We want to create a twitter-like app where users can write small messages (250 words max) and can post for public viewing. The message is called **post**and the app name is called **postcard**. The app needs a backend rest API which can be consumed by its front-end UI (mobile/web etc.). So we need to create REST APIs for the postcard application.

**Stories**

* As a logged-in user, I can create/delete a new post with a max length of 250 chars.
* As a logged-in user, I can follow other users.
* As a logged-in user, I can give star to other users' posts.
* As a logged-in user, I can query [only my posts] based on the time period like the latest 10 posts, all posts, or posts that are stared by other users.
* As a logged-in user, I can query the top 10 public posts from the users I followed, based on date/most stared
* As an anonymous user (not logged in), I can query/search post by user / #tag

**Tech Stack**

Programming Language: **Java/Golang/Ruby/Python**

DB: **Sqlite3/MySQL/PostgreSQL/Any Other DB**

Build Pipeline: **Travis-CI/Jenkins/Any Other Tool**

Code Repo: **Github/Any Other Code Mgmt Tool**

**Additional Considerations**

1. The code development should follow the **CI-CD** process with the build pipeline
2. There should be unit and integration tests with appropriate code coverage
3. There are around 3.5 hours to finish the complete requirement, so be quick

**Timeline**

Duration: **3 Hrs (Maximum)**

Question By company

No need to create complete project first left start with the step by step,

**How you will design Database depends on the above API.**

**Then after that tell me the api format with request and response details**

For hint you can check my answer down

---------DB structure-----

post msg

I am in #interview at #Dell #DellEMC

#Dell is one of my #Dream #Company.

post\_id: 123

tag: interview, Dell, DellEMC, Dream, Company

user

user\_id

user\_name

user\_post:

post\_id

user\_id

post\_msg(max 250)

created\_date\_time

user\_follow

user\_id

follow\_user\_id

tags

tag\_id

tag\_name

tag\_post\_mapping

tag\_id

post\_id

star

post\_id

user\_id

---------API Design-----

As a logged-in user, I can create/delete a new post with a max length of 250 chars.

For Create new Post

API URl: https://postcart/post

Method Call: Post

Request Payload:

{

"postMsg": "I am in #interview at #Dell #DellEMC

#Dell is one of my #Dream #Company."

}

Response:

{

"post\_id": 12,

"postMsg": "I am in #interview at #Dell #DellEMC

#Dell is one of my #Dream #Company.",

"created\_date\_time": "08-oct-2021 .."

}

As an anonymous user (not logged in), I can query/search post by user / #tag

API URl: https://postcart/search-post/"prateek #Dell #Interview ram"

API URl: https://postcart/search-post/name\_tag

Method Call: Get

Request Payload:

Response:

{

[

"post\_id": 12,

"postMsg": "I am in #interview at #Dell #DellEMC

#Dell is one of my #Dream #Company.",

"created\_date\_time": "08-oct-2021 .."

],

[

"post\_id": 12,

"postMsg": "I am in #interview at #Dell #DellEMC

#Dell is one of my #Dream #Company.",

"created\_date\_time": "08-oct-2021 .."

]

}