

## Project Planning Phase

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

|               |   |
|---------------|---|
| Date          | 2 November 2022                               |
| Team ID       | PNT2022TMID02662                              |
| Project Name  | Project –Personal Expense Tracker Application |
| Maximum Marks | 8 Marks                                       |

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

Use the below template to create product backlog and sprint schedule

| Sprint                              | Functional Requirement (Epic) | User Story Number | User Story / Task   | Story Points | Priority | Team Members                         |
|-------------------------------------|-------------------------------|-------------------|---|--------------|----------|--------------------------------------|
| Sprint-1                            | Registration                  | USN-1             | As a user, I can register for the application by entering my email, password, and confirming my password. | 2            | High     | Vishnu Kumar V K                     |
|                                     |                               | USN-2             | As a user, I will receive confirmation email once I have registered for the application                   | 1            | High     | Senthil Nathan U                     |
|                                     | Login                         | USN-3             | As a user, I can log into the application by entering email & password                                    | 1            | High     | Vijay Sarathi KN                     |
|                                     | Dashboard                     | USN-4             | Logging in takes to the dashboard for the logged user   | 2            | High     | Vignesh Boopathy                     |
| BUG FIXES AND OTHER UI IMPROVEMENTS |                               |                   |   |              |          |                                      |
| Sprint-2                            | Workspace                     | USN-1             | Workspace for personal expense tracking   | 2            | High     | Vignesh Boopathy & Senthil Nathan u  |
|                                     | Charts                        | USN-2             | Visual representation of the customers data   | 2            | Medium   | Vijay Sarathi K N & Vishnu Kumar V K |
|                                     | Connecting to IBM DB2         | USN-3             | Linking database with dashboard   | 2            | High     | Vijay Sarathi                        |
|                                     | Interactivity                 | USN-4             | Making Dashboard interactive with JS  | 1            | Medium   | Vignesh Boopathy                     |

| Sprint                       | Functional Requirement (Epic) | User Story Number | User Story / Task  | Story Points | Priority | Team Members                         |
|------------------------------|-------------------------------|-------------------|--|--------------|----------|--------------------------------------|
| Sprint 3                     |                               | USN-1             | Wrapping up the server side works of frontend                          | 1            | Medium   | Senthil Nathan U                     |
|                              | Watson Assistant              | USN-2             | Creating Chat-bot for expense tracking and for clarifying user's query | 2            | High     | Vishnu Kumar V K                     |
|                              | Send Grid                     | USN-3             | Using Send Grid to send mail to the users about their expenses         | 1            | Low      | Vishnu Kumar V K & Vijay Sarathi KN  |
|                              |                               | USN-4             | Integrating both frontend and backend                                  | 2            | High     | Vignesh Boopathy & Vijay Sarathi K N |
| BUG FIXES AND ROUTINE CHECKS |                               |                   |  |              |          |                                      |
| Sprint-4                     | Docker                        | USN-1             | Creating image of website using Docker                                 | 2            | High     | Vignesh Boopathy                     |
|                              | Cloud Registry                | USN-2             | Uploading docker image to IBM Cloud registry                           | 2            | High     | Vishnu Kumar V K                     |
|                              | Kubernetes                    | USN-3             | Create container using the docker image and hosting the site           | 2            | High     | Senthil Nathan U                     |
|                              | Exposing                      | USN-4             | Exposing IP/Ports for the site   | 2            | High     | Vijay Sarathi KN                     |

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

| Sprint   | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|--------------------|----------|-------------------|---------------------------|---|------------------------------|
| Sprint-1 | 9                  | 6 Days   | 24 Oct 2022       | 29 Oct 2022               | 9   | 29 Oct 2022                  |
| Sprint-2 | 9                  | 6 Days   | 31 Oct 2022       | 05 Nov 2022               | 9   | 05 Nov 2022                  |
| Sprint-3 | 8                  | 6 Days   | 07 Nov 2022       | 12 Nov 2022               | 8   | 12 Nov 2022                  |
| Sprint-4 | 6                  | 6 Days   | 14 Nov 2022       | 19 Nov 2022               | 6   | 19 Nov 2022                  |

