Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning,Stories, Story points)

Date	**09-11-2023**
Team ID	**Team-593025**
Project Name	**Project - Online Payments Fraud Detection Using ML**
Maximum Marks	**8 Marks**

Project planning is vital for successful project execution as it establishes a roadmap for achieving objectives, allocating resources, managing risks, and ensuring effective communication. It provides clarity on project scope, timelines, and budgets, enabling teams to allocate resources efficiently, manage risks proactively, and make informed decisions. A well-defined plan facilitates effective communication among stakeholders, helps in maintaining control over project costs, and ensures that quality standards are met. Additionally, project planning contributes to customer satisfaction by delivering outcomes within scope and timelines, while also providing a foundation for continuous improvement and adherence to legal and regulatory requirements. Overall, project planning is an indispensable process that sets the foundation for project success by providing a structured approach to project management.

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

SPRINT	FUNCTIONAL REQUIREMENT	USER STORY NUMBER	USER STORY OR TASK	STORY POINTS	PRIORITY	TEAM MEMBERS
1	Data Ingestion	US-01	Collect transaction data from databases	5	HIGH	Shivam & Sweety
1	Data Ingestion	US-02	Implement real-time data stream ingestion	8	HIGH	Shivam & Sweety
1	Data Ingestion	US-03	Develop data cleaning and normalization	8	HIGH	Shivam & Sweety
1	Data Preprocessi	US-04	Implement feature	5	MEDIUM	Shivam & Sweety

	ng		engineering			
2	Data Sampling	US-05	Apply oversampling for handling class imbalance	5	HIGH	Shivam & Sweety
2	Feature Selection	US-06	Implement Recursive Feature Elimination	8	HIGH	Shivam & Sweety
2	Machine Learning	US-07	Train Decision Tree classifier	8	HIGH	Shivam & Sweety
2	Machine Learning	US-08	Train Random Forest classifier	8	HIGH	Shivam & Sweety
3	Model	US-09	Perform	8	HIGH	Shivam &

	Validation		**k-fold cross-validation**			**Sweety**
3	**Model Evaluation**	**US-10**	**Calculate precision, recall, F1-score**	**5**	**HIGH**	**Shivam & Sweety**
3	**Model Serialization**	**US-11**	**Serialize and save the best model**	**5**	**MEDIUM**	**Shivam & Sweety**
3	**Flask API Development**	**US-12**	**Create a RESTful API for real-time predictions**	**8**	**HIGH**	**Shivam & Sweety**
4	**IBM Cloud Deployment**	**US-13**	**Deploy the system on IBM Cloud**	**13**	**HIGH**	**Shivam & Sweety**
4	**Real-time Scoring**	**US-14**	**Implement real-time**	**13**	**HIGH**	**Shivam & Sweety**

