

RUN RESULT

go-employee-analytics

Dokumen ini berisi bukti bahwa aplikasi go-employee-analytics berhasil dijalankan dan seluruh fitur utama dapat diakses dengan baik melalui HTTP API.

Repository: <https://github.com/hackim18/go-employee-analytics>

1. Aplikasi Berjalan

Deskripsi

Menunjukkan bahwa aplikasi backend berhasil dijalankan dan siap menerima request.

```
PROBLEMS SONARQUBE DEBUG CONSOLE TERMINAL OUTPUT GITLENS

watching internal\repository
watching internal\usecase
watching internal\utils
watching output
watching sql
exclude tmp
building...
running...
2025/12/24 14:31:04 Successfully loaded configuration from .env
[GIN-debug] [WARNING] Running in "debug" mode. Switch to "release" mode in production.
- using env: export GIN_MODE=release
- using code: gin.SetMode(gin.ReleaseMode)

[GIN-debug] GET    /health      --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Health-fm (3 handlers)
[GIN-debug] GET    /q2          --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q2-fm (3 handlers)
[GIN-debug] GET    /q3          --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q3-fm (3 handlers)
[GIN-debug] GET    /q4          --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q4-fm (3 handlers)
[GIN-debug] GET    /q5          --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q5-fm (3 handlers)
[GIN-debug] POST   /q6/save     --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q6Save-fm (3 handlers)
[GIN-debug] GET    /q7/file     --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q7Read-fm (3 handlers)
[GIN-debug] GET    /q8          --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q8-fm (3 handlers)
[GIN-debug] GET    /q9/sorted-unique --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q9SortedUnique-fm (3 handlers)
[GIN-debug] GET    /q9/duplicates --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q9Duplicates-fm (3 handlers)
[GIN-debug] POST   /q9/remove   --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q9Remove-fm (3 handlers)
[GIN-debug] POST   /q9/add      --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q9Add-fm (3 handlers)
[GIN-debug] GET    /q10         --> go-employee-analytics/internal/delivery/http.(*AnalyticsController).Q10-fm (3 handlers)
[GIN-debug] GET    /            --> go-employee-analytics/internal/delivery/http.route.(*RouteConfig).RegisterCommonRoutes.func1 (3 handlers)
[GIN-debug] GET    /api         --> go-employee-analytics/internal/delivery/http.route.(*RouteConfig).RegisterCommonRoutes.func1 (3 handlers)
[GIN-debug] Listening and serving HTTP on :8080
```

Table

employee_analytics employees annual_reviews X				
Properties Data ER Diagram Localhost PostgreSQL D				
annual_reviews Enter a SQL expression to filter results (use Ctrl+Space)				
Grid	123 id	123 emp_id	review_date	
1	10	1	2016-01-01 07:00:00.000 +0700	
2	20	2	2016-04-12 07:00:00.000 +0700	
3	30	10	2015-02-13 07:00:00.000 +0700	
4	40	22	2010-10-12 07:00:00.000 +0700	
5	50	11	2009-01-01 07:00:00.000 +0700	
6	60	12	2009-03-03 07:00:00.000 +0700	
7	70	13	2008-12-01 07:00:00.000 +0700	
8	80	1	2003-04-12 07:00:00.000 +0700	
9	90	1	2014-04-30 07:00:00.000 +0700	

employee_analytics

employees

annual_reviews

Properties

Data

ER Diagram

Localhost PostgreSQL

Databases

employee_analytics

Schemas

public

employees

Enter a SQL expression to filter results (use Ctrl+Space)

Grid

123 id

A-Z first_name

A-Z last_name

hire_date

termination_date

123 salary

1

2

3

4

5

6

1

2

3

4

5

6

Bob

Joe

Nancy

Keith

Kelly

Frank

Smith

Jarrod

Soley

Widjaja

Smalls

Nguyen

2009-06-20 07:00:00.000 +0700

2010-02-12 07:00:00.000 +0700

2012-03-14 07:00:00.000 +0700

2013-09-10 07:00:00.000 +0700

2013-09-10 07:00:00.000 +0700

2015-04-10 07:00:00.000 +0700

2016-01-01 07:00:00.000 +0700

[NULL]

[NULL]

2014-01-01 07:00:00.000 +0700

[NULL]

2015-05-01 07:00:00.000 +0700

10,000

20,000

30,000

20,000

20,000

60,000

Menunjukkan bahwa aplikasi backend berhasil dijalankan dan siap menerima request.