## 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)

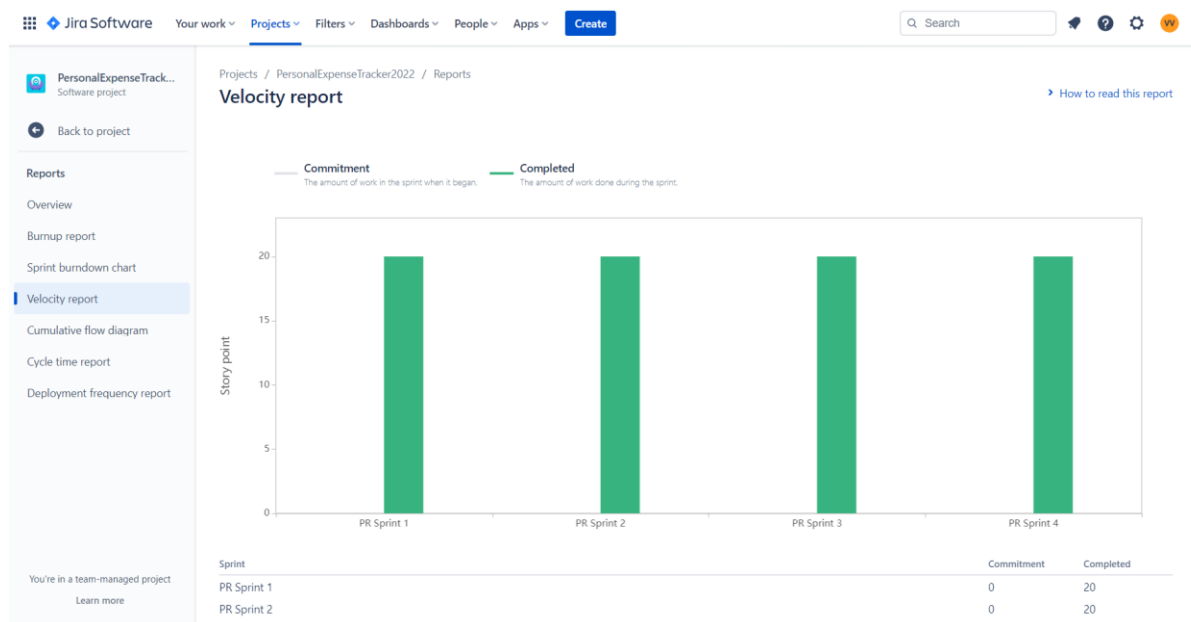
$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