			scoring of transactions			

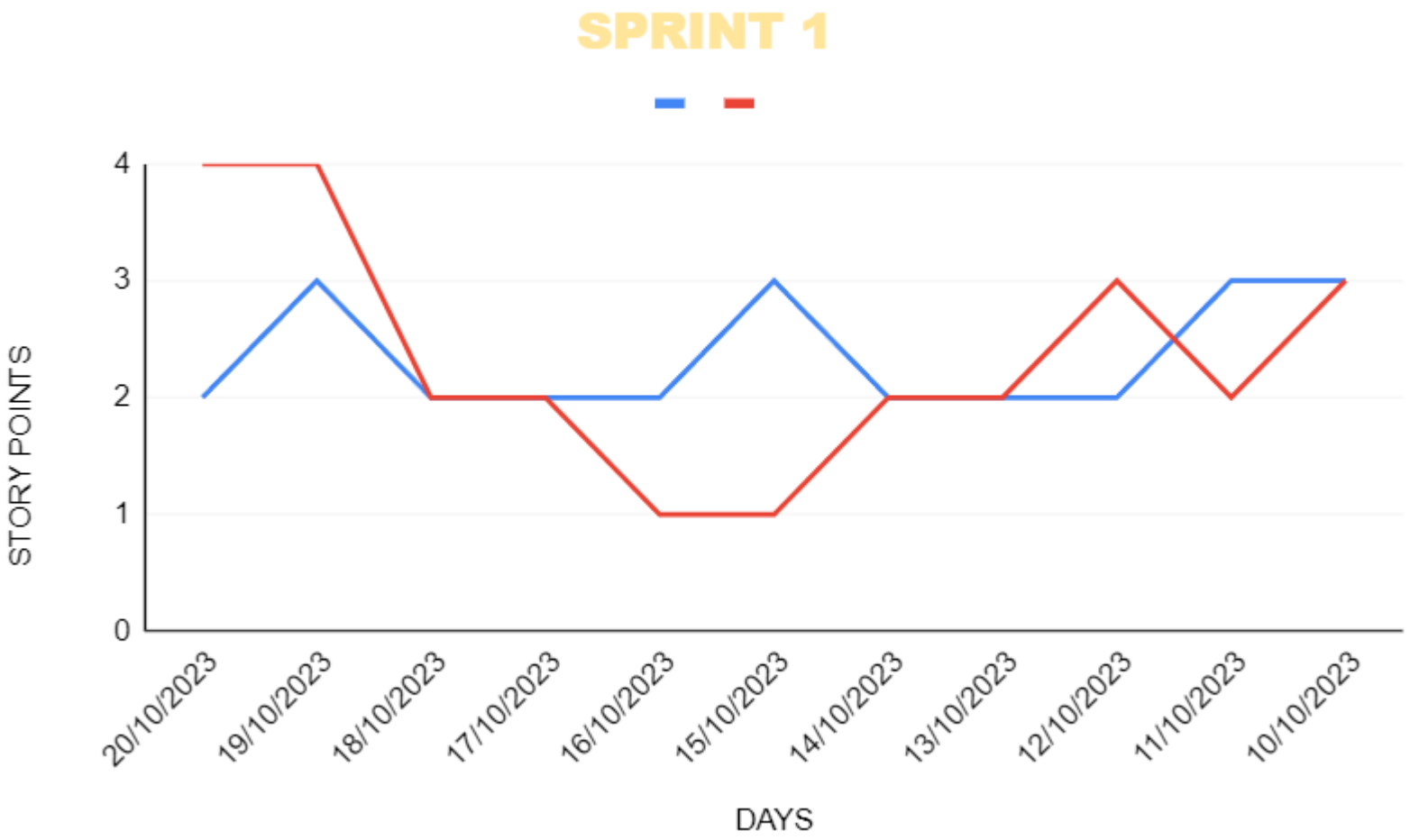
Project Tracker, Velocity & Burndown Chart: (4 Marks)

SPRINT	TOTAL STORY POINTS	DURATION	SPRINT START DATE	SPRINT END DATE	Story Points Sprint Release Date	ACTUAL RELEASE DATE	VELOCITY(STORY POINTS PER SPRINT)	AVERAGE VELOCITY (STORY POINTS PER DAY)
1	26	10 days	10-OCT-2023	20-OCT-2023	26	20-OCT-2023	20	2
2	29	10 days	21-OCT-2023	30-OCT-2023	29	30-OCT-2023	20	2
3	26	10 days	31-OCT-2023	9-NOV-2023	26	9-NOV-2023	20	2
4	26	10 days	10-NOV-2023	20-NOV-2023	26	20-NOV-2023	20	2

