Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Gemini Pro Vision API (Pre-trained)	Deep learning model for image recognition. Pre-trained on a massive dataset for food identification.	(Not applicable)	Not directly applicable (provides probability scores for food categories)

Custom Convolutional Neural Network (CNN)	Deep learning model specifically trained on food images.	Learning rate, number of filters, optimizer	Potentially higher accuracy than off-the-shelf solutions
Support Vector Machine (SVM)	Machine learning model for classification.	Kernel function, regularization parameter	High accuracy with smaller datasets

Model Development Phase Template

Date	15 July 2024
Team ID	SWTID1720259116
Project Title	Nutrition App Using Gemini Pro : Your Comprehensive Guide to Healthy Eating and Well-being"
Maximum Marks	6 Marks

Model Selection Report

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

Recommendation:

This project proposes utilizing the pre-trained **Gemini Pro Vision API** for food recognition. This offers several advantages:

- **High Accuracy:** Gemini Pro is likely pre-trained on a vast dataset, leading to high food identification accuracy.
- **Reduced Development Time:** Leveraging a pre-trained model saves significant time and resources compared to building a custom CNN.
- **Focus on App Development:** The project can prioritize user interface, data management, and integration with other app functionalities.

However, if the project requires absolute control over the model or desires potentially higher accuracy, a custom CNN could be explored in a future iteration.