

Task | Instagram Backend API

The task is to develop a basic version of alnstagram. You are only required to develop the API for the system. Below are the details.

You are required to Design and Develop an HTTP JSON API capable of the following operations,

- Create an User
 - Should be a POST request
 - Use JSON request body
 - URL should be '/users'
- Get a user using id
 - Should be a GET request
 - o Id should be in the url parameter
 - URL should be '/users/<id here>'
- Create a Post
 - Should be a POST request
 - Use JSON request body
 - URL should be '/posts'
- Get a post using id
 - Should be a GET request
 - o Id should be in the url parameter
 - URL should be '/posts/<id here>'
- List all posts of a user
 - Should be a GET request
 - URL should be '/posts/users/<ld here>'

Additional Constraints/Requirements:

- The API should be developed using <u>Go.</u>
- MongoDB should be used for storage.
- Only packages/libraries listed here and here can be used.

Scoring:

- Completion Percentage
 - No. of working endpoints among the ones listed above.
- Quality of Code
 - Reusability
 - o Consistency in naming variables, methods, functions, types
 - o Idiomatic i.e. in Go's style
- Passwords should be securely stored such they can't be reverse engineered
- Make the server thread safe
- Add <u>pagination</u> to the list endpoint
- Add <u>unit tests</u>



Resources:

- Completing the <u>Golang tour</u> should give one a good grip over the language. Do this well and you will complete the task with ease.
- This **book** covers both the workings of web and Go based servers.

Users should have the following attributes

- Id
- Name
- Email
- Password

Posts should have the following Attributes. All fields are mandatory unless marked optional:

- Id
- Caption
- Image URL
- Posted Timestamp

Task Submission: https://bit.ly/vittechtasksub1

Discord Link: https://discord.gg/pGQ5Huve3J

Deadline: 9th Oct'21, Saturday 11:59 PM (Midnight)