Insider Assessment Project

We are seeking the design of an automatic message sending system for this project.

Project Description:

In this project, you are tasked with developing a system that automatically sends **2 messages** retrieved from the database, which have not yet been sent, **every 2 minutes**, as illustrated in the CURL request provided below.

Requirements:

- Retrieve **message content**, **recipient phone number**, and **sending status** for each record from the Database. Character limit is required for message content.
- Upon project deployment, automatic message sending should -start, processing all unsent records in the database.
- Messages that have been sent once should not be resent. Newly added records should be sent in the subsequent automatic process.
- **(Bonus Item)** - After sending a message, cache to Redis the **messageId** value received from the response along with the sending time.

Additional Details:

- The project should feature 2 separate API endpoints:
  - Start/Stop automatic message sending
  - Retrieve a list of sent messages
- An example webhook.site has been provided with the Response value for tracking the sent requests.
  Example webhook.site (If the provided link is inactive, you may create your own or seek assistance.)

Things to consider;

- Utilize Golang for development. Do not use any cron package or access the Linux crontab command. We expect you to implement this yourself using Go
- API requests and responses should be documented using swagger.io.
- Include a README.md file for installation or configuration (e.g., docker commands).
- Host your code on GitHub or Bitbucket.

Evaluation Criteria:

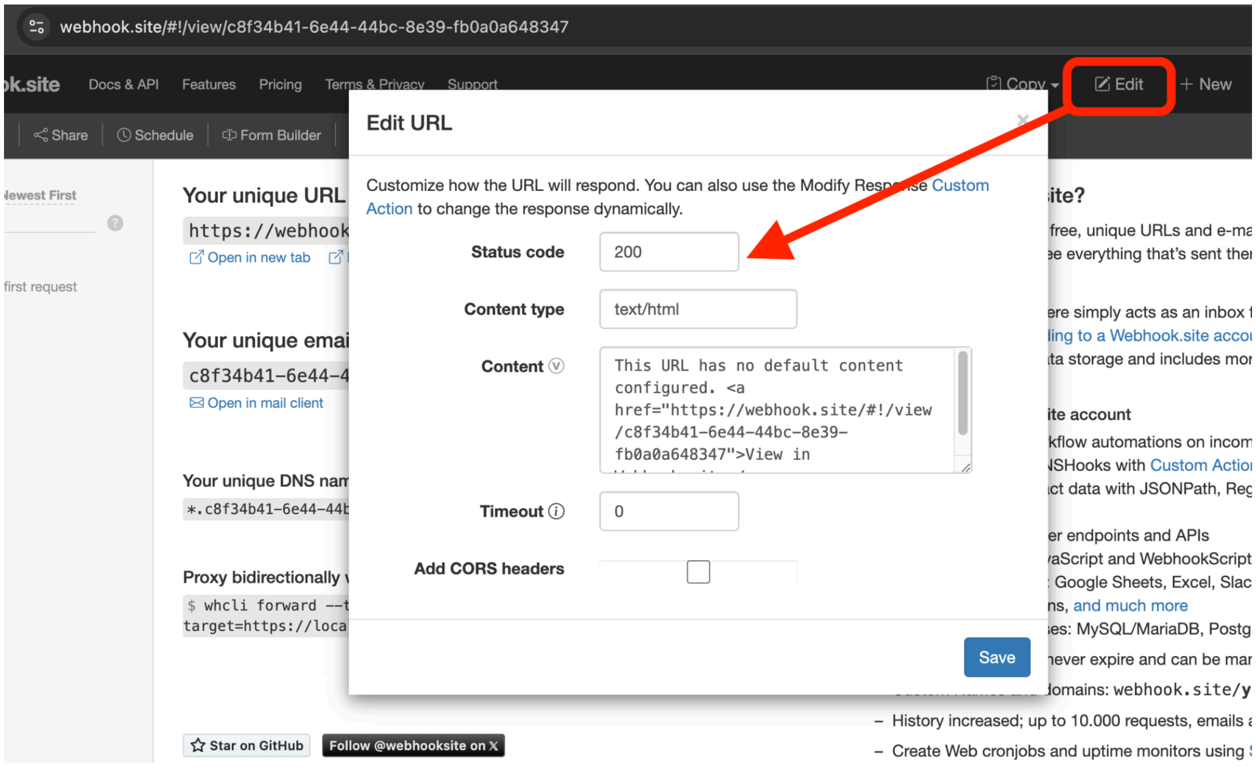
- Architecture / Design patterns / Code Structure
- Code quality / Readability / Consistency / Clean code
- Database/table designs / (Bonus) Redis usage

- The app should work as expected

Webhook.site Request Payload

```
curl --location 'https://webhook.site/c3f13233-1ed4-429e-9649-8133b3b9c9cd' \
--header 'Content-Type: application/json' \
--header 'x-ins-auth-key: INS.me1x9uMcyYGlhKKQVPoc.bO3j9aZwRTOcA2Ywo' \
--data '{
    "to": "+905551111111",
    "content": "Insider - Project"
}'
```

The webhook.site URL given in the curl example is a sample URL. You can create your own webhook URL via webhook.site. You can set the http response code and body of your webhook as shown in the screenshot.



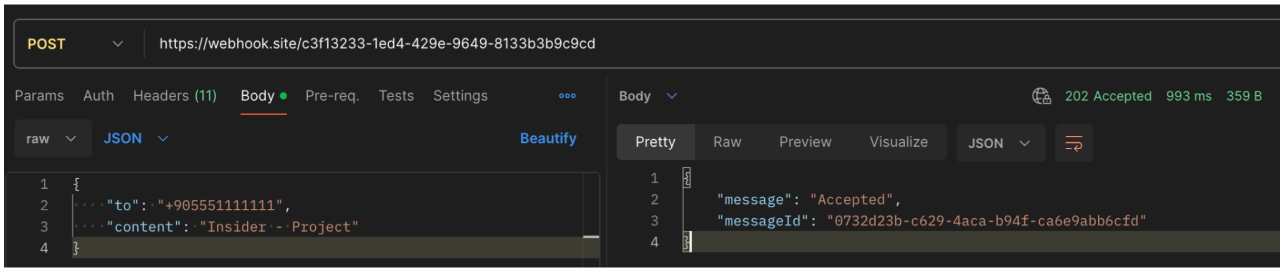
Edit URL

Customize how the URL will respond. You can also use the Modify Response Custom Action to change the response dynamically.

Status code	200
Content type	text/html
Content	This URL has no default content configured. <a href="https://webhook.site/#!/view/c8f34b41-6e44-44bc-8e39-fb0a0a648347">View in
Timeout	0
Add CORS headers	☐

Save

Post and Response example screenshot



https://webhook.site/c3f13233-1ed4-429e-9649-8133b3b9c9cd

```
{
    "to": "+905551111111",
    "content": "Insider - Project"
}
```

```
{
    "message": "Accepted",
    "messageId": "0732d23b-c629-4aca-b94f-ca6e9abb6cfd"
}
```

Return Value Example

Code:
202

Message:

```
{
   "message": "Accepted",
   "messageId": "67f2f8a8-ea58-4ed0-a6f9-ff217df4d849"
}
```