# **Project Plan: Land Type Classification using Sentinel-2 Satellite Images**

# 1. Timeline (Gantt Chart):

Task	Start Date	e End Date	Duration
Milestone 1: Data Collection, Exploration & Preprocessing	g Week 1	Week 4	4 weeks
Milestone 2: Advanced Data Analysis & Model Selection	Week 5	Week 8	4 weeks
Milestone 3: Model Development & Training	Week 9	Week 12	4 weeks
Milestone 4: Deployment & Monitoring	Week 13	Week 16	4 weeks
Milestone 5: Final Documentation & Presentation	Week 17	Week 18	2 weeks

#### 2. Milestones and Deliverables:

# Milestone Deliverables

Milestone 1 EDA Report, Cleaned Dataset, Visualizations

Milestone 2 Data Analysis Report, Model Selection Summary, Visualizations

Milestone 3 Model Code, Training and Evaluation Reports, Final Model

Milestone 4 Deployed Model, Monitoring Setup, MLOps Report

Milestone 5 Final Project Report, Final Presentation

### 3. Resource Allocation:

- Data Scientists: 2 (for data collection, preprocessing, and model development)
- Machine Learning Engineers: 2 (for model training, optimization, and deployment)
- **DevOps Engineer**: 1 (for deployment and monitoring setup)
- Project Manager: 1 (for overall project coordination and stakeholder communication)