

# Task2.2

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## 환경

- Ubuntu

Description: Ubuntu 22.04.1 LTS

Release: 22.04

Codename: jammy

- node: v18.12.1

- minikube version: v1.27.1

## 구현 방법

### 코드 수정

- example-voting-app-task2.2 directory를 기준으로 한다.
- task2.1의 코드를 기반으로 수정했다.
- 투표항목에 both와 none을 추가하여 vote, result 부분을 수정하였다.

### vote

- votoe/app.py 를 수정했다.

```
option_a = os.getenv('OPTION_A', "Cats")
option_b = os.getenv('OPTION_B', "Dogs")
# added to handle both and none
```

```

option_c = os.getenv('OPTION_C', "Both")
option_d = os.getenv('OPTION_D', "None")

# edited in hello function
resp = make_response(render_template(
    'index.html',
    option_a=option_a,
    option_b=option_b,
    option_c=option_c,
    option_d=option_d,
    hostname=hostname,
    vote=vote,
))

```

- vote/index.html 을 수정했다.

```

<body>
  <div id="content-container">
    <div id="content-container-center">
      <h3>{{option_a}} vs {{option_b}} vs {{option_c}} vs {{option_d}}!</h3>
      <form id="choice" name='form' method="POST" action="/">
        <button id="a" type="submit" name="vote" class="a" value="a">{{option_a}}</button>
        <button id="b" type="submit" name="vote" class="b" value="b">{{option_b}}</button>
        <button id="c" type="submit" name="vote" class="c" value="c">{{option_c}}</button>
        <button id="d" type="submit" name="vote" class="d" value="d">{{option_d}}</button>
      </form>
      <div id="tip">
        (Tip: you can change your vote)
      </div>
      <div id="hostname">
        Processed by container ID {{hostname}}
      </div>
    </div>
  </div>
  <script src="http://code.jquery.com/jquery-latest.min.js" type="text/javascript"></script>
  <script src="//cdnjs.cloudflare.com/ajax/libs/jquery-cookie/1.4.1/jquery.cookie.js"></script>

  {% if vote %}
  <script>
    var vote = "{{vote}}";

    if (vote == "a") {
      $(".a").prop('disabled', true);
      $(".a").html('{{option_a}} <i class="fa fa-check-circle"></i>');
      $(".b").css('opacity', '0.5');
      $(".c").css('opacity', '0.5');
      $(".d").css('opacity', '0.5');
    }
    if (vote == "b") {
      $(".b").prop('disabled', true);
      $(".b").html('{{option_b}} <i class="fa fa-check-circle"></i>');
      $(".a").css('opacity', '0.5');
      $(".c").css('opacity', '0.5');
      $(".d").css('opacity', '0.5');
    }
    if (vote == "c") {
      $(".c").prop('disabled', true);
      $(".c").html('{{option_c}} <i class="fa fa-check-circle"></i>');
      $(".a").css('opacity', '0.5');
      $(".b").css('opacity', '0.5');
      $(".d").css('opacity', '0.5');
    }
  
```

```

} if (vote == "d") {
    $(".d").prop('disabled', true);
    $(".d").html('{{option_d}} <i class="fa fa-check-circle"></i>');
    $(".a").css('opacity', '0.5');
    $(".b").css('opacity', '0.5');
    $(".c").css('opacity', '0.5');
}
</script>
{% endif %}
</body>

```

- 위와 같이 option c, option d에 대한 부분을 추가하였다. 또한 기존의 option a, option b에 대한 부분에 c, d를 추가하였다.
- style.css도 수정하였으나 생략하겠다.