2. Health Check API

Endpoint

GET /health

The screenshot shows a REST client interface with a collection of endpoints on the left. The selected endpoint is 'GET Health'. The main panel shows the request details for 'go-employee-analytics / Health'. The URL is 'http://localhost:8080/health'. The response is a 200 OK status with a 5 ms response time and 184 B body. The response body is a JSON object:

```

{
  "message": "Analytics health success",
  "data": {
    "status": "ok"
  }
}

```

3. Analisis Karyawan Aktif Berdasarkan Kriteria Nama

Endpoint

GET /q2

Screenshot of a REST client interface showing a GET request to `http://localhost:8080/q2`. The response is a 200 OK status with a JSON body:

```
{
  "message": "Analytics Q2 success",
  "data": []
}
```

The interface includes a sidebar with a list of collections, a main panel for the request details, and a bottom panel for the response body.

4. Karyawan Tanpa Data Ulasan

Endpoint

GET /q3

Screenshot of a REST client interface showing a GET request to `http://localhost:8080/q3`. The response is a 200 OK status with a JSON body:

```
{
  "message": "Analytics Q3 success",
  "data": [
    {
      "first_name": "Nancy",
      "last_name": "Soley",
      "hire_date": "2012-03-14"
    },
    {
      "first_name": "Kelly",
      "last_name": "Smalls",
      "hire_date": "2013-09-10"
    },
    {
      "first_name": "Keith",
      "last_name": "Widjaja",
      "hire_date": "2013-09-10"
    }
  ]
}
```

The interface includes a sidebar with a list of collections, a main panel for the request details, and a bottom panel for the response body.

5. Selisih Tanggal Perekrutan

Endpoint

GET /q4

Screenshot of a REST client interface showing a collection of API endpoints. The selected endpoint is **Q4 - Hire Date Difference** (GET). The response is a 200 OK status with a JSON body:

```
{
  "message": "Analytics Q4 success",
  "data": {
    "earliest_hire_date": "2010-02-12",
    "latest_hire_date": "2013-09-10",
    "difference_days": 1306
  }
}
```

6. Proyeksi Kenaikan Gaji dan Total Ulasan

Endpoint

GET /q5

Screenshot of a REST client interface showing the **Q5 - Salary Projections** endpoint (GET). The response is a 200 OK status with a JSON body:

```
{
  "id": 3,
  "first_name": "Nancy",
  "last_name": "Soley",
  "hire_year": 2012,
  "base_salary": 30000,
  "salary_2016": 52470.19,
  "review_count": 0
},
{
  "id": 2,
  "first_name": "Joe",
  "last_name": "Jairod",
  "hire_year": 2010,
  "base_salary": 20000
}
```

7. Ekspor Data ke File

Endpoint

POST /q6/save

go-employee-analytics / Q7 - Read Output File

GET `{{baseUrl}}/q7/file?name=contoh3.txt` Send

Params

Key	Value	Description
name	contoh3.txt	

Body

```
9 {
10   {
11     "first_name": "Kelly",
12     "last_name": "Smalls",
13     "hire_date": "2013-09-10"
14   },
15   {
16     "first_name": "Keith",
17     "last_name": "Widjaja",
18     "hire_date": "2013-09-10"
19   },
20   {
21     "first_name": "Frank",
22     "last_name": "Nguyen",
23     "hire_date": "2015-04-10"
24   }
25 }
```

10. Validasi dan Pencarian Data Kota

Endpoint

GET /q8

go-employee-analytics / Q8 - City Lookup

GET `{{baseUrl}}/q8?city=Bogor` Send

Params

Key	Value	Description
city	Bogor	

Body

```
1 {
2   "message": "Analytics Q8 success",
3   "data": {
4     "city": "Bogor",
5     "exists": false,
6     "suggestions": [
7       "Bandung",
8       "Makasar"
9     ]
10  }
11 }
```

