

Here is your Agile Sprint Planning customized for:

## Online Payments Fraud Detection using Machine Learning

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### Sprint 1

#### Epic 1: Data Collection

- USN1: Collecting Online Payment Fraud Dataset → Story Point: 2
- USN2: Loading Dataset into Python Environment → Story Point: 1

#### Epic 2: Data Preparation

- USN3: Handling Missing Values → Story Point: 3
- USN4: Encoding Categorical Variables (Transaction Type) → Story Point: 3
- USN5: Removing Irrelevant Columns & Handling Data Imbalance → Story Point: 3

#### Epic 3: Model Development

- USN6: Splitting Data (Train-Test Split) → Story Point: 2
- USN7: Training Machine Learning Models (Random Forest / XGBoost) → Story Point: 4

### Total Story Points in Sprint 1

**= 2 + 1 + 3 + 3 + 3 + 2 + 4**

**= 18 Story Points**

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## Sprint 2

### Epic 4: Model Evaluation & Optimization

- USN8: Model Evaluation (Accuracy, Precision, Recall, F1-Score) → Story Point: 3
- USN9: Hyperparameter Tuning → Story Point: 4

### Epic 5: Visualization

- USN10: Fraud vs Non-Fraud Visualization (Bar Chart) → Story Point: 2
- USN11: Correlation Heatmap → Story Point: 3

### Epic 6: Deployment

- USN12: Saving Trained Model (.pkl File) → Story Point: 2
- USN13: Building Flask Web Application → Story Point: 5
- USN14: Integrating Model with Web App → Story Point: 4

### Epic 7: Documentation

- USN15: Writing Project Report & Documentation → Story Point: 4

### Total Story Points in Sprint 2

**= 3 + 4 + 2 + 3 + 2 + 5 + 4 + 4**

**= 27 Story Points**

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### Velocity Calculation

- Sprint 1 = 18 Story Points

- **Sprint 2 = 27 Story Points**
- **Total Story Points = 45**
- **Number of Sprints = 2**





◆ **Velocity =  $45 \div 2 = 22.5 \approx 23$  Story Points per Sprint**

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### **Final Summary (For PPT)**

- **Sprint 1 focused on Data Preparation & Model Training**
  - **Sprint 2 focused on Evaluation, Deployment & Documentation**
  - **Average Team Velocity = 23 Story Points per Sprint**
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**If you want, I can also create:**

-  **Product Backlog Table**
-  **Burndown Chart**
-  **Scrum Roles & Responsibilities**
-  **Complete Agile Documentation**

**Tell me what you need next** 