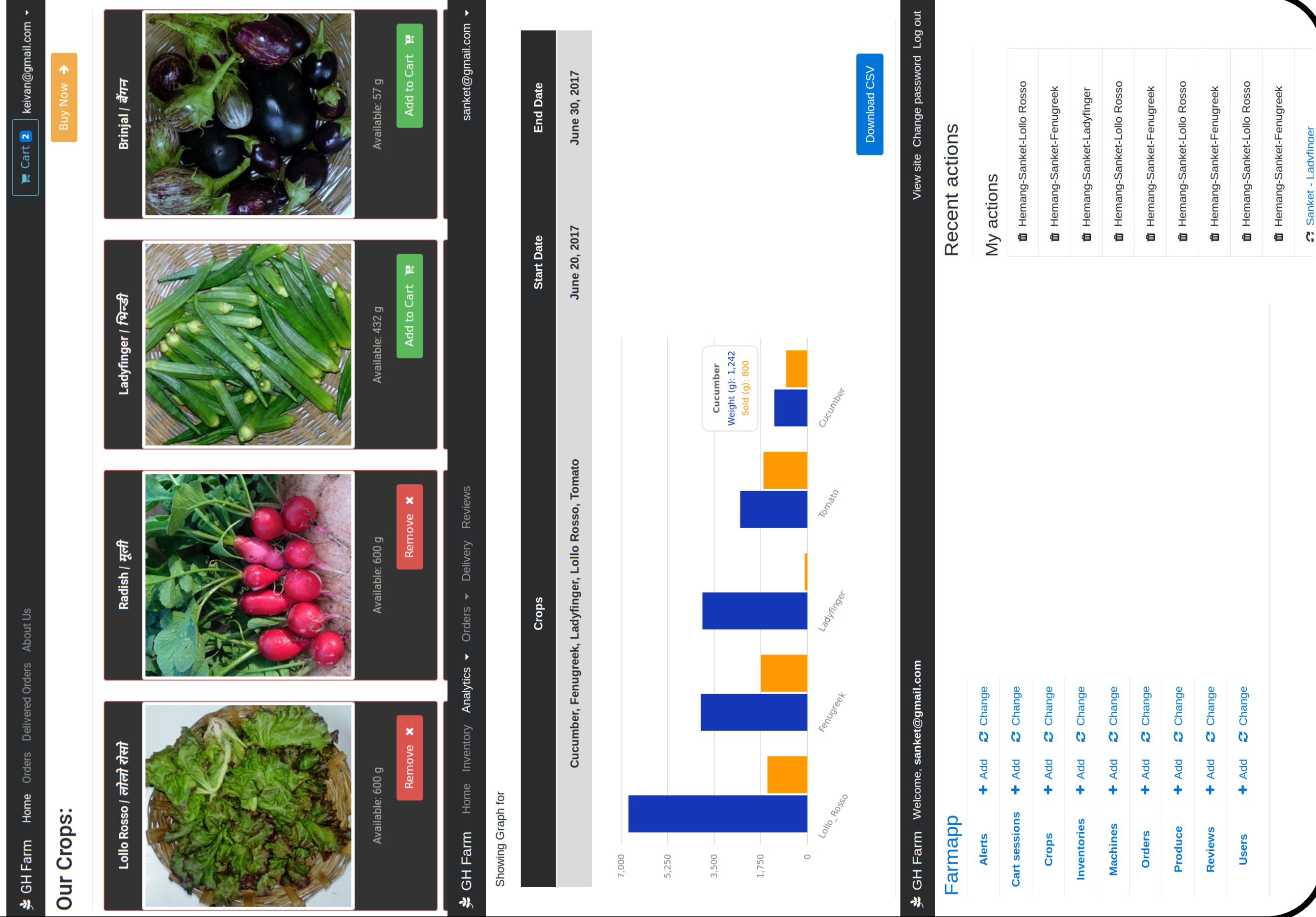
Overview:

1. An automated system for Farm produce Monitoring and Logging.
2. A System to generate and plot analytics about the logged data for producers.
3. An organised, scalable and secure web based interface to distribute the Farm produce.
4. An easy to use and feature rich control over the entire system for admins.

Motivation:

1. Automation of Menial task of produce logging.
2. Logging details about farm produce such as weight, image, type, etc. onto a web based portal.
3. Web interface for Monitoring and generating analytics about the data.
4. Distribution of farm produce via an online Portal.

For more details visit our github repository:
https://github.com/eYSIP-2017/
eYSIP-2017_Development_of_Web_Interface_for_GH_Farm_Produce

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