11. Operasi Data Array

Endpoint

/q9/*

Search collections

- GET Health 200 OK
- GET Q2 - Active Smith Employees 200 OK
- GET Q3 - Employees Without Reviews 200 OK
- GET Q4 - Hire Date Difference 200 OK
- GET Q5 - Salary Projections 200 OK
- POST Q6 - Save Output Files 200 OK
- GET Q7 - Read Output File 200 OK
- GET Q8 - City Lookup 200 OK
- GET Q9a - Sorted Unique Numbers 200 OK
- GET Q9b - Duplicate Counts 200 OK
- POST Q9c - Remove Numbers 400 Bad Request

go-employee-analytics / Q9a - Sorted Unique Numbers

GET {{baseUrl}}/q9/sorted-unique

Send

Docs Params Authorization Headers (8) Body Scripts Settings Cookies

Query Params

Key	Value	Description	Bulk Edit
Key	Value	Description	

Body Cookies (1) Headers (3) Test Results

200 OK 2 ms 194 B Save Response

```
1 {
2   "message": "Analytics Q9 sorted unique success",
3   "data": [
4     1,
5     2,
6     3,
7     4,
8     6,
9     8,
10    9
11  ]
12 }
```

Search collections

- GET Health 200 OK
- GET Q2 - Active Smith Employees 200 OK
- GET Q3 - Employees Without Reviews 200 OK
- GET Q4 - Hire Date Difference 200 OK
- GET Q5 - Salary Projections 200 OK
- POST Q6 - Save Output Files 200 OK
- GET Q7 - Read Output File 200 OK
- GET Q8 - City Lookup 200 OK
- GET Q9a - Sorted Unique Numbers 200 OK
- GET Q9b - Duplicate Counts 200 OK
- POST Q9c - Remove Numbers 400 Bad Request

go-employee-analytics / Q9b - Duplicate Counts

GET {{baseUrl}}/q9/duplicates

Send

Docs Params Authorization Headers (8) Body Scripts Settings Cookies

Query Params

Key	Value	Description	Bulk Edit
Key	Value	Description	

Body Cookies (1) Headers (3) Test Results

200 OK 3 ms 332 B Save Response

```
17   "value": 4,
18   "count": 2
19 },
20 {
21   "value": 6,
22   "count": 3
23 },
24 {
25   "value": 8,
26   "count": 3
27 },
28 {
29   "value": 9,
30   "count": 1
31 }
32 ]
```

Search collections

- GET Health 200 OK
- GET Q2 - Active Smith Employees 200 OK
- GET Q3 - Employees Without Reviews 200 OK
- GET Q4 - Hire Date Difference 200 OK
- GET Q5 - Salary Projections 200 OK
- POST Q6 - Save Output Files 200 OK
- GET Q7 - Read Output File 200 OK
- GET Q8 - City Lookup 200 OK
- GET Q9a - Sorted Unique Numbers 200 OK
- GET Q9b - Duplicate Counts 200 OK
- POST Q9c - Remove Numbers 400 Bad Request

