

Here is your Agile Sprint Planning customized for:

Online Payments Fraud Detection using Machine Learning

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

$$= 2 + 1 + 3 + 3 + 2 + 4$$

$$= 18 \text{ Story Points}$$

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

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**

⌚ 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