Project Planning Phase

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

Date	27-10-2023
Team ID	PNT2022TMID593014
Project Name	Diabetes prediction using ML
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Project Initialization & Infrastructure Setup	USN-1	As a healthcare professional, I want Set up the development environment with the required tools and frameworks to start the diabetes prediction project.	1	High	Tasneem
Sprint-1	Data collection	USN-2	As a health care institutions, I want to collect and Gather a comprehensive dataset of health records and relevant parameters for training the diabetes prediction model.	2	High	Prasuna
Sprint-2	data preprocessing	USN-3	Preprocess the collected dataset by cleaning, normalizing, and splitting it into training and validation sets.	3	High	Prasuna
Sprint-3	Model Development & Training	USN-4	select the most suitable model for predicting diabetes onset and Train the selected machine learning model using the preprocessed dataset.	5	High	Shreya
Sprint-4	model deployment & Integration	USN-5	As a system Administrator, I want to Deploy the trained machine learning model as a service or API and integrate it into a user-friendly interface.	6	High	Harini
Sprint-5	Personalized Risk Assessment	USN-6	As an individual, I want to input my health data into the system to receive a personalized risk assessment for diabetes onset.	1	medium	Tasneem
Sprint-5	Model Evaluation and Enhancement	USN-7	As a researcher, I want tools to evaluate the effectiveness of the diabetes prediction model and continuously enhance its performance.	2	High	Tasneem

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	3	1 Day	28 oct 2023	28 oct 2023	3	28 oct 2023
Sprint-2	3	1 Day	29 oct 2023	29 oct 2023	3	29 oct 2023
Sprint-3	5	3 Days	30 oct 2023	1 nov 2023	5	1 nov 2023
Sprint-4	6	3 Days	2 nov 2023	4 nov 2023	6	4 nov 2023
Sprint-5	3	2 Days	5 nov 2023	6 nov 2023	3	6 nov 2023

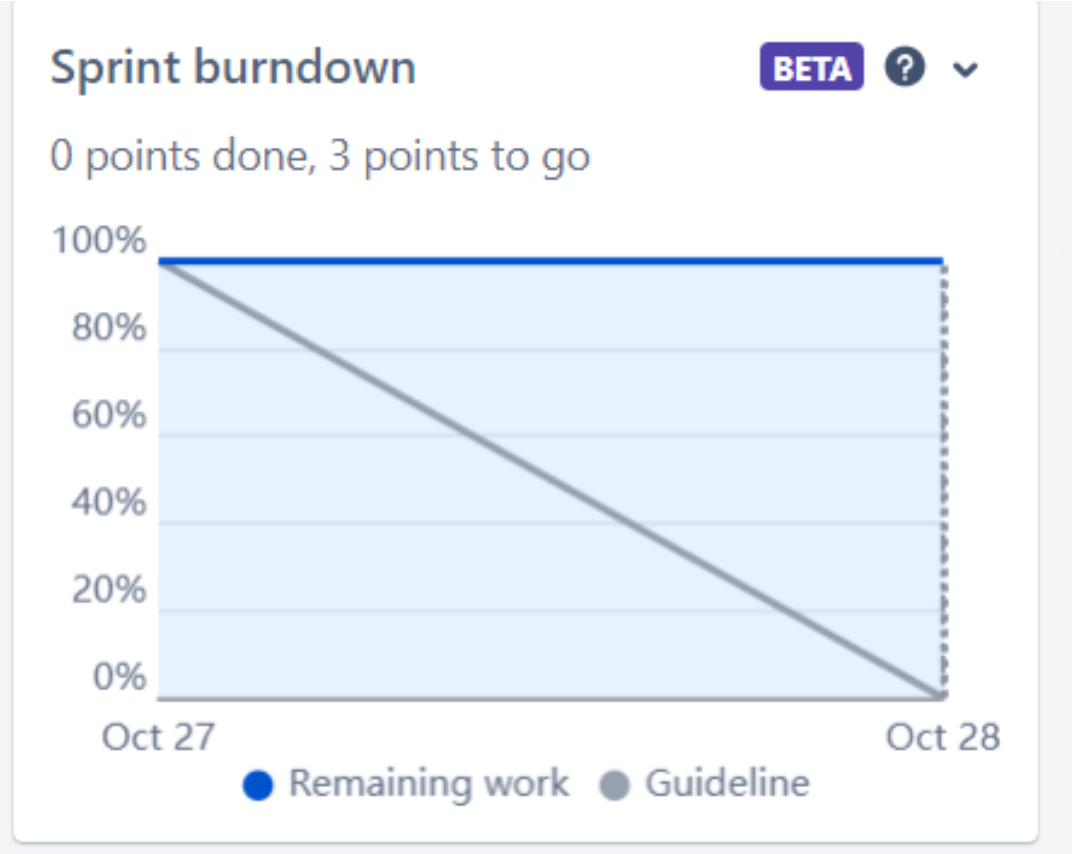
Velocity:
Imagine we have a 11-days sprint duration, and the velocity of the team is 4 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