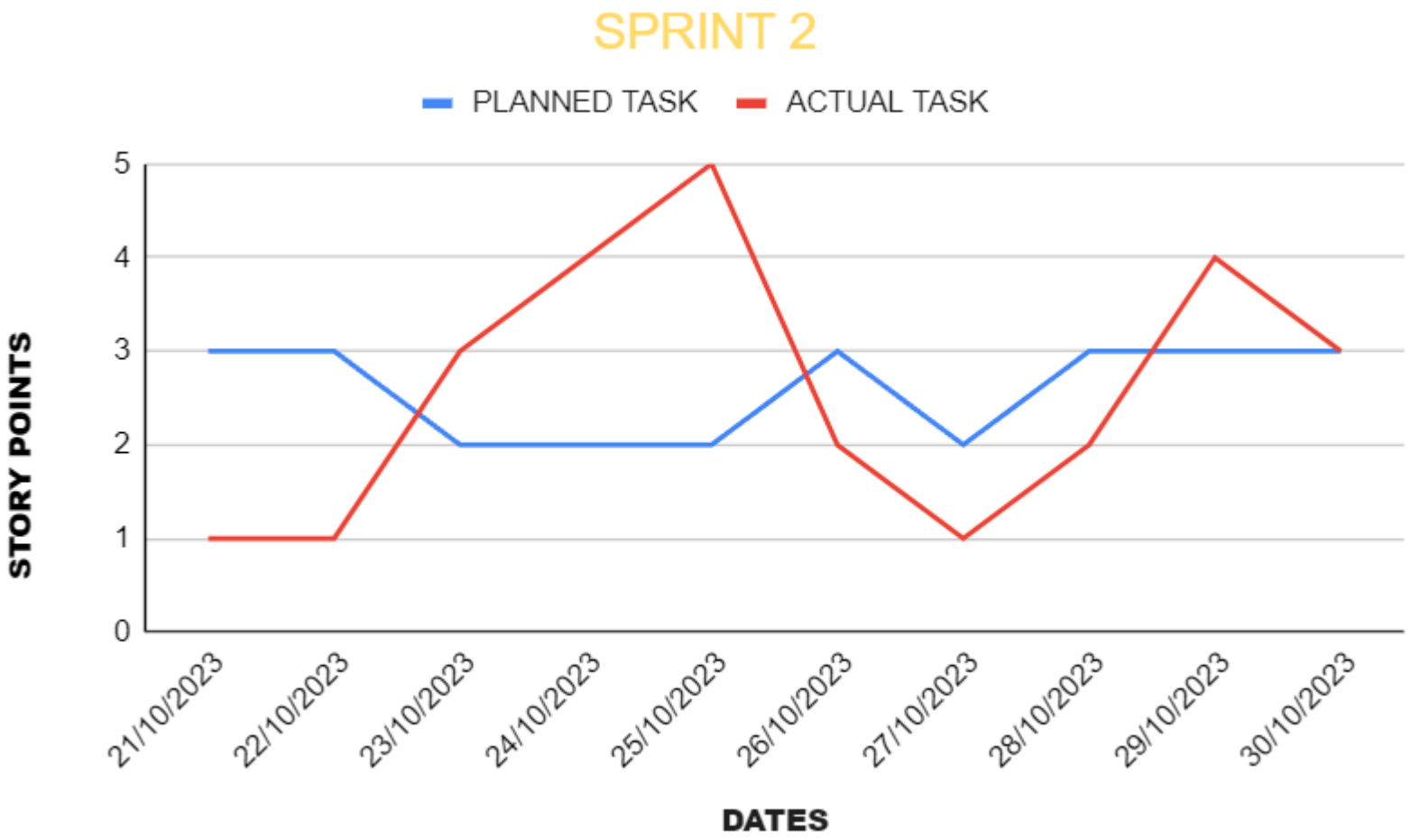
Velocity:
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