go-employee-analytics / Q9c - Remove Numbers

POST {{baseUrl}}/q9/remove

Send

Docs Params Authorization Headers (11) Body Scripts Settings Cookies

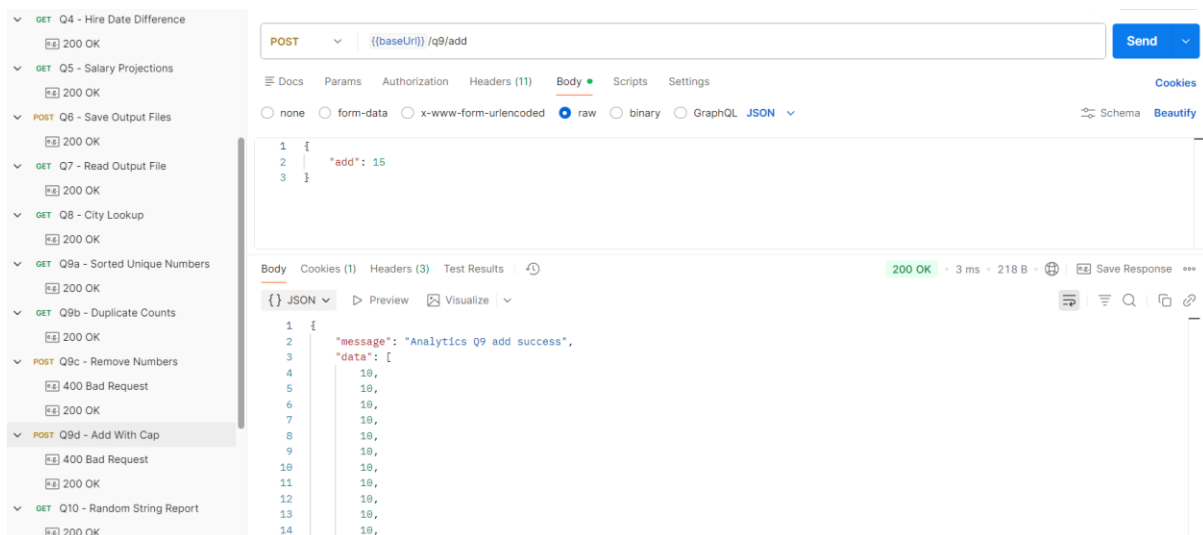
none form-data x-www-form-urlencoded raw binary GraphQL JSON Schema Beautify

```
1 {
2   "remove": [
3     9,
4     1,
5     6,
6     4
7   ]
8 }
```

Body Cookies (1) Headers (3) Test Results

200 OK 2 ms 189 B Save Response

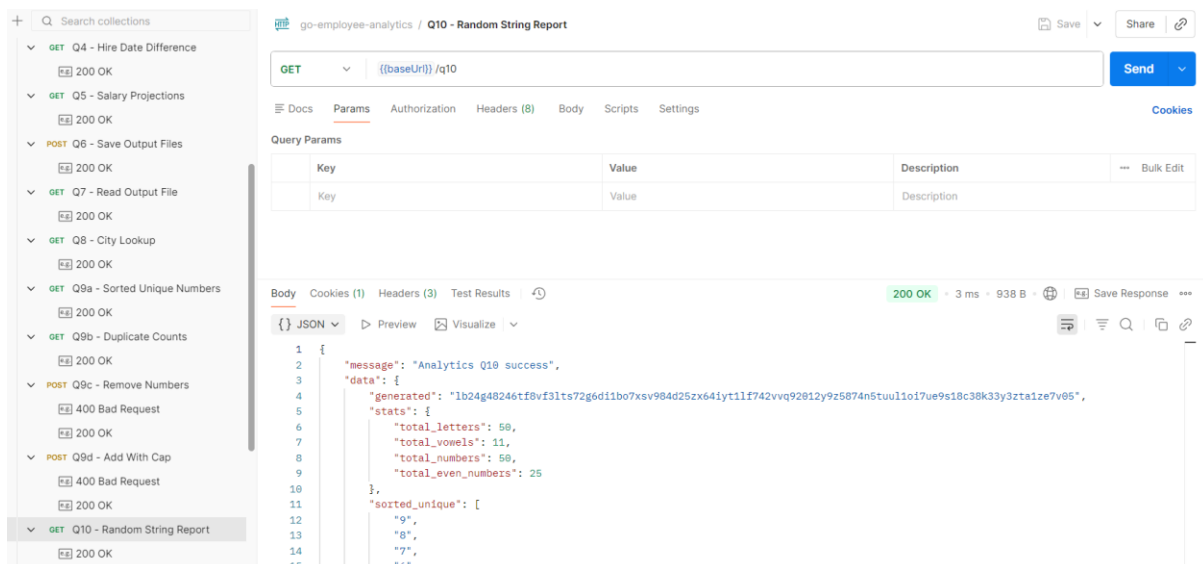
```
1 {
2   "message": "Analytics Q9 remove success",
3   "data": [
4     8,
5     3,
6     8,
7     2,
8     3,
9     3,
10    8,
11    2
12  ]
13 }
```



12. Generator Data Acak

Endpoint

GET /q10



13. Penutup

Seluruh fitur utama aplikasi telah berhasil dijalankan dan diverifikasi melalui HTTP API.