

## Project: GreenCart – Online Grocery Web Application

### Agile Planning – Sprint Logic

Epic:

Build a full-stack grocery shopping website with user-friendly design, cart functionality, and backend integration.

#### Definitions

Epic: A large functionality (e.g., user management, product browsing) that spans multiple sprints.

Story: A smaller unit of functionality that contributes to an epic.

Story Point: A measure of task effort, generally following the Fibonacci series (1, 2, 3, 5, 8...).

Sprint: A 5-day development cycle where a subset of stories is completed.

Velocity: Average story points completed per sprint.

#### Sprint 1 (5 Days) – Basic Frontend Setup & UI

Task	Story Points
Setup project structure (Angular)	1
Create landing page	2
Build product grid UI	3
Design header & navigation bar	2
Footer & contact info section	2
Responsive layout with Bootstrap	3

#### Sprint 2 (5 Days) – User Auth & Product Features

Task	Story Points
User login/signup (Angular + Node.js)	3
Add to cart functionality	2
Product detail page	3
Search/filter feature	2
Product category pages	3

#### Sprint 3 (5 Days) – Backend Integration

Task	Story Points
MongoDB schema & setup	2
REST API creation (Node.js)	3
Connect frontend with backend	3
Cart persistence in database	3
Product management (admin)	3

#### Sprint 4 (5 Days) – Final Touches & Deployment

Task	Story Points
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Dummy payment integration (e.g., Razorpay demo)	5
Order history & user profile	3
Testing and debugging	3
Hosting on alternative (e.g., Netlify, Firebase, or manual server)	2
Final documentation	2

## Summary

Sprint	Story Points
Sprint 1	13
Sprint 2	13
Sprint 3	14
Sprint 4	15

Total Story Points = 55

Number of Sprints = 4

Velocity =  $55 / 4 = 13.75$  Story Points/Sprint