**✅ Project Summary**

You are developing a **Twitter-style web application**, using:

* **Frontend**: React
* **Backend**: Node.js + MongoDB + Firebase Storage (Save Image)

**🎯 Main Features:**

* User registration and login
* Post tweets (max. 140 characters) with hashtags
* View tweets from followed users
* Follow and unfollow users
* Search tweets by hashtags
* User profile with bio and tweets
* Agile workflow (3 sprints, SCRUM, Kanban, daily stand-ups)
* Automated testing and CI in the final sprint

**🗓️ Project Sprint Plan**

**Each sprint is 1 calendar week (5 days).  
Estimated time per task uses:  
🟢 1 day · 🟡 2–3 days · 🔴 4–5 days**

# Sprint 1 – Setup and User Authentication - ***Start***

**🔧 Project Plan (3 person – 2 days)**

* Create Repository and Project Structure 🟡 (2 days)

**🔙 Backend (1 person – 4 days)**

* Set up project and MongoDB
* Create User Schema and Tweet Schema 🟢 (1 day)
* Create endpoints to hash passwords and provide token
* Create user registration endpoint with password hashing
* Create Endpoints to Get User Details and Get Tweets 🟢 (1 day)

**🎨 Frontend (2 people – 9 days)**

* Set up React project and routing 🟢 (1 day)
* Create login Page with validation 🟡 (3 days)
* Create register Page with validation 🟡 (3 days)
* Login Session and Navigate to Profile Page 🟢(1 day)
* Apply basic styles 🟢 (1 day)

**🛠️ Full Stack( 3 person – 2 days)**

* Implement private route protection after login🟢 (1 day)

# Sprint 2 – Tweets and Hashtags - ***Start***

**🔙 Backend (1 dev × 4 days)**

* Added populate to User and Tweet Endpoints 🟢 (1 day)
* Create Endpoint to Save a Tweet in DB 🟢 (1 day)
* Create Endpoint to Add Followers/Following
* Create Endpoint to Delete Followers/Following 🟢 (1 day)
* Create Endpoint to Search User and hashtag 🟢 (1 day)

**🎨 Frontend (2 devs × 5 days = 10 dev-days)**

* Create tweet form with character counter 🟢 (1 day)
* Show tweets in feed
* Highlight hashtags visually 🟢 (1 day)
* Add tweet section to ProfilePage and test with dummy data 🟡 (2 days)
* Add styles to profilepage 🟡 (2 days)
* Change styles from working.css to auth.css for LogIn, LoginPassword 🟢 (1 day)
* Add error to password and test with dummy data 🟢 (1 day)
* Create Homepage and style 🟡 (2 days)

**🛠️Full Stack( 3 person – 2 days)**

* Create Functions to get Username in Login Page 🟢 (1 day)

# Sprint 3 – Profiles and Follow System - ***Start***

**🔙 Backend (1 dev × 4 days)**

* Check Endpoint to Get Tweets by Username and Following 🟢 (1 day)
* Implement Multer in Backend to save profile and background images🟡 (2 days)

**🛠️Full Stack( 3 person – 2 days)**

* Create Functions to Validate Username & Password in LoginPassword Page
* Create Function to Create a New User in Signup Page 🟢 (1 day)
* Create Functions to Display Tweets in Home Page
* Create Functions to Display User Details in Profile Page 🟢 (1 day)
* Create Functions to Add Tweet and Comment in Home Page
* Create Functions to Add or Delete Following in Home Page
* Create Functions to Search User and hashtag in Home Page 🟢 (1 day)

# Sprint 4 – Profile Features and Integration Testing - ***Start***

**🔙 Backend (1 dev × 4 days)**

* Implement initial setup for SuperTest
* Create test functions for User endpoints 🟡 (2 days)

**🎨 Frontend (2 devs × 5 days = 10 dev-days)**

* Implement logout functionality 🟡 (2 days)

**🛠️Full Stack( 3 person – 2 days)**

* Implement logout functionality 🟡 (2 days)
* Create Functions to Save Images from the Frontend to the Backend 🟢 (1 day)
* Create and run an integration test in the Tweeter project 🟡 (2 days)