## result

- result/views/app.js를 아래와 같이 수정했다.

```

var app = angular.module('catsvsdogs', []);
var socket = io.connect({ transports: ['polling'] });

var bg1 = document.getElementById('background-stats-1');
var bg2 = document.getElementById('background-stats-2');
var bg3 = document.getElementById('background-stats-3');
var bg4 = document.getElementById('background-stats-4');

app.controller('statsCtrl', function ($scope) {
    $scope.aPercent = 25;
    $scope.bPercent = 25;
    $scope.cPercent = 25;
    $scope.dPercent = 25;

    var updateScores = function () {
        socket.on('scores', function (json) {
            data = JSON.parse(json);
            var a = parseInt(data.a || 0);
            var b = parseInt(data.b || 0);
            var c = parseInt(data.c || 0);
            var d = parseInt(data.d || 0);
            let period_data = data.period;

            var percentages = getPercentages(a, b, c, d);

            bg1.style.width = percentages.a + "%";
            bg2.style.width = percentages.b + "%";
            bg3.style.width = percentages.c + "%";
            bg4.style.width = percentages.d + "%";

            $scope.$apply(function () {
                $scope.aPercent = percentages.a;
                $scope.bPercent = percentages.b;
                $scope.cPercent = percentages.c;
                $scope.dPercent = percentages.d;
                $scope.total = a + b + c + d;
                $scope.period = period_data;
            });
        });
    };
});

```

```

var init = function () {
    document.body.style.opacity = 1;
    updateScores();
};

socket.on('message', function (data) {
    init();
});

function getPercentages(a, b, c, d) {
    var result = {};
    let tem;
    if (a + b + c + d > 0) {
        result.a = Math.round(a / (a + b + c + d) * 100);
        tem = 100 - result.a;
        result.b = Math.round(b / (a + b + c + d) * 100);
        tem -= result.b;
        result.c = Math.round(c / (a + b + c + d) * 100);
        result.d = tem - result.c;
    } else {
        result.a = result.b = result.c = result.d = 25;
    }

    return result;
}

```

- 추가된 항목들의 배경색을 설정하고, updateScores 함수에서 data 갯수를 불러오며, 각 변수에 해당 항목의 투표 건수를 기록한다.
- getPercentages 함수도 평균을 구하도록 다시 설정했다.
- result/views/index.html을 수정했다.
  - 추가된 항목들에 맞게 Both와 None을 추가하고, 적절한 divdier를 통해 항목들을 구분하게 설정했다.

## K8s image 생성 및 push

```

# in example-voting-app-task2.2 dir
$ docker login
hkyeo98
${password}
$ docker build ./result -t example-voting-app-result-task2.2
$ docker tag example-voting-app-result-task2.2:latest kyuber/example-voting-app-result-task2.2
$ docker push kyuber/example-voting-app-result-task2.2

$ docker build ./vote -t example-voting-app-vote-task2.2
$ docker tag example-voting-app-vote-task2.2:latest kyuber/example-voting-app-vote-task2.2
$ docker push kyuber/example-voting-app-vote-task2.1

$ docker build ./worker -t example-voting-app-worker-task2.2
$ docker tag example-voting-app-worker-task2.2:latest kyuber/example-voting-app-worker-task2.2
$ docker push kyuber/example-voting-app-worker-task2.2

```

## vote-deployment.yaml 적용

```
# vote-deployment.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  labels:
    app: vote
  name: vote
  namespace: vote
spec:
  replicas: 1
  selector:
    matchLabels:
      app: vote
  template:
    metadata:
      labels:
        app: vote
    spec:
      containers:
        - image: kyuber/example-voting-app-vote-task2.2:latest
          name: vote
          ports:
            - containerPort: 80
              name: vote
```

## result-deployment.yaml 적용

```
apiVersion: apps/v1
kind: Deployment
metadata:
  labels:
    app: result
  name: result
  namespace: vote
spec:
  replicas: 1
  selector:
    matchLabels:
      app: result
  template:
    metadata:
      labels:
        app: result
    spec:
      containers:
        - image: kyuber/example-voting-app-result-task2.2
          name: result
          ports:
            - containerPort: 80
              name: result
```

## worker-deployment.yaml 적용

```
apiVersion: apps/v1
kind: Deployment
metadata:
```

```

labels:
  app: worker
  name: worker
  namespace: vote
spec:
  replicas: 1
  selector:
    matchLabels:
      app: worker
  template:
    metadata:
      labels:
        app: worker
    spec:
      containers:
        - image: kyuber/example-voting-app-worker-task2.2
          name: worker

