** **

**Project Title: Epicurean Harnessing CNNs for Hotdog Detection**

**Assignee**: Manjunadh Ramachandrula

**Assigned by:** Moses K

**Assigned on:**22-07-2024

**Technology: Deep Learning**

**Domain: Food Technology**

**Project Description:**

This project aims to develop an advanced image classification system that can accurately distinguish between images of hotdogs and "not-hotdogs". To achieve this, we have curated a new high-quality dataset of images sourced from Google and other publicly available repositories. Our system leverages the power of Convolutional Neural Networks (CNNs), a deep learning architecture well-suited for image recognition tasks, to analyse and classify images.

Our system is designed to provide a robust and accurate hotdog detection capability, with the potential to pave the way for more sophisticated food recognition systems in the future. The final system will be deployed in a user-friendly interface, allowing users to upload images and receive instant feedback on whether the image is a hotdog or not.

**Project Scenario:**

Company is looking to expand its menu analysis capabilities by incorporating our hotdog detection system. By analysing images of menu items, Company can provide restaurants with valuable insights on menu engineering, pricing, and customer preferences. Our system can help to Company identify popular hotdog variations, enabling restaurants to optimize their menus and increase sales. This partnership can lead to increased revenue and market share.

**Dataset:**

Data having Training Images, testing images and validating images present in each separate folder and each folder having hotdog images and non-hotdog images in all the folders. So, we need to build the model with the training data, testing data and validation should be done using the validation data.

[Link](https://www.kaggle.com/datasets/antareepdey/hotdog-silicon-valley/data)

**Files need to be submitted:**

1. **Training Notebook**
2. **Dataset folder**
3. **Flask folder**
4. **Documentation**

**Submission Date:**