**AI-Powered Nutrition Analyzer For Fitness Enthusiasts**

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| Date | 21-06-2025 |
| Team ID | SWTID1749893823 |
| ProjectTitle | AI-Powered Nutrition Analyzer For Fitness Enthusiasts |
| Maximum Marks | 5 Marks |

**Model Selection Report**

In the model selection report for future deep learning and computer vision projects, various architectures, such as CNNs or RNNs, will be evaluated. Factors such as performance, complexity, and computational requirements will be considered to determine the most suitable model for the task at hand.

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| Model | Description | Performance Metric (Accuracy) |
| VGG16 | It is a deep convolutional neural network with 16 layers developed by the Visual Geometry Group at Oxford. It uses small 3×3 filters and follows a simple, uniform architecture with stacked convolutional and max-pooling layers. It is accurate but computationally heavy and memory-intensive. | Accuracy Score:  98.01% |
| MobileNetV2 | It is a lightweight, efficient CNN designed for mobile and embedded vision applications. It uses depthwise separable convolutions and **inverted residual blocks** to reduce computation and model size. MobileNetV2 is faster and smaller than VGG16, with comparable accuracy for many tasks. | Accuracy Score:  99.91% |