Velocity = (3+3+5+6+3) / 5 = 20 / 5 = 4

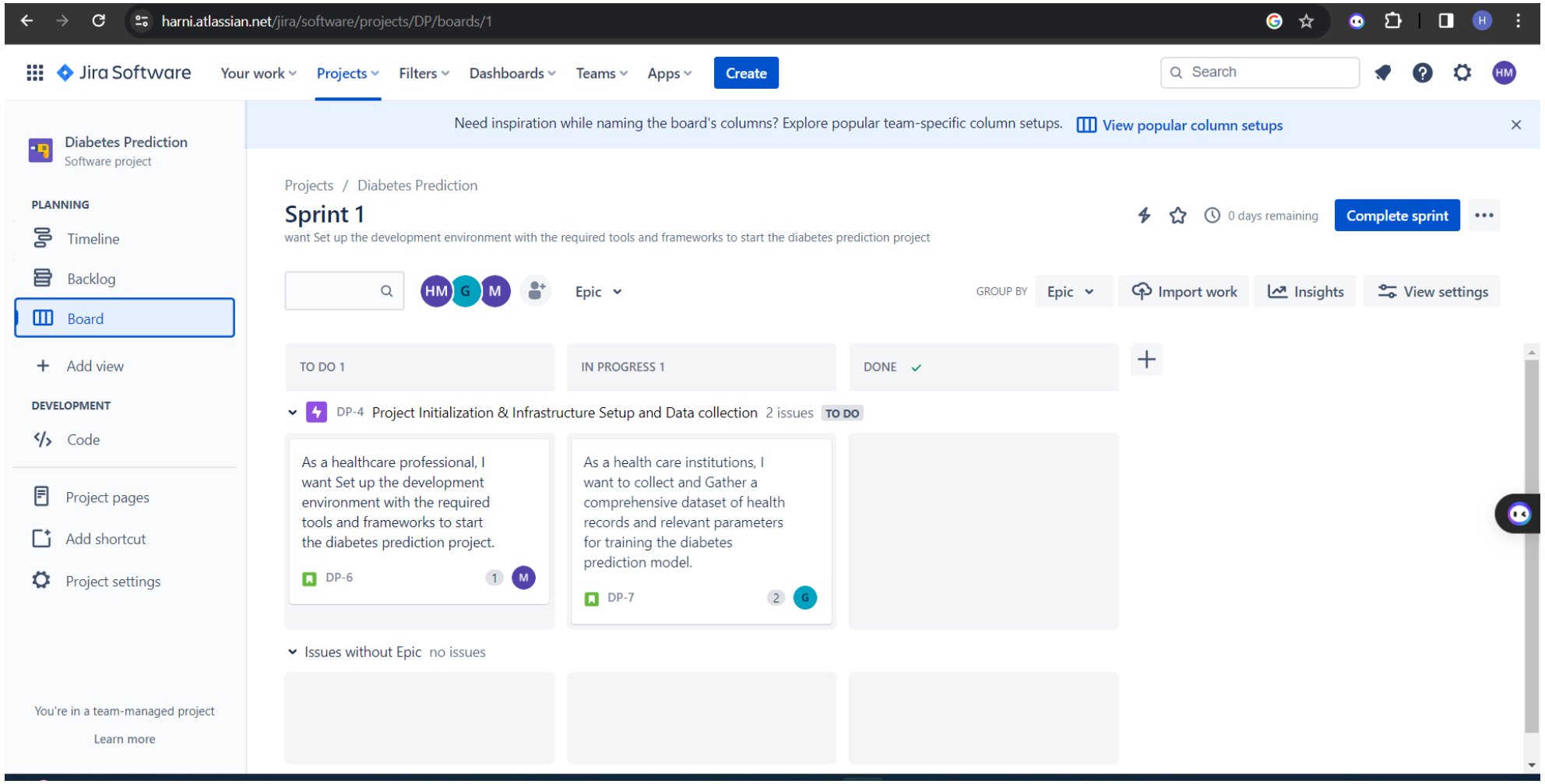
$$AV = \frac{sprint\ duration}{velocity}$$

