# FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY (FISAT)

**Hormis Nagar, Mookkannoor PO, Angamaly, Kochi**
**Accredited by NAAC with 'A+' Grade**

## DEPARTMENT OF COMPUTER APPLICATIONS

## SYNOPSIS OF THE MINI PROJECT

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| Name of the Student | SONA LAZAR |
| Batch &<br>Roll Number | S4B Batch<br>48 |
| Contact Number &<br>Email id | 9633591213 |
| Name of Project Guide | Sona Mary Louis |
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| Project Title | GrowWell : Sustainable E-commerce for Health and Farmers |
| Area of the Project | Web Application |
| Date of Submission | 31 – 12 - 2024 |

**Description of Project:**

This project is an advanced AI- and ML-powered e-commerce platform designed to create a holistic and inclusive experience for users, farmers, and BPL (Below Poverty Line) beneficiaries. The platform enables users to purchase grains, pulses, vegetables, and fruits while offering personalized health recommendations based on their health conditions and dietary preferences. By integrating AI and ML, the system predicts and suggests the most suitable products for managing specific diseases, helping users make informed, health-conscious choices.

The platform retains the core functionalities of a robust e-commerce system, including product browsing, adding items to a cart, secure payments using Razorpay, and order management. Additionally, it introduces the following modules:

1. **Health Recommendation Module:**
   Users can input their health details, such as existing conditions (e.g., diabetes, hypertension), and the platform uses AI and ML algorithms to recommend fruits, vegetables, grains, and pulses beneficial for their specific health needs.

2. **BPL User Module:**
   Special provisions are made for BPL users, allowing them to access products at subsidized rates. This module ensures affordability and inclusivity, enabling low-income families to meet their dietary and nutritional requirements at a reduced cost.
3. **Farmers' Marketplace Module:**
   Farmers can directly register and list their products, eliminating intermediaries and ensuring fair pricing. This module supports farmers in managing inventory, receiving direct orders from consumers, and accessing logistic support for delivery. AI-driven analytics provide insights to farmers, such as demand forecasting and pricing trends, empowering them to optimize their production and sales.

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| Front End & Back End Tools | React JS, Express JS, Node JS , Mongo DB, Python( for AI/ML Models) |