TWEET APP

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1   PROBLEM STATEMENT

Tweet App is SPA (Single Page App) for registered users to post new tweets, reply to tweets, like/unlike tweets.

Guest users cannot see any tweets.

The core modules of tweet app are:

1. User registration and login
2. Post tweet
3. View users/handles and their respective tweets

The scope includes developing the application using dot net as backend and for front end use angular.

2   PROPOSED TWEET APP WIREFRAME

1. UI needs improvisation and modification as per given use case.

2.

3   TWEET COMPONENT SKETCH

4 BUSINESS-REQUIREMENT:

As an application developer, develop frontend, middleware and deploy the Tweet App (Single Page App) with below guidelines:

User Story #	User Story Name	User Story

US_01	Registration and Login	As a user I should be able to login/Register in the tweet application
		
		Acceptance criteria:
		1. A logged-in user can reset their password so they can login, even if they forget their password.
		2. A logged-in user:
		   a. Cannot change their username.
		   b. Can logout from their account.
		3. As a user I should be able to furnish following details at the time of registration
		   a. First Name
		   b. Last Name
		   c. Email
		   d. Login Id
		   e. Password
		   f. Confirm Password
		   g. Contact Number
		4. All details fields must be mandatory
		5. Login Id and Email must be unique
		6. Password and Confirm Password must be same
		7. If any constraint is not satisfied, validation message must be shown

US_02	Post Tweet	As a user I should be able to post a tweet
		
		Acceptance criteria:
		   a. Tweet should not go beyond 144 characters.
		   b. Tweet can optionally be associated with a tag which should not go beyond 50 characters

US_03	View and Reply Tweet	As a user I should be able to view others tweet and reply to it.
		
		Acceptance criteria:
		   a. View others tweet and reply
		   b. Others tweet should display original tweet with all the reply
		   c. Tweet and reply must have user name and time of post displayed along.
		   d. Reply should not go beyond 144 characters
		   e. I should be optionally able to add a tag while replying

5 EXPECTED DELIVERABLES

5.1 REST API (PRODUCTS & FRAMEWORKS -> COMPUTE & INTEGRATION):

a. Use .Net Core API to version and implement the REST endpoints.

b. Implement HTTP methods like GET, POST, PUT, DELETE, PATCH to implement RESTful resources:

POST	/api/v1.0/tweets/register	Register as new user
GET	/api/v1.0/tweets/login	Login
GET	/api/v1.0/tweets/<username>/forgot	Forgot password
GET	/api/v1.0/tweets/all	Get all tweets
GET	/api/v1.0/tweets/users/all	Get all users
GET	/api/v/1.0/tweets/user/search/username*	Search by username
GET	/api/v1.0/tweets/username	Get all tweets of user
POST	/api/v1.0/tweets/<username>/add	Post new tweet
PUT	/api/v1.0/tweets/<username>/update/<id>	Update tweet
DELETE	/api/v1.0/tweets/<username>/delete/<id>	Delete tweet
PUT	/api/v1.0/tweets/<username>/like/<id>	Like tweet
POST	/api/v1.0/tweets/<username>/reply/<id>	Reply to tweet

c. ***username may be partial or complete username**

d. Use necessary configuration in place for REST API in application.json

e. Use constructor-based dependency injection

f. Follow Rest API Naming Conventions

g. Document REST endpoints with Swagger

5.2 DATABASE (PRODUCTS & FRAMEWORKS -> DATABASE & STORAGE):

1. As an application developer:

   a. Implement ORM with .Net Core Data

   b. Have necessary configuration in place for REST API in application .Net Core based configuration

6 PLATFORM

Use above Business Requirements to implement the below.

1. Use Azure to deploy application on cloud.
2. Use Azure SQL Server as a database for the Application.
3. Use Azure Functions and DB to build a backend process for handling requests for Tweet App.
4. Use Azure Service to send email to company after stock is listed.

Note: Minimum 2APIs (UI+Backend) to be hosted in cloud