# **Project Git issues filtered by label**

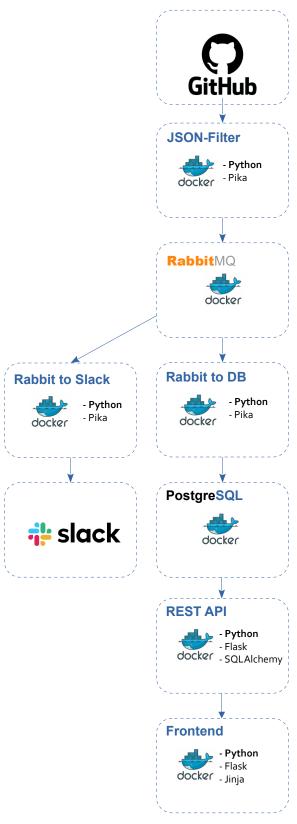
#### Project goal:

Git "Issues" filter by label and output to web site and messenger

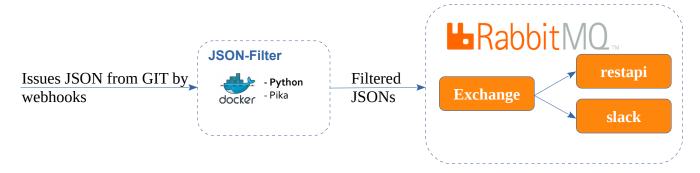
#### **Technical requirement:**

- The project should consist of microservices that run on the same server as service.
- Technology stack:
  - GitHub;
  - Python;
  - Flask (Pika, SQLAlchemy, Jinja);
  - PostgreSQL;
  - RabbitMQ;
  - Docker;
  - CentOS;
  - Ansible;
  - Google Cloud Platform.

## **Structural scheme:**



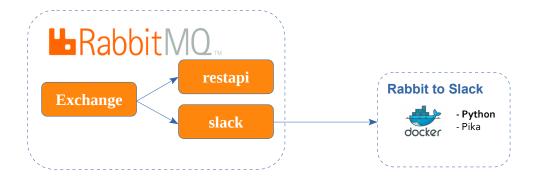
### **Block interaction between the JSON Filter and RabbitMQ**



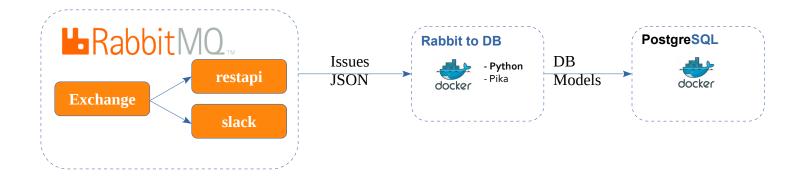
#### JSON data that is generated in the JSON-Filter and transmitted to the RabbitMQ

```
{"action": "opened",
  "issue": {
     "html_url": "https://github.com/Mary1509/Practice3/issues/8",
                                                                                   "action": "labeled",
     "id": 952053779,
                                                                                   "issue": {
     "number": 8,
                                                                                     "id": 952053779,
    "state": "open",
"title": "oop",
                                                                                     "state": "closed",
                                                                                     "user": {
     "body": "kkk",
                                                                                        "login": "Mary1509",
     "user": {
                                                                                        "html_url": "https://github.com/Mary1509",
       "login": "Mary1509",
                                                                                        "avatar_url": "https://avatars.githubusercontent.com/u/54399719?
       "html_url": "https://github.com/Mary1509",
       "avatar_url": "https://avatars.githubusercontent.com/u/54399719?
                                                                                      "data": "2021-07-19T19:26:36Z"
    },
     "labels": [
                                                                                }
          "name": "bug"
          "name": "duplicate"
         "name": "invalid"
       },
         "name": "question"
     "data": "2021-07-19T19:26:36Z",
     "repository": {
       "name": "Practice3",
       "html_url": "https://github.com/Mary1509/Practice3"
  }
}
```

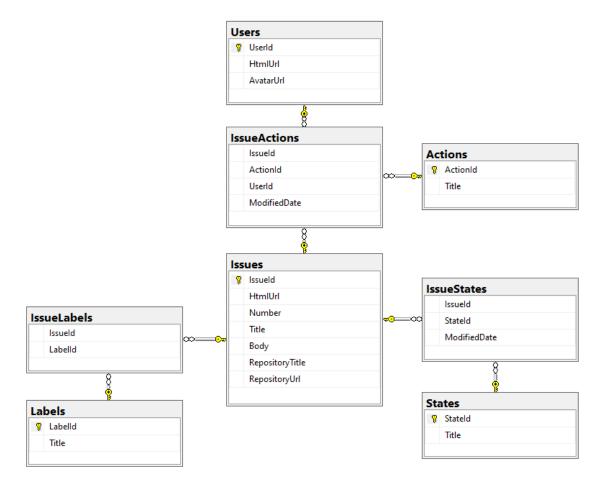
# **Block interaction between the RabbitMQ and Rabbit to Slack**



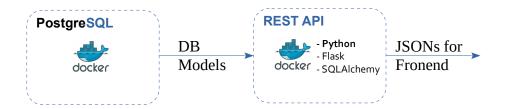
# Block interaction between the RabbitMQ, Rabbit to DB and PostgreSQL



# **Database Diagram**



# **Block interaction between the PostgreSQL and REST API**



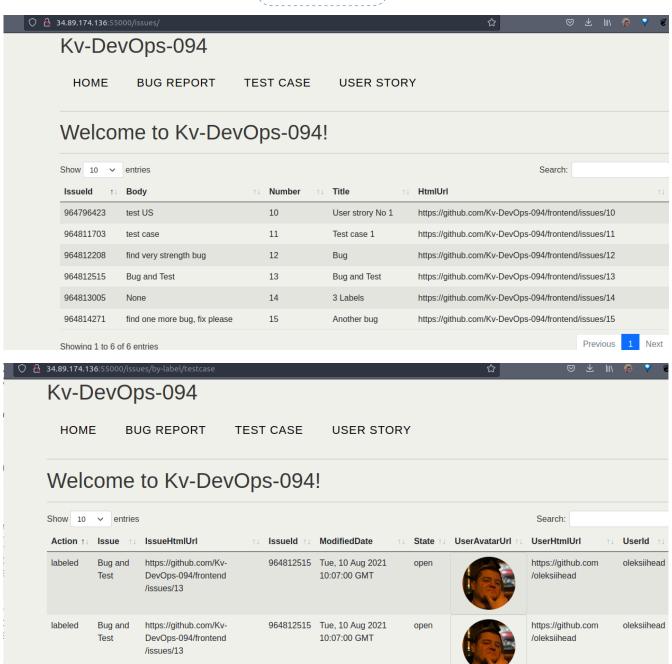
#### Examples of requests and JSON that are returned.

```
GET - /issues/by-label/<label> - Get issues by label
http://127.0.0.1:5000/issues/by-label/Bug%20report
  "Action": "opened",
  "Issue": "Third issue title",
  "IssueHtmlUrl": "https://github.com/Mary1509/Practice3/issues/3",
  "IssueId": 944298295,
  "ModifiedDate": "Wed, 14 Jul 2021 09:03:03 GMT",
  "State": "open",
  "UserAvatarUrl": "https://avatars.githubusercontent.com/u/54399719?
v=4",
  "UserHtmlUrl": "https://github.com/Mary1509",
  "UserId": "Mary1509"
GET - /issues/ - Get all issues
http://127.0.0.1:5000/issues/
  "Body": "Comment here",
  "HtmlUrl": "https://github.com/Mary1509/Practice3/issues/3",
  "IssueId": 944298295,
  "Number": 3,
  "Title": "Third issue title"
 },
GET - /issues/by-id/<int:id> - Get issues by id
http://127.0.0.1:5000/issues/by-id/944298295
  "Action": "opened",
  "Issue": "Third issue title",
  "IssueHtmlUrl": "https://github.com/Mary1509/Practice3/issues/3",
  "IssueId": 944298295,
  "ModifiedDate": "Wed, 14 Jul 2021 09:03:03 GMT",
  "State": "open",
  "UserAvatarUrl": "https://avatars.githubusercontent.com/u/54399719?
```

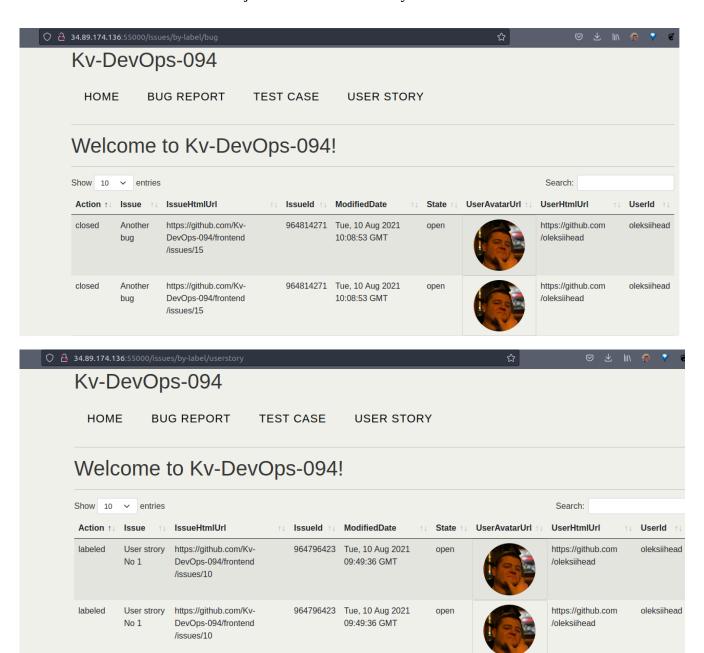
```
"UserHtmlUrl": "https://github.com/Mary1509",
  "UserId": "Mary1509"
 },
GET - /labels/ - Get all labels
http://127.0.0.1:5000/labels/
  "LabelId": 1.
  "Title": "User story"
 },
GET - /states/ - Get all states
http://127.0.0.1:5000/states/
  "StateId": 1,
  "Title": "open"
GET - /actions/ - Get all actions
http://127.0.0.1:5000/actions/
  "ActionId": 1,
  "Title": "opened"
 },
GET - /users/ - Get all users
http://127.0.0.1:5000/users/
 {
    "AvatarUrl": "https://avatars.githubusercontent.com/u/54399719?v=4",
  "HtmlUrl": "https://github.com/Mary1509",
"UserId": "Mary1509"
```

#### **Frontend**





Project: Git issues filtered by label



Project: Git issues filtered by label

## **Infrastructure**

The infrastructure consists of one GSP Instance (e2-micro) with CentOS. Docker containers are loaded from DockerHub and run as services.

