

**LAPORAN PRAKTIKUM PEMROGRAMAN BACKEND LANJUTAN
CLEAN ARSITEKTUR, STRUCT TRASH DAN MODUL 8**



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