```

## 실행 방식

### kubernetes

```

# in example-voting-app-task2.2 dir
$ kubectl create namespace vote
$ kubectl create -f k8s-specifications/

# vote url. enter below address to browser to see the vote ui.
$ minikube service -n vote vote --url
http://192.168.49.2:31000

# result url.
$ minikube service -n vote result --url
http://192.168.49.2:31001

# to use period thing, should enter below urls in browser.
http://192.168.49.2:31001/period?period=5m
http://192.168.49.2:31001/period?period=1h
http://192.168.49.2:31001/period?period=1d

```

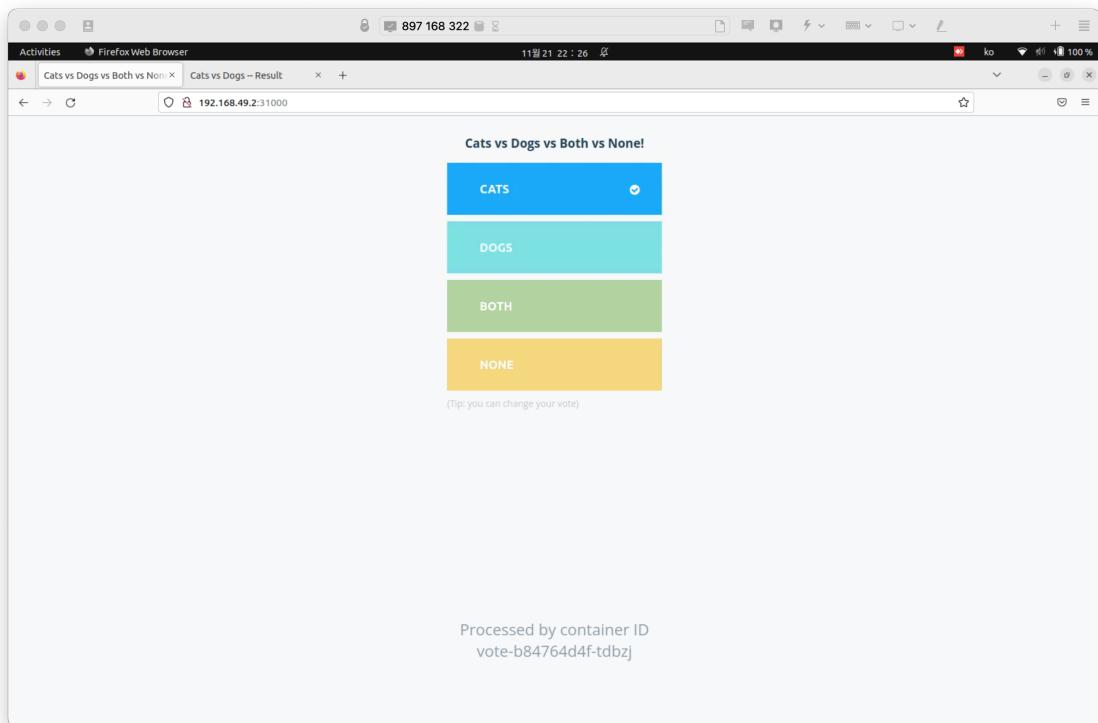
## 실행 결과

### kubernetes

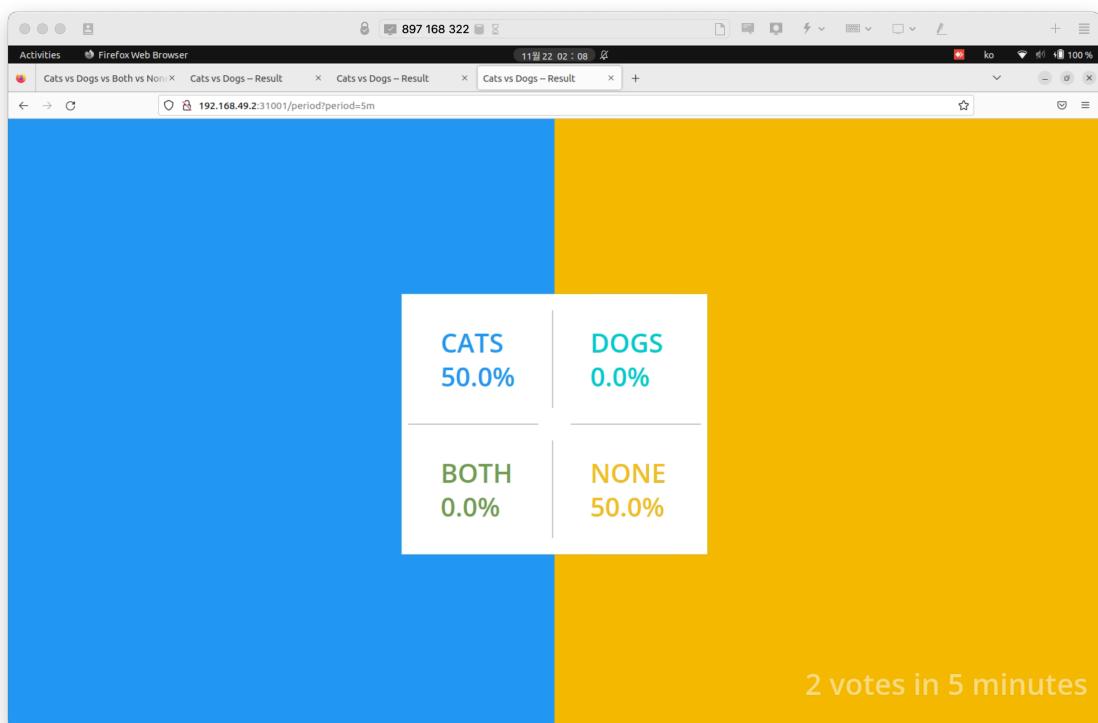
- 시간차를 두고 투표를 진행했다고 가정.

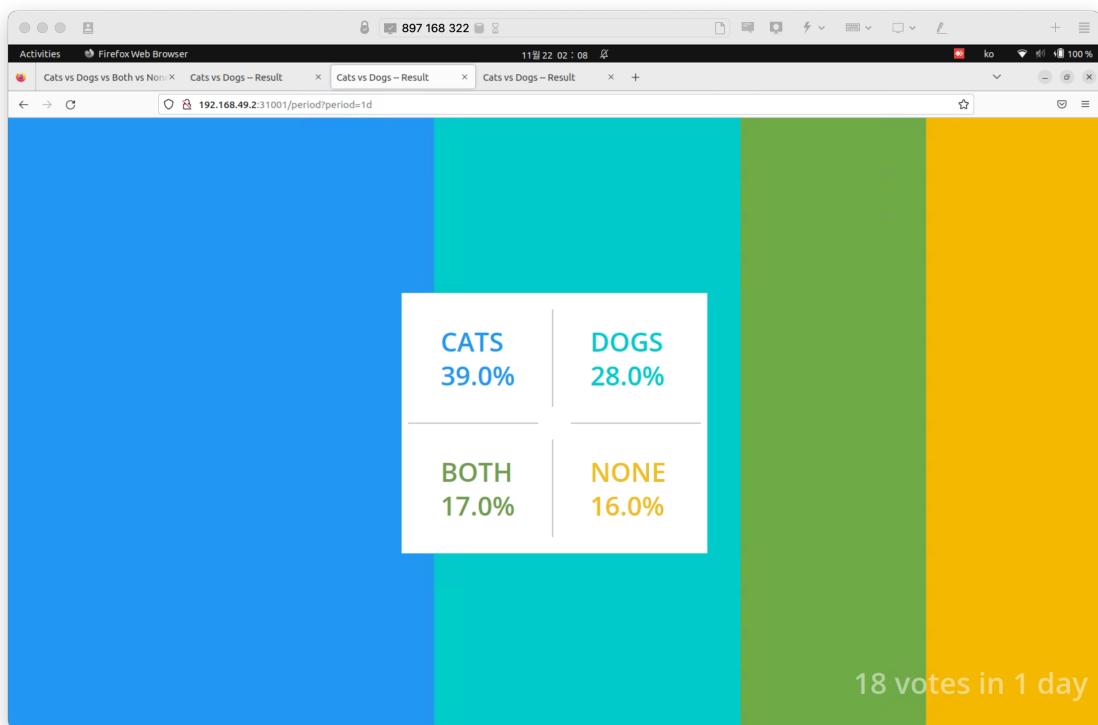
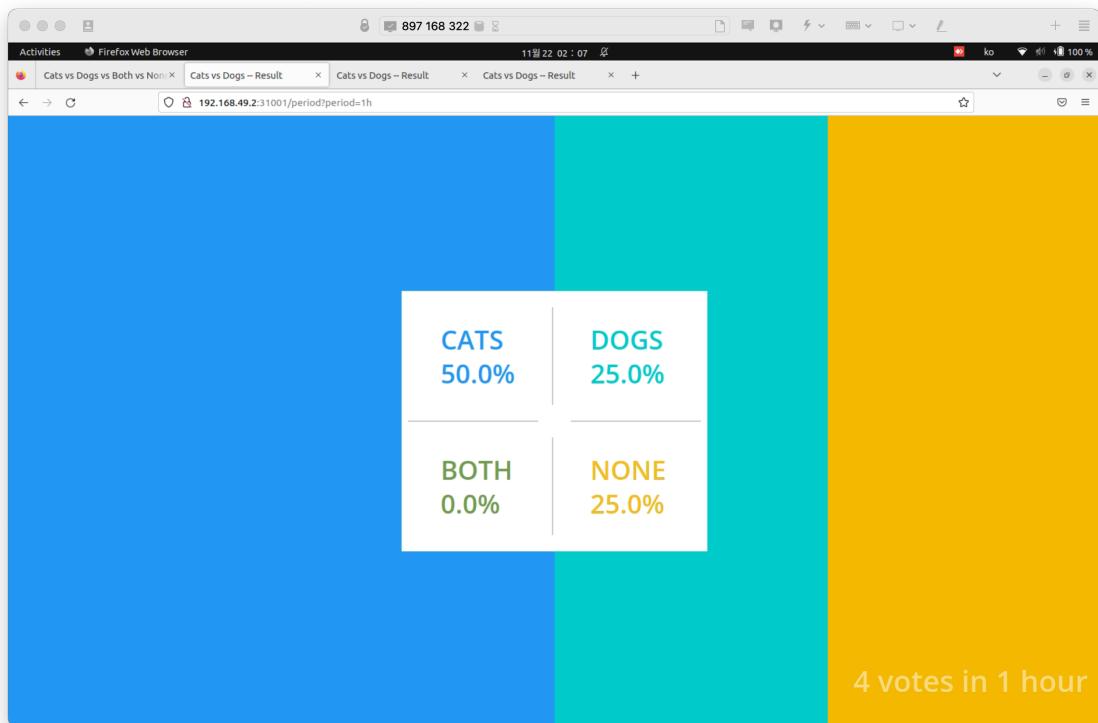
### 투표 UI