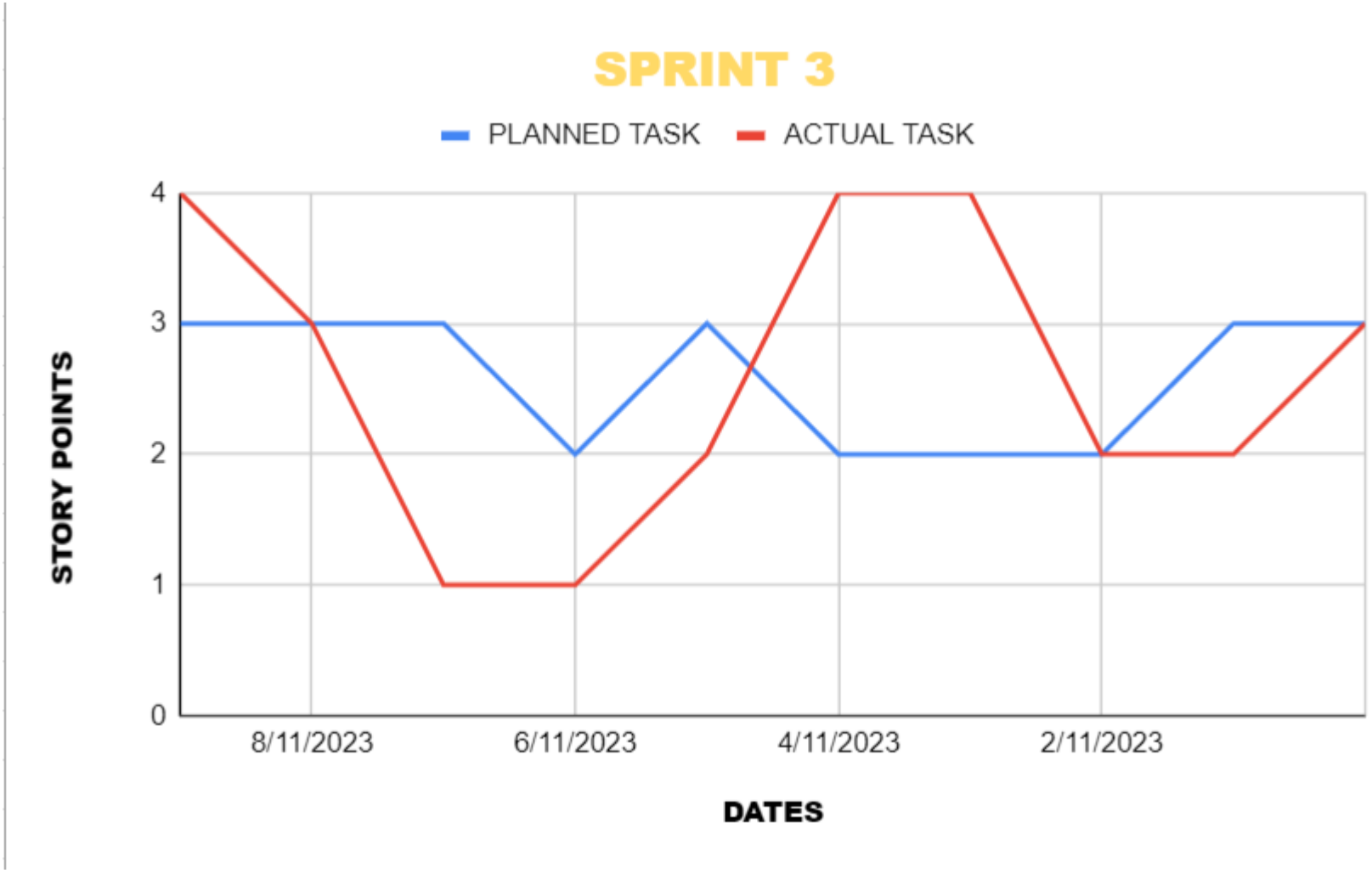
BURNDOWN CHART
SPRINT 1



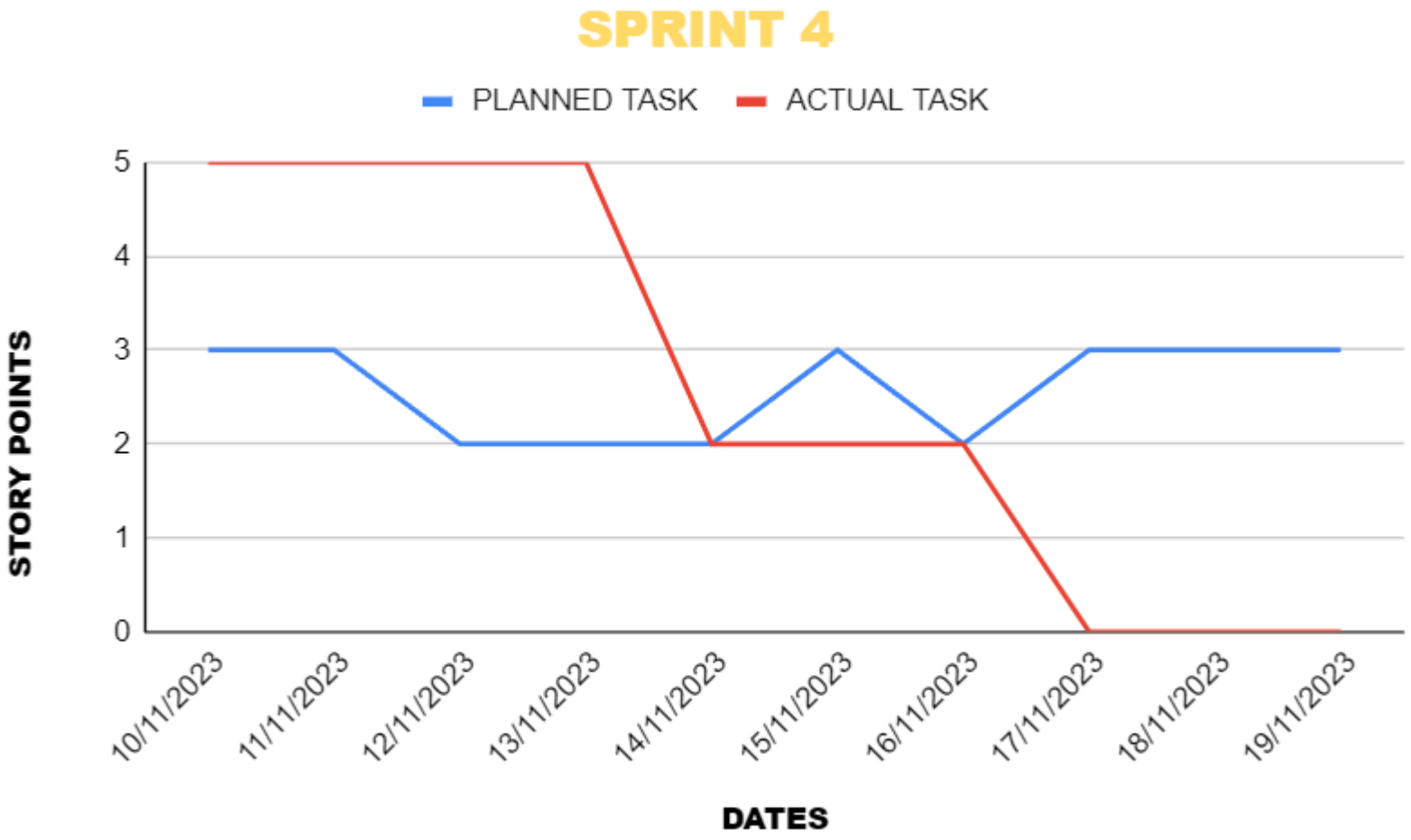
SPRINT 2


SPRINT 2
PLANNED TASK
ACTUAL TASK
STORY POINTS
5
4
3
2
1
0
21/10/2023
22/10/2023
23/10/2023
24/10/2023
25/10/2023
26/10/2023
27/10/2023
28/10/2023
29/10/2023
30/10/2023
DATES

SPRINT 3


SPRINT 3
PLANNED TASK
ACTUAL TASK
STORY POINTS
4
3
2
1
0
8/11/2023
6/11/2023
4/11/2023
2/11/2023
DATES

SPRINT 4


SPRINT 4
PLANNED TASK
ACTUAL TASK
STORY POINTS
5
4
3
2
1
0
10/11/2023
11/11/2023
12/11/2023
13/11/2023
14/11/2023
15/11/2023
16/11/2023
17/11/2023
18/11/2023
19/11/2023
DATES

CUMULATIVE FLOW DIAGRAM