**Sprint – 1 AV = 9/6 = 1.5**

**Sprint – 2 AV = 9/6 = 1.5**

**Sprint – 3 AV = 8/6 = 1.3**

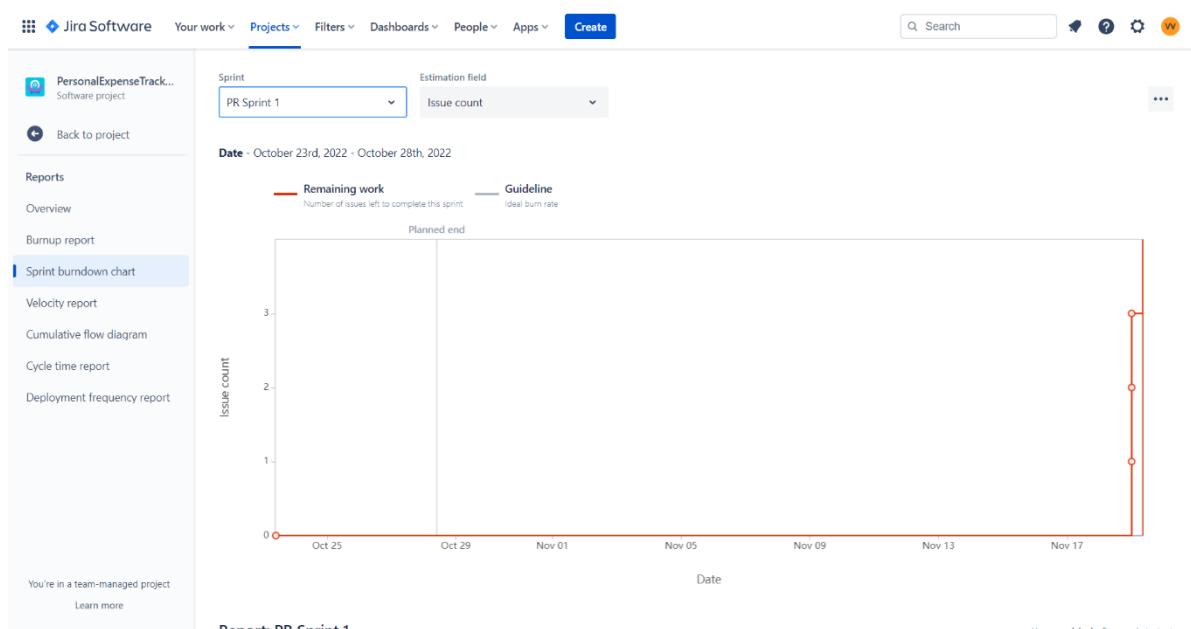
**Sprint – 4 AV = 6/6 = 1**



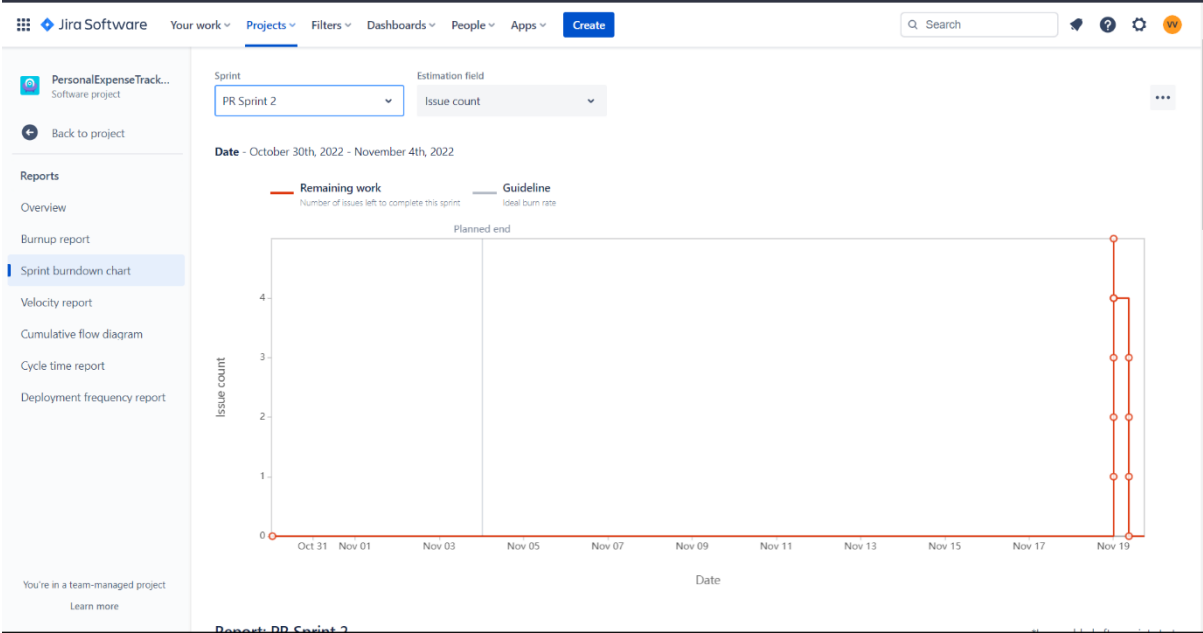
## Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

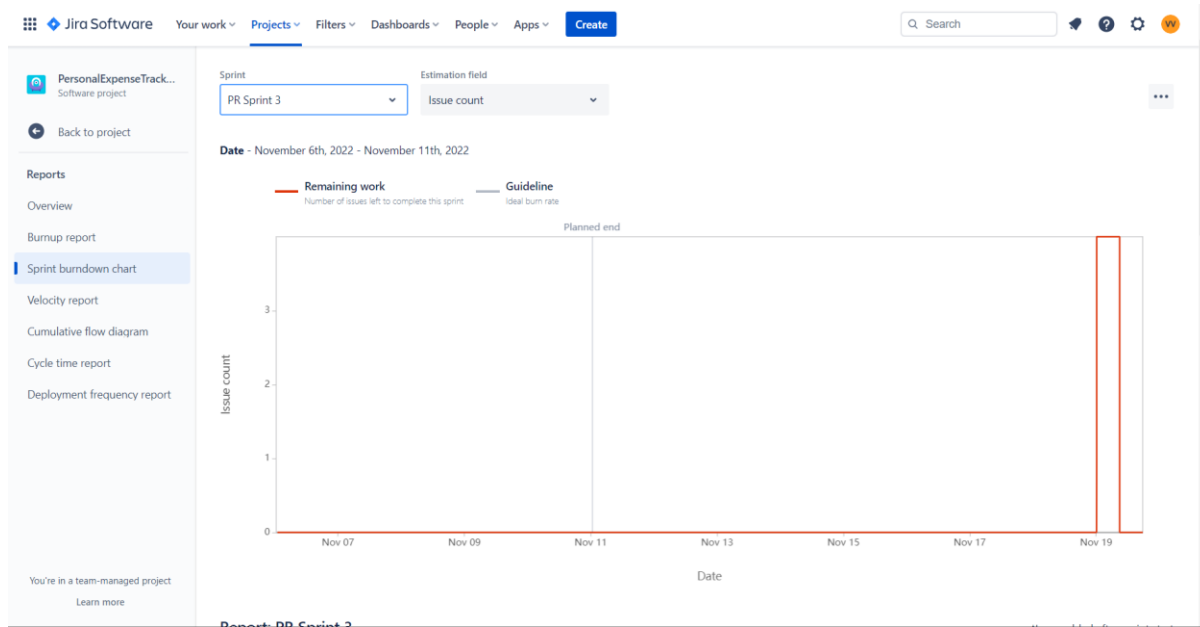
### SPRINT 1 BURNDOWN CHART:



SPRINT 2 BURNDOWN CHART:



SPRINT 3 BURNDOWN CHART:



SPRINT 4 BURNDOWN CHART:

