Project Planning Phase

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

Date	27–10 -2023
Team ID	Team - 592731
Project Name	Walmart Sale Analysis For Retail Industry with Machine Learning
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 project manager, I want to set up the development environment and configure the necessary infrastructure to commence the Walmart Sale Analysis project.	1	High	Akshara
Sprint-1	Data Collection	USN-2	As a data engineer, I want to gather and collate a comprehensive dataset of Walmart's historical sales data and	2	High	Akshara

			relevant parameters for training the machine learning model.			
Sprint-2	Data preprocessing	USN-3	Preprocess the collected dataset by cleaning, normalizing, and splitting it into training and validation sets to prepare it for analysis.	3	High	Akshara
Sprint-3	Model Development & Training	USN-4	Select the most suitable model for sales prediction and train the chosen machine learning model using the preprocessed Walmart sales dataset.	5	High	Chetan
Sprint-4	Model Deployment & Integration	USN-5	As a software developer, I want to deploy the trained machine learning model as a service or API and integrate it into a user-friendly interface	6	High	Chetan
Sprint-5	Personalized Risk Assessment	USN-6	As an individual, I want to utilize the developed model to forecast future sales trends and make informed decisions	1	Mediu m	Yogitha
Sprint-5	Model Evaluation and Enhancement	USN-7	These user stories represent the key phases and tasks involved in the project planning for Walmart Sale Analysis in the retail industry using machine learning. The team members and their responsibilities can be customized based on your project team's composition.	2	High	Yogitha

Project Tracker, Velocity and 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 Nov2023	6	4 Nov2023
Sprint-5	3	2 Days	5 Nov 2023	6 Nov 2023	3	6 Nov 2023

Velocity:

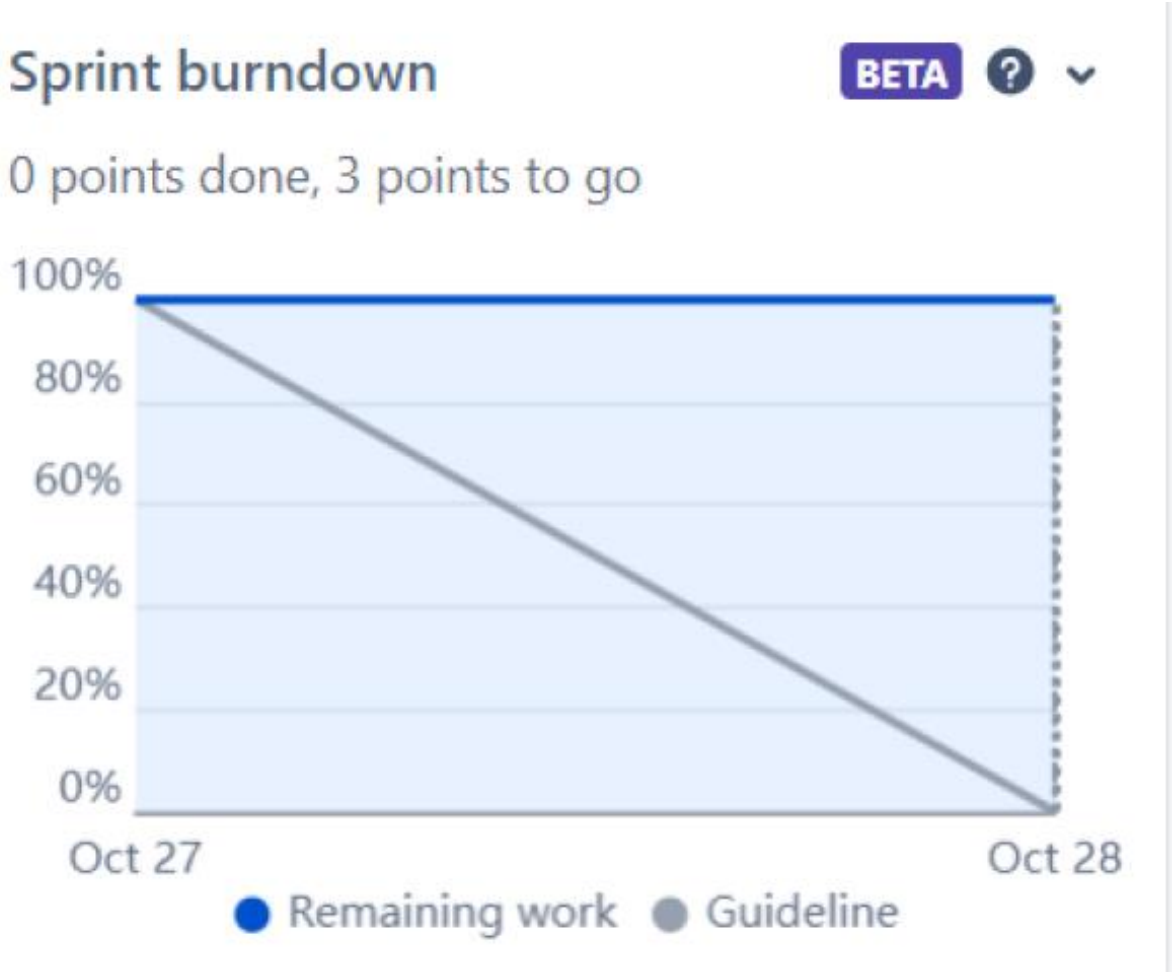
Imagine we have a 11-days sprint duration, and the velocity of the team is 3 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