AV = 11/4 = 2.75

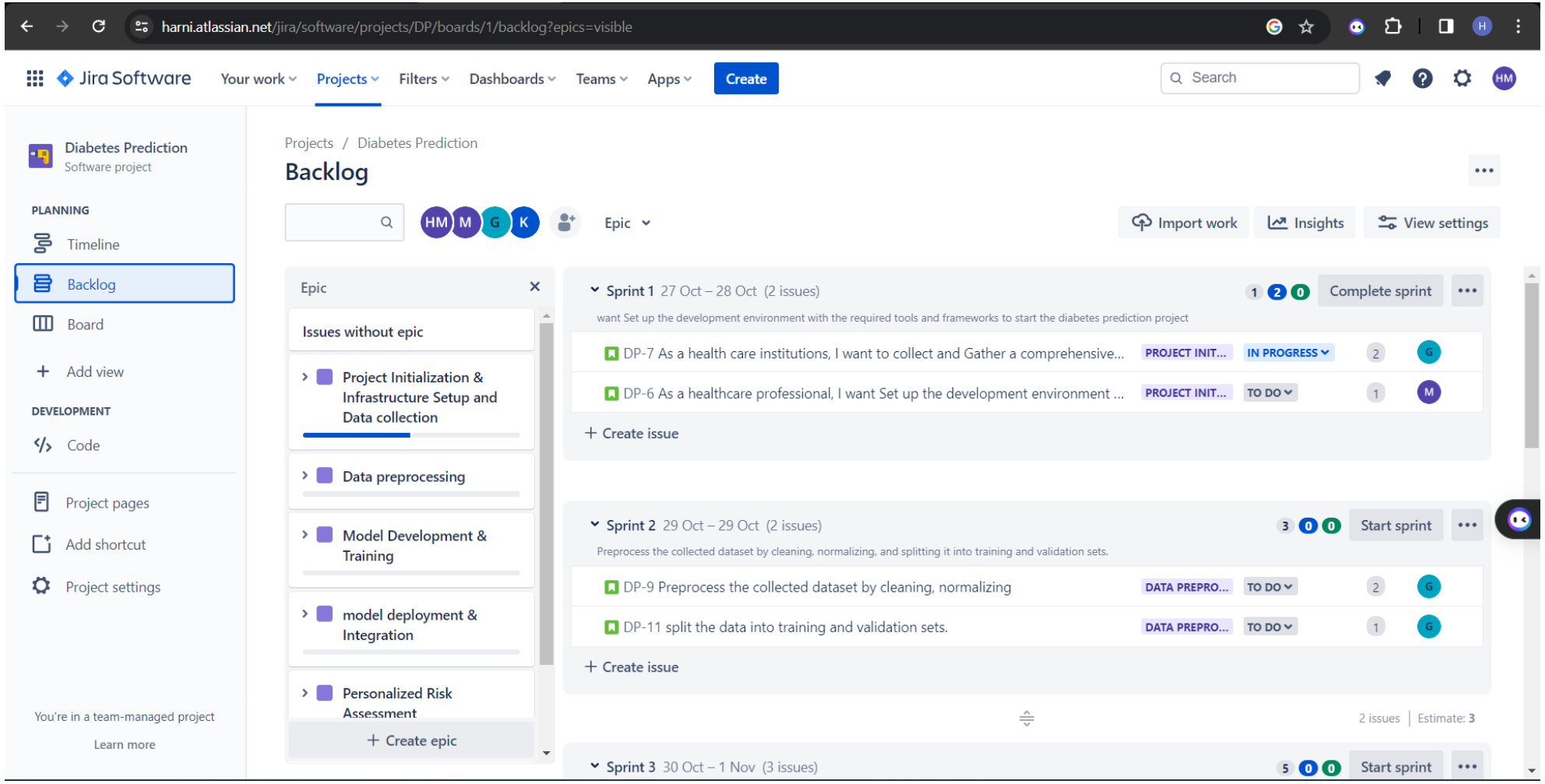
Burndown Chart:

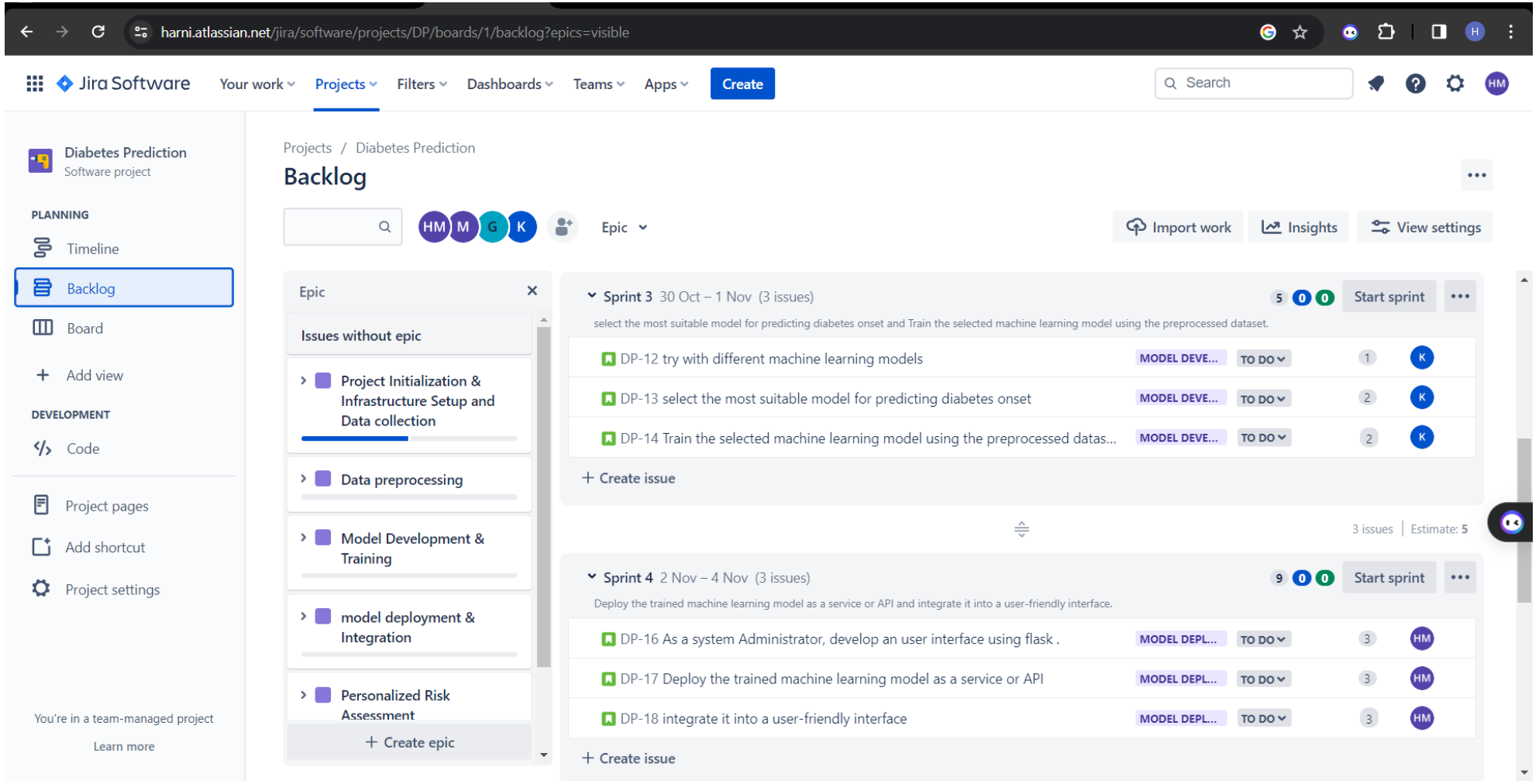


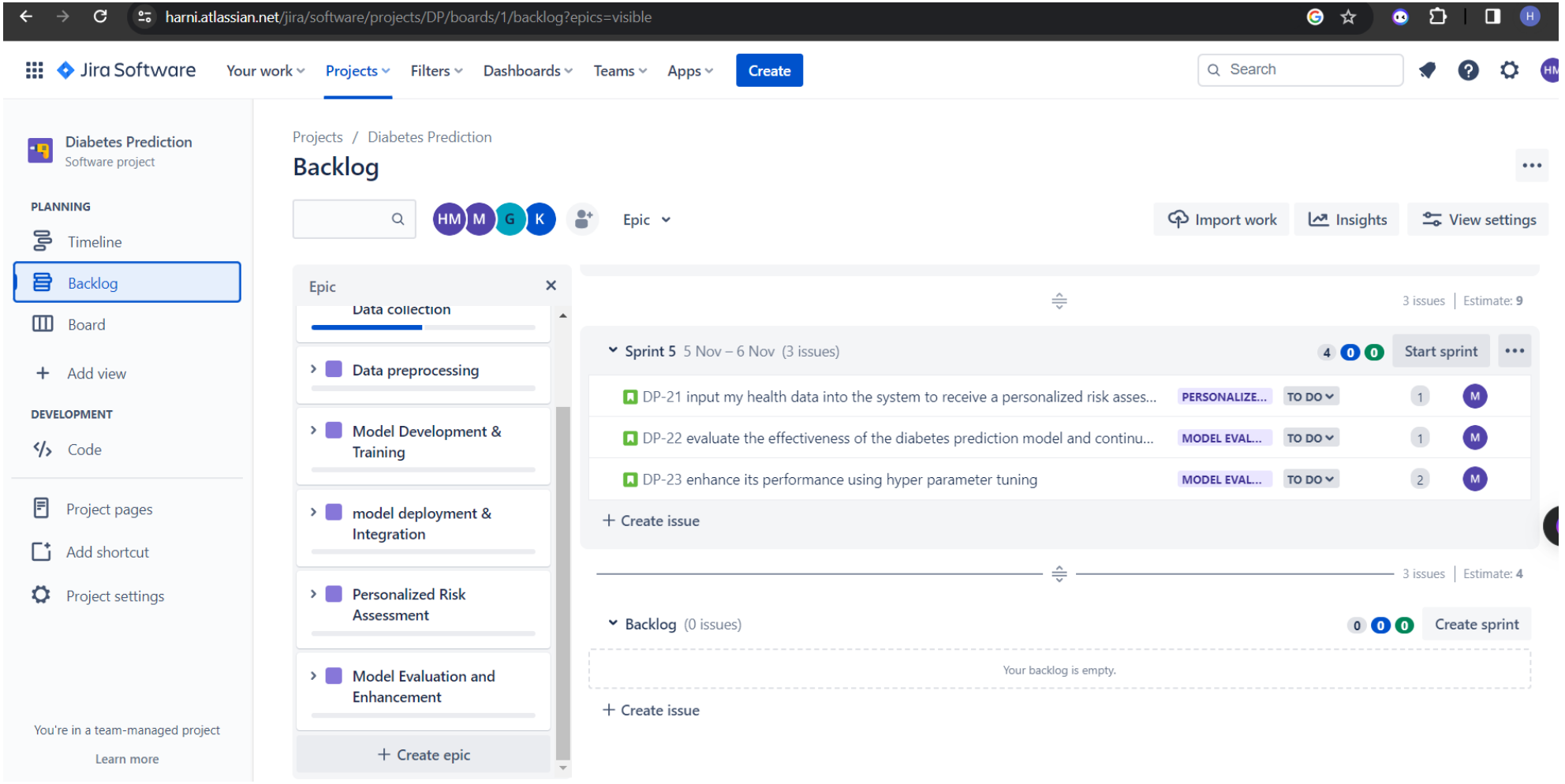
Board section.