- 투표를 위한 UI



- 먼저 투표한 후, 5분, 1시간, 하루에 대한 결과를 나타내는 화면





## terminal log message

- 투표 시 vote log message와 worker log message를 보여준다.

```
server.js - distributed_system [SSH: 218.144.189.252]
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS JUPYTER COMMENTS + v x
1 yea@yubar:~/Starting_distributed_system$ example-voting-app-task2.kubectl -n vote logs vote-b8476d4f-tdbzj
[2022-11-21 13:26:03 +0000] [1] [INFO] Starting gunicorn 20.1.0
[2022-11-21 13:26:03 +0000] [1] [INFO] Listening on: http://0.0.0.0:80 (1)
[2022-11-21 13:26:03 +0000] [1] [INFO] Using worker: sync
[2022-11-21 13:26:03 +0000] [7] [INFO] Booting worker with pid: 7
[2022-11-21 13:26:12 +0000] [8] [INFO] Booting worker with pid: 8
[2022-11-21 13:26:12 +0000] [9] [INFO] Booting worker with pid: 9
[2022-11-21 13:26:12 +0000] [10] [INFO] Booting worker with pid: 10
[2022-11-21 13:26:12,749] INFO in app: Received vote for a at 1669837172
[2022-11-21 13:26:12 +0000] [9] [INFO] Received vote for a at 1669837172
2d25fb2a827fe3a
17.2.17.0.1. - - [21/Nov/2022:13:26:12 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:12 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 200 0 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
[2022-11-21 13:26:31,932] INFO in app: Received vote for b at 1669837191
[2022-11-21 13:26:31 +0000] [10] [INFO] Received vote for b at 1669837191
3e2cb94a6d4c379
17.2.17.0.1. - - [21/Nov/2022:13:26:31 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:31 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
[2022-11-21 13:26:32,749] INFO in app: Received vote for c at 1669837192
[2022-11-21 13:26:32 +0000] [9] [INFO] Received vote for c at 1669837192
Seed9f1a8284897
17.2.17.0.1. - - [21/Nov/2022:13:26:32 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:32 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
[2022-11-21 13:26:33,364] INFO in app: Received vote for d at 1669837193
[2022-11-21 13:26:33 +0000] [9] [INFO] Received vote for d at 1669837193
c7769a0e59428
17.2.17.0.1. - - [21/Nov/2022:13:26:33 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:33,971] INFO in app: Received vote for a at 1669837193
[2022-11-21 13:26:33 +0000] [10] [INFO] Received vote for a at 1669837193
e3acab3b451d993
17.2.17.0.1. - - [21/Nov/2022:13:26:33 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:33 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
[2022-11-21 13:26:34,496] INFO in app: Received vote for b at 1669837194
[2022-11-21 13:26:34 +0000] [10] [INFO] Received vote for b at 1669837194
b055dca9b1e109
17.2.17.0.1. - - [21/Nov/2022:13:26:34 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:34 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
[2022-11-21 13:26:35,975] INFO in app: Received vote for a at 1669837194
[2022-11-21 13:26:34 +0000] [7] [INFO] Received vote for a at 1669837194
947c719ap7f82
17.2.17.0.1. - - [21/Nov/2022:13:26:34 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:34 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
[2022-11-21 13:26:35,583] INFO in app: Received vote for c at 1669837195
[2022-11-21 13:26:35 +0000] [9] [INFO] Received vote for c at 1669837195
31385d5161995
17.2.17.0.1. - - [21/Nov/2022:13:26:35 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
17.2.17.0.1. - - [21/Nov/2022:13:26:35 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:3100/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
[2022-11-21 13:26:36,655] INFO in app: Received vote for a at 1669837196
[2022-11-21 13:26:36 +0000] [1] [INFO] Starting gunicorn 20.1.0
SSH: 218.144.189.252 lastest _ @ 0.0.0.0 1.0.1_stable_starter
In 195 Col 10 Spaces: 2 LITE-8 LF (1) JavaScirpt

```

```
[1] PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS JUPYTER COMMENTS + bash example-vote... + bash example-vote...
[1] 64; rv:107.0 Gecko/20100101 Firefox/107.0
[2022-11-21 13:26:37,122] INFO In app: Received vote for b at 1669837197
[2022-11-21 13:26:37,100] [INFO] Received vote for b at 1669837197
172.17.0.1 - - [21/Nov/2022:13:26:37 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:13:26:37 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 13:38:14,876] INFO In app: Received vote for c at 1669837894
[2022-11-21 13:38:14 +0000] [INFO] Received vote for c at 1669837894
ca1994c002d4e5
172.17.0.1 - - [21/Nov/2022:13:38:14 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:13:38:14 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 13:38:15,405] INFO In app: Received vote for b at 1669837895
[2022-11-21 13:38:15 +0000] [INFO] Received vote for b at 1669837895
5b5be168f32043a
172.17.0.1 - - [21/Nov/2022:13:38:15 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:13:38:15 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 13:38:15,842] INFO In app: Received vote for a at 1669837895
[2022-11-21 13:38:15 +0000] [INFO] Received vote for a at 1669837895
325c584d4d8d07
172.17.0.1 - - [21/Nov/2022:13:38:15 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:13:38:15 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 13:38:15,648] INFO In app: Received vote for d at 1669837901
[2022-11-21 13:38:15 +0000] [INFO] Received vote for d at 1669837901
e767b4c8990442
172.17.0.1 - - [21/Nov/2022:13:38:21 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:13:38:21 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 17:02:35,761] INFO In app: Received vote for a at 1669805155
[2022-11-21 17:02:35 +0000] [INFO] Received vote for a at 1669805155
3a8be06ed64c21
172.17.0.1 - - [21/Nov/2022:17:02:35 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:02:35 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 17:02:36,305] INFO In app: Received vote for b at 1669805156
[2022-11-21 17:02:36 +0000] [INFO] Received vote for b at 1669805156
9e80055ef6bd134
172.17.0.1 - - [21/Nov/2022:17:02:36 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:02:36 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 17:02:43,177] INFO In app: Received vote for a at 1669805463
[2022-11-21 17:02:43 +0000] [INFO] Received vote for a at 1669805463
3c4064f091c31
172.17.0.1 - - [21/Nov/2022:17:07:43 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:07:43 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 17:07:44,177] INFO In app: Received vote for d at 1669805464
[2022-11-21 17:07:44 +0000] [INFO] Received vote for d at 1669805464
b05c151fed92816
172.17.0.1 - - [21/Nov/2022:17:07:44 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/201001 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:07:44 +0000] "GET /static/styleheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 17:07:44,177] INFO In app: Received vote for d at 1669805464
[2022-11-21 17:07:44 +0000] [INFO] Received vote for d at 1669805464
yeekyubiner-/development/distributed_system/example-voting-app-task2.25
```

```

server.js — distributed_system [SSH: 218.144.189.252]
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS JUPYTER COMMENTS
64; rv:107.0 Gecko/20100101 Firefox/107.0"
[2022-11-21 17:02:36,385] INFO in app: Received vote for b at 1669050156
[2022-11-21 17:02:36 +0000] [9] [INFO] Received vote for b at 1669050156
172.17.0.1 - - [21/Nov/2022:17:02:36 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:02:36 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:02:36 +0000] [9] [INFO] Received vote for a at 1669050463
[2022-11-21 17:07:43 +0000] [8] [INFO] Received vote for a at 1669050463
3c1bc4fadf91c31
172.17.0.1 - - [21/Nov/2022:17:07:43 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:07:43 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
[2022-11-21 17:07:44,177] INFO in app: Received vote for d at 1669050464
[2022-11-21 17:07:44 +0000] [8] [INFO] Received vote for d at 1669050464
172.17.0.1 - - [21/Nov/2022:17:07:44 +0000] "POST / HTTP/1.1" 200 2437 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
172.17.0.1 - - [21/Nov/2022:17:07:44 +0000] "GET /static/stylesheets/style.css HTTP/1.1" 304 0 "http://192.168.49.2:31000/" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:107.0) Gecko/20100101 Firefox/107.0"
yewo@kyuber:~/development/distributed_system/example-voting-app-task2.2s$ kubectl -n vote logs worker-68d5446cc9-7mjqv
Error: flags cannot be placed before plugin name: -n
yewo@kyuber:~/development/distributed_system/example-voting-app-task2.2s$ kubectl -n vote logs worker-68d5446cc9-7mjqv
Connected to db
Connected to redis
Connecting to redis
Processing vote for 'a' by '2d2d5b2a82f03ea'
1669037172
Processing vote for 'b' by '262c8d9a6d4c979'
1669037191
Processing vote for 'c' by '5eeddf1a8284897'
1669037192
Processing vote for 'd' by 'ce77d9aea5a9428'
1669037193
Processing vote for 'a' by 'e3acab304516693'
1669037193
Processing vote for 'b' by 'bb5bdacaa9be1d98'
1669037194
Processing vote for 'a' by 'c9d7c7c19a7ff82'
1669037194
Processing vote for 'c' by '31385d5161f99f15'
1669037195
Processing vote for 'a' by '4cc428ca52c9715'
1669037195
Processing vote for 'b' by '2b15d1c217e721'
1669037197
Processing vote for 'c' by 'ca1994c0024e0c5'
1669037194
Processing vote for 'b' by 'b5dbe168f320430'
1669037195
Processing vote for 'a' by '325c58ad4dd8da7'
1669037196
Processing vote for 'd' by 'e7fb7c4809044f2'
1669037196
Processing vote for 'a' by '3a8be0ed6c4c21'
1669037197
Processing vote for 'b' by '9e000d55efbd134'
166905156
Processing vote for 'a' by '3c1bc4fadf91c31'
1669054463
Processing vote for 'd' by 'b05e151fed92816'
1669054464

```