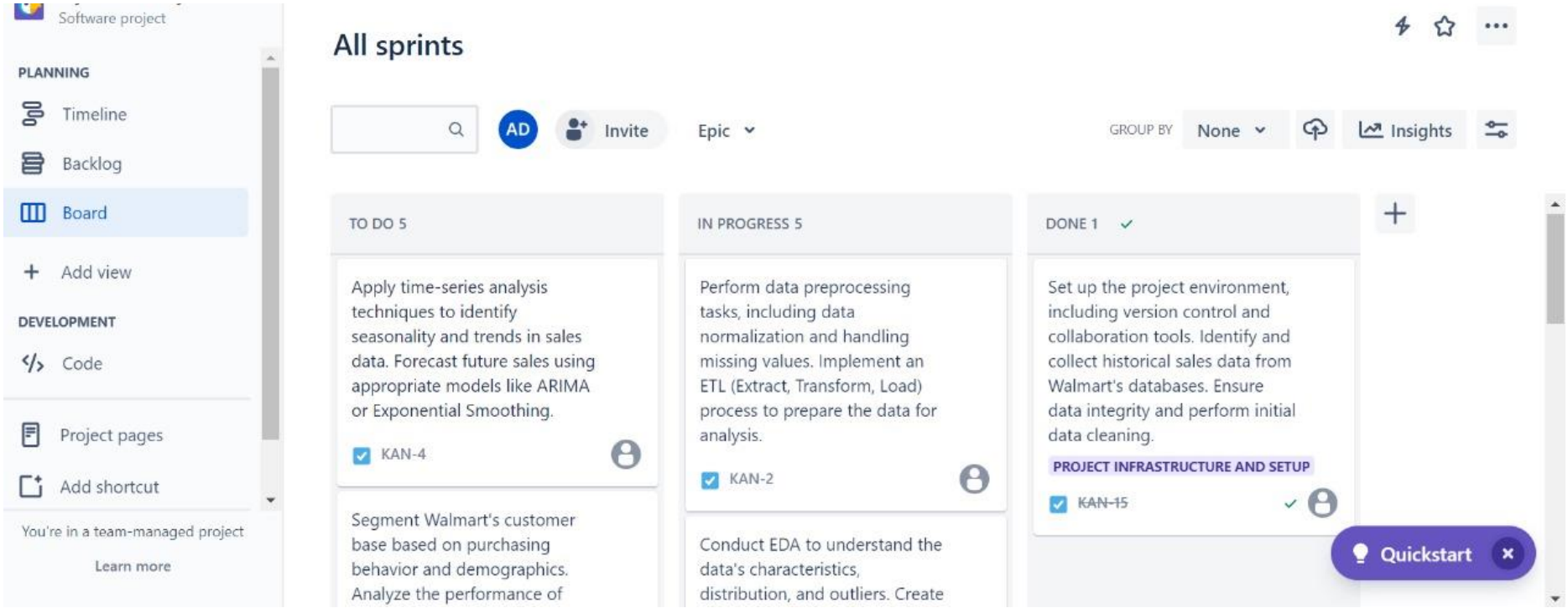
$$AV = \frac{sprint\ duration}{velocity}$$