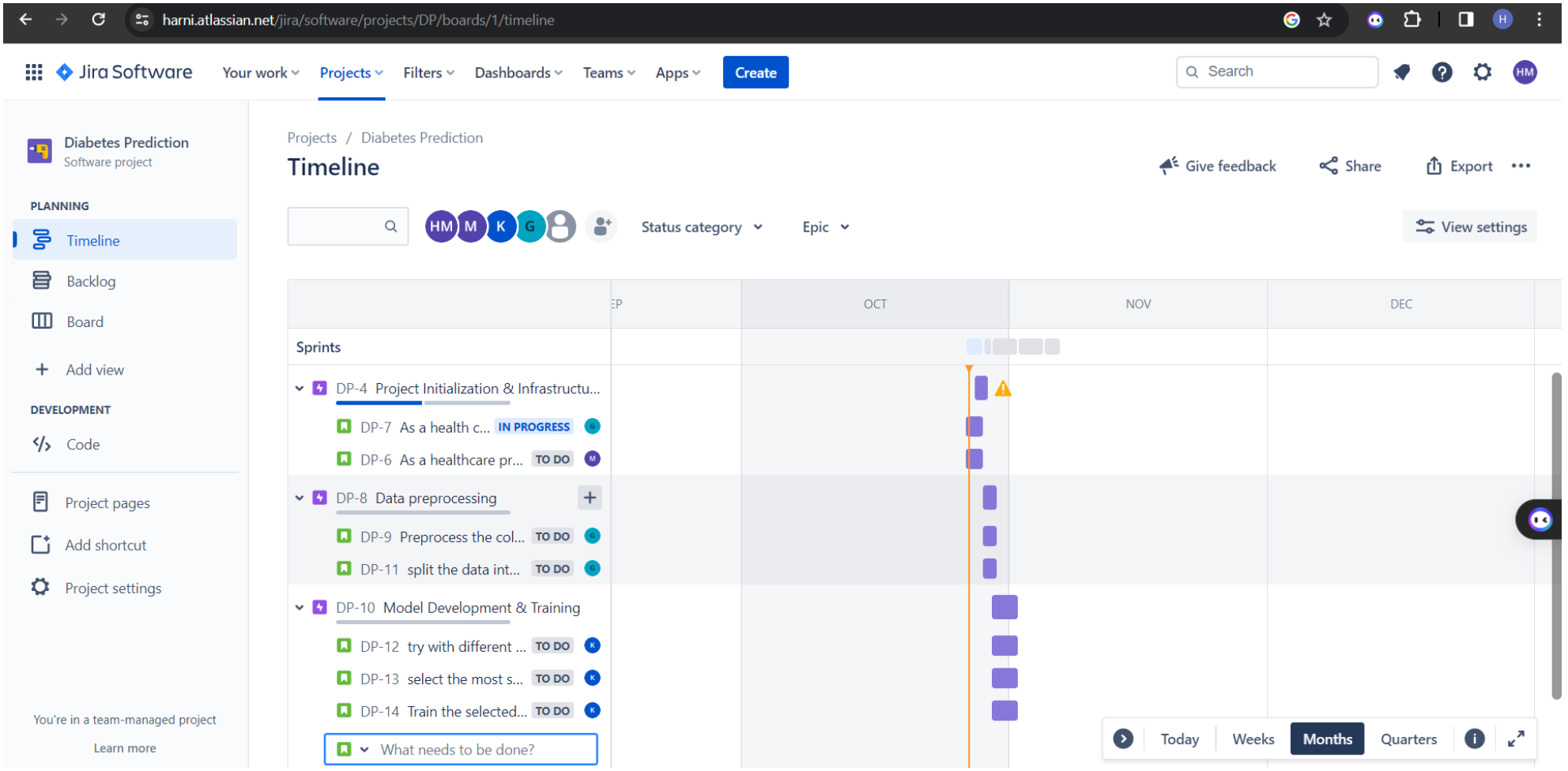
Backlog section

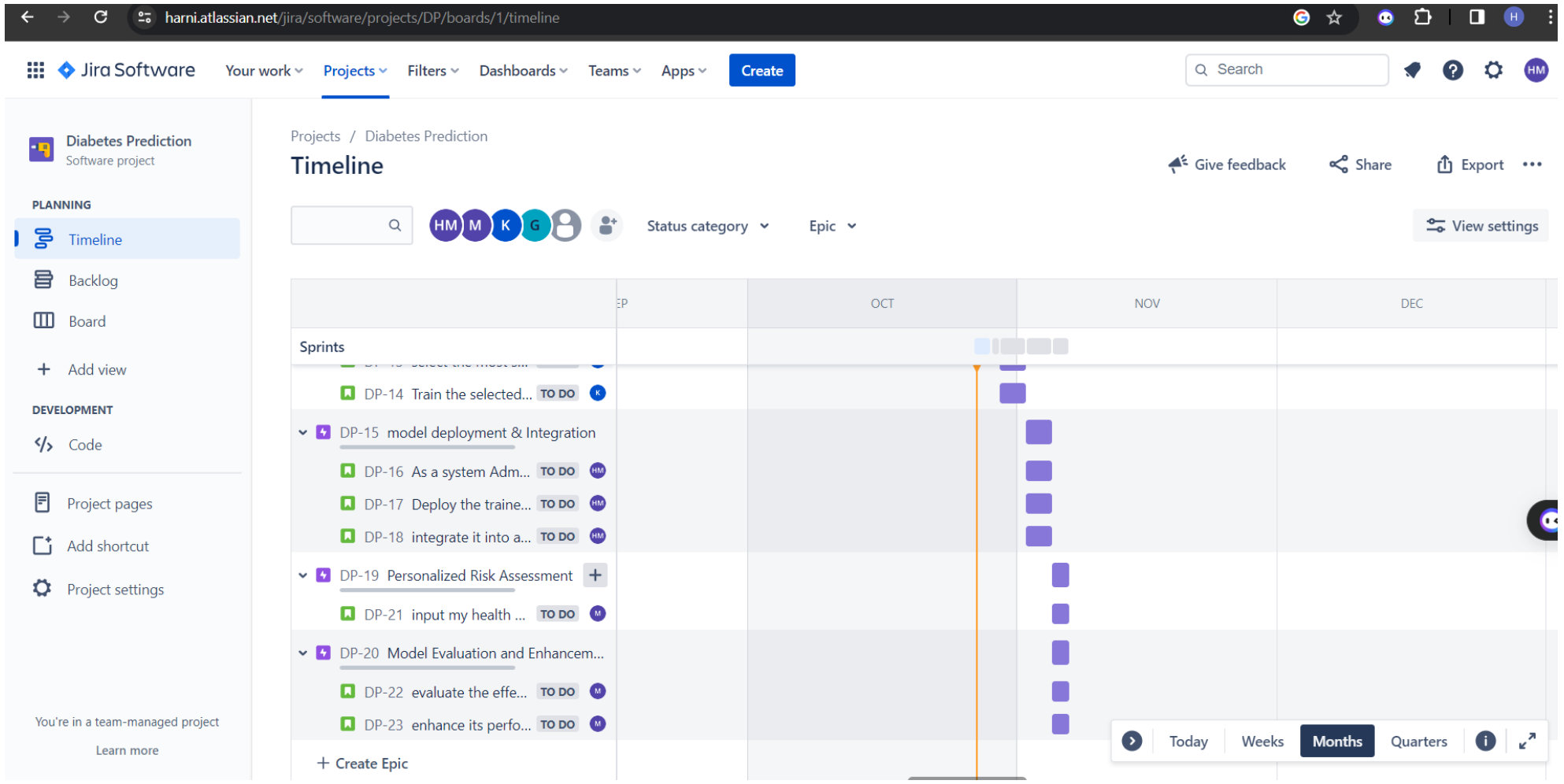



harni.atlassian.net/jira/software/projects/DP/boards/1/backlog?epics=visible
Jira Software
Your work
Projects
Filters
Dashboards
Teams
Apps
Create
Search
Diabetes Prediction
Software project
PLANNING
Timeline
Backlog
Board
Add view
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Projects / Diabetes Prediction
Backlog
Epic
Import work
Insights
View settings
Epic
Issues without epic
Project Initialization & Infrastructure Setup and Data collection
Data preprocessing
Model Development & Training
model deployment & Integration
Personalized Risk Assessment
Create epic
Sprint 3 30 Oct – 1 Nov (3 issues)
Start sprint
select the most suitable model for predicting diabetes onset and Train the selected machine learning model using the preprocessed dataset.
DP-12 try with different machine learning models
DP-13 select the most suitable model for predicting diabetes onset
DP-14 Train the selected machine learning model using the preprocessed datas...
MODEL DEVE...
TO DO
Create issue
3 issues | Estimate: 5
Sprint 4 2 Nov – 4 Nov (3 issues)
Start sprint
Deploy the trained machine learning model as a service or API and integrate it into a user-friendly interface.
DP-16 As a system Administrator, develop an user interface using flask .
DP-17 Deploy the trained machine learning model as a service or API
DP-18 integrate it into a user-friendly interface
MODEL DEPL...
TO DO
Create issue


harni.atlassian.net/jira/software/projects/DP/boards/1/backlog?epics=visible
Jira Software
Your work
Projects
Filters
Dashboards
Teams
Apps
Create
Search
Diabetes Prediction
Software project
PLANNING
Timeline
Backlog
Board
Add view
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Projects / Diabetes Prediction
Backlog
Epic
Import work
Insights
View settings
Epic
Data collection
Data preprocessing
Model Development & Training
model deployment & Integration
Personalized Risk Assessment
Model Evaluation and Enhancement
Create epic
3 issues | Estimate: 9
Sprint 5 5 Nov – 6 Nov (3 issues)
Start sprint
DP-21 input my health data into the system to receive a personalized risk asses...
DP-22 evaluate the effectiveness of the diabetes prediction model and continu...
DP-23 enhance its performance using hyper parameter tuning
TO DO
Create issue
3 issues | Estimate: 4
Backlog (0 issues)
Create sprint
Your backlog is empty.
Create issue

Timeline


harni.atlassian.net/jira/software/projects/DP/boards/1/timeline
Jira Software
Your work
Projects
Filters
Dashboards
Teams
Apps
Create
Search
Diabetes Prediction
Software project
PLANNING
Timeline
Backlog
Board
Add view