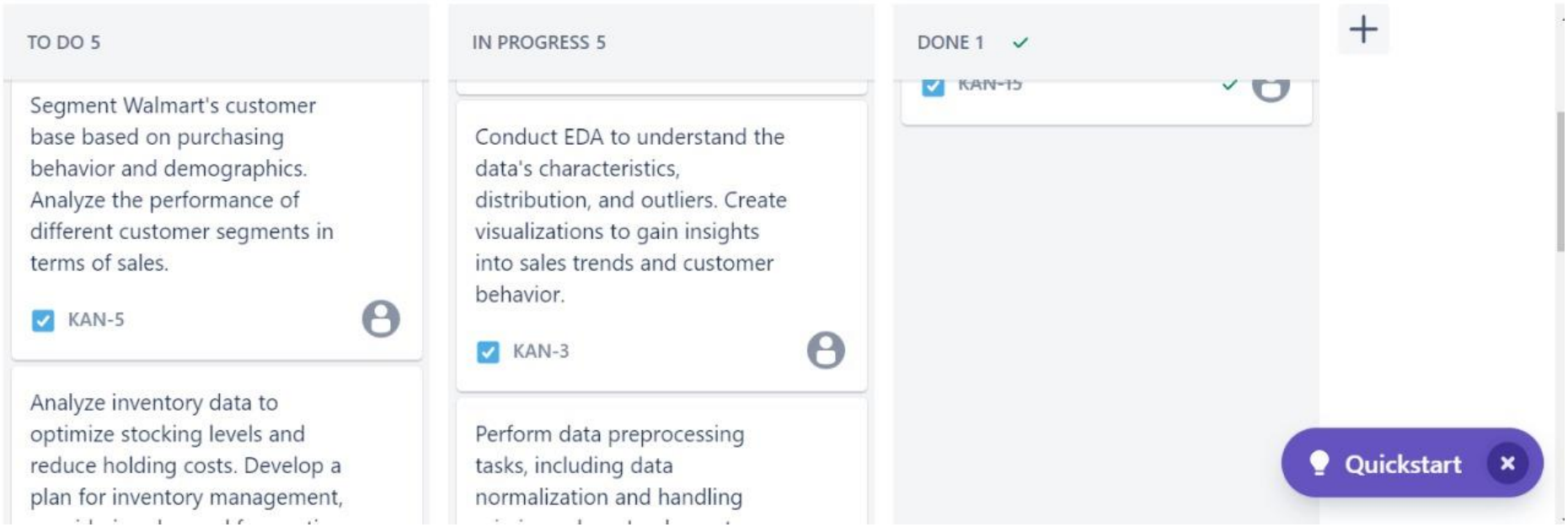
AV = 11/4 = 2.75

Burndown Chart:

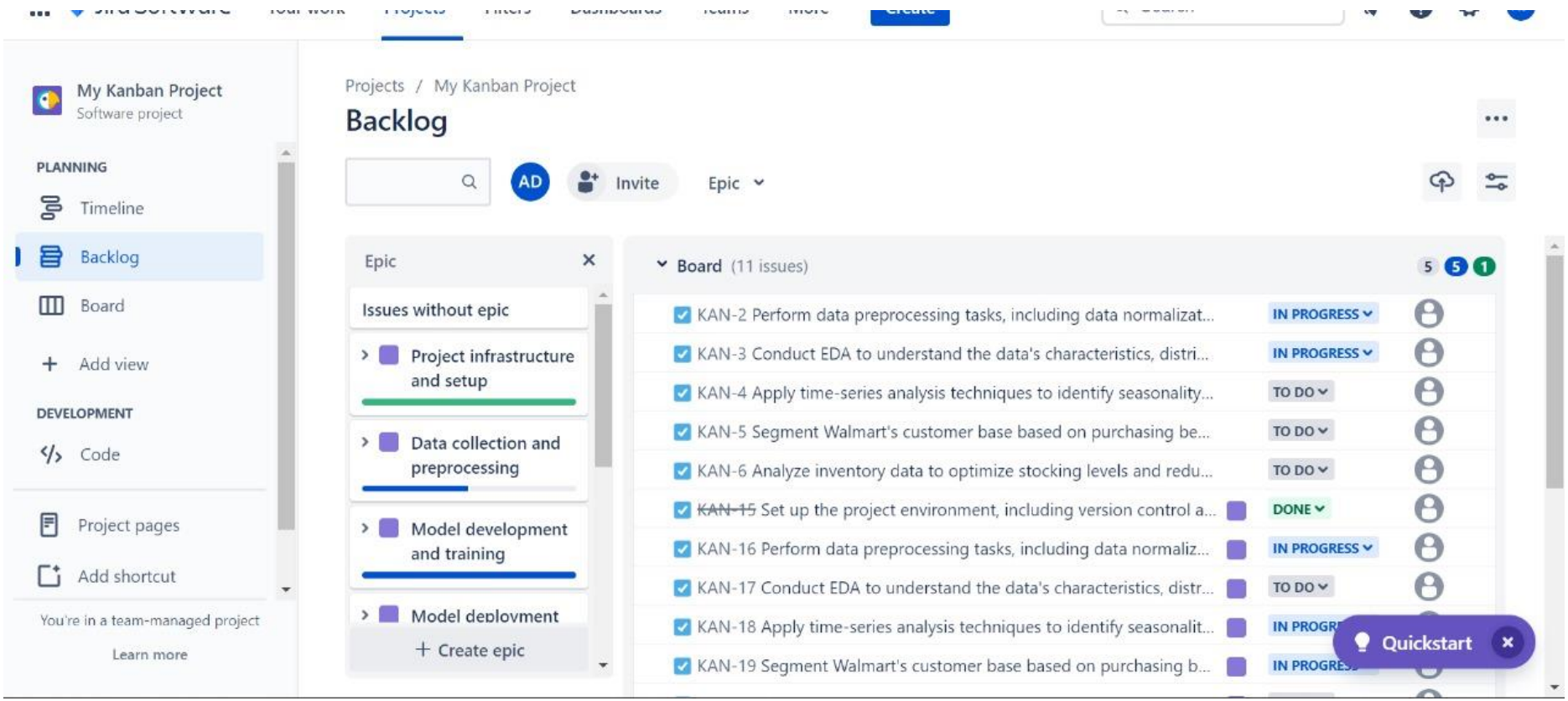


Board Section

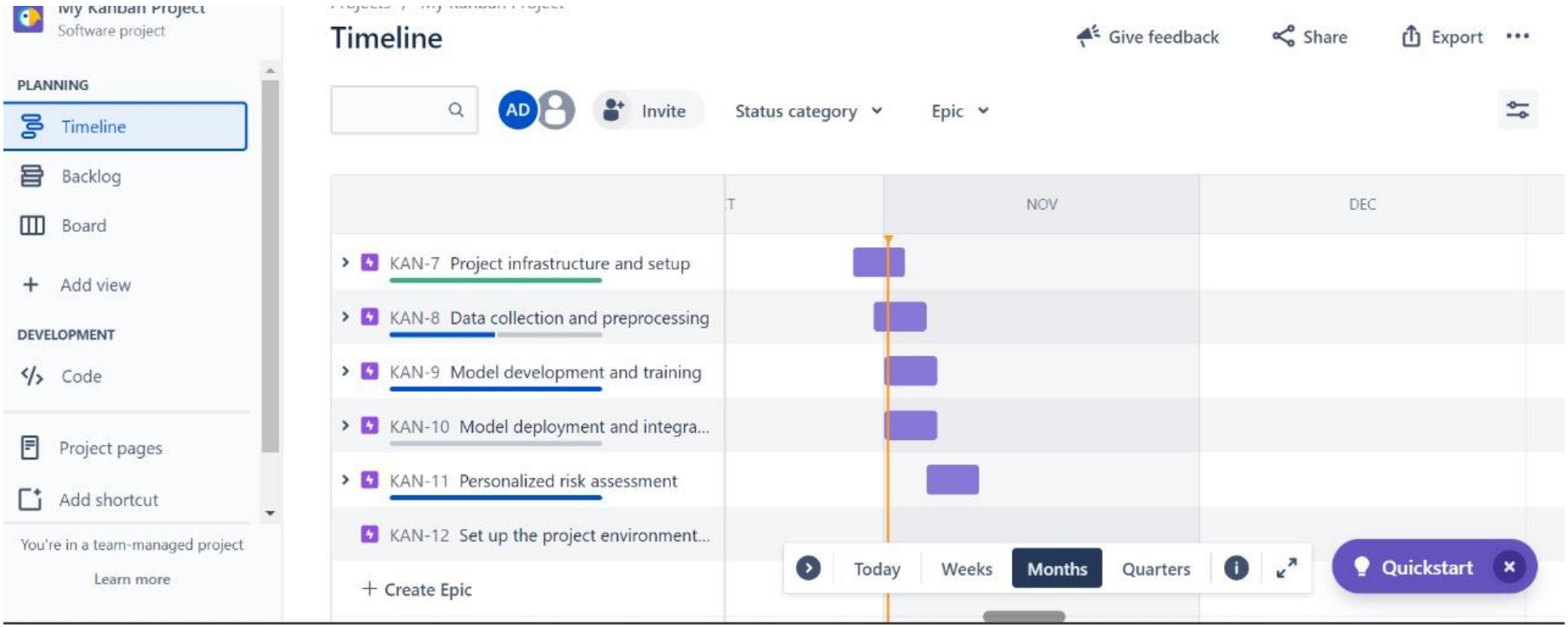


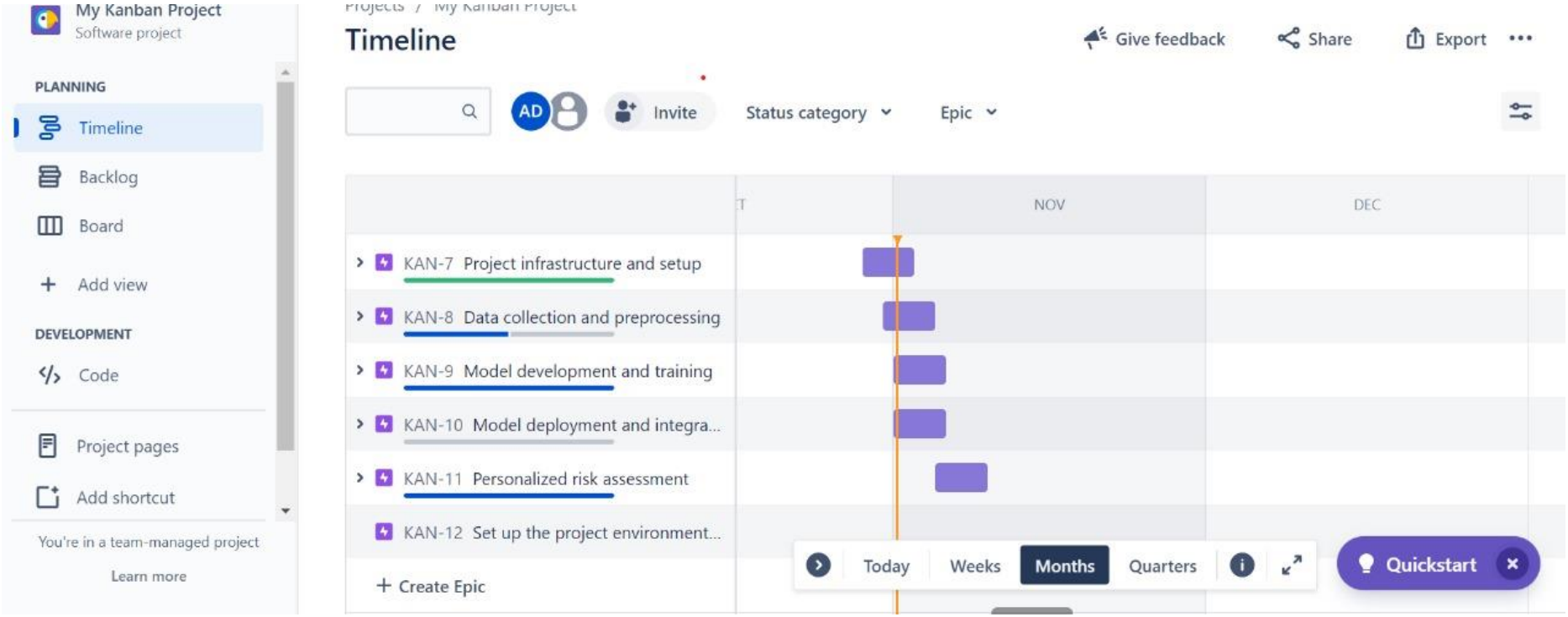

TO DO 5
Segment Walmart's customer base based on purchasing behavior and demographics. Analyze the performance of different customer segments in terms of sales.
KAN-5
Analyze inventory data to optimize stocking levels and reduce holding costs. Develop a plan for inventory management,
IN PROGRESS 5
Conduct EDA to understand the data's characteristics, distribution, and outliers. Create visualizations to gain insights into sales trends and customer behavior.
KAN-3
Perform data preprocessing tasks, including data normalization and handling
DONE 1
KAN-15
Quickstart

Backlog Section



Timeline Section




My Kanban Project
Software project
PLANNING
Timeline
Backlog
Board
Add view
DEVELOPMENT
Code
Project pages
Add shortcut
You're in a team-managed project
Learn more
Timeline
Give feedback
Share
Export
AD
Invite
Status category
Epic
NOV
DEC
KAN-7 Project infrastructure and setup
KAN-8 Data collection and preprocessing
KAN-9 Model development and training
KAN-10 Model deployment and integra...
KAN-11 Personalized risk assessment
KAN-12 Set up the project environment...
Create Epic
Today
Weeks
Months
Quarters
Quickstart