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Projects / Diabetes Prediction
Timeline
Give feedback
Share
Export
Status category
Epic
View settings
OCT
NOV
DEC
Sprints
DP-4 Project Initialization & Infrastructu...
DP-7 As a health c... IN PROGRESS
DP-6 As a healthcare pr... TO DO
DP-8 Data preprocessing
DP-9 Preprocess the col... TO DO
DP-11 split the data int... TO DO
DP-10 Model Development & Training
DP-12 try with different ... TO DO
DP-13 select the most s... TO DO
DP-14 Train the selected... TO DO
What needs to be done?
Today
Weeks
Months
Quarters


harni.atlassian.net/jira/software/projects/DP/boards/1/timeline
Jira Software
Your work
Projects
Filters
Dashboards
Teams
Apps
Create
Search
Diabetes Prediction
Software project
PLANNING
Timeline
Backlog
Board
Add view
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Projects / Diabetes Prediction
Timeline
Give feedback
Share
Export
Status category
Epic
View settings
OCT
NOV
DEC
Sprints
DP-14 Train the selected... TO DO
DP-15 model deployment & Integration
DP-16 As a system Adm... TO DO
DP-17 Deploy the traine... TO DO
DP-18 integrate it into a... TO DO
DP-19 Personalized Risk Assessment
DP-21 input my health ... TO DO
DP-20 Model Evaluation and Enhancem...
DP-22 evaluate the effe... TO DO
DP-23 enhance its perfo... TO DO
Create Epic
Today
Weeks
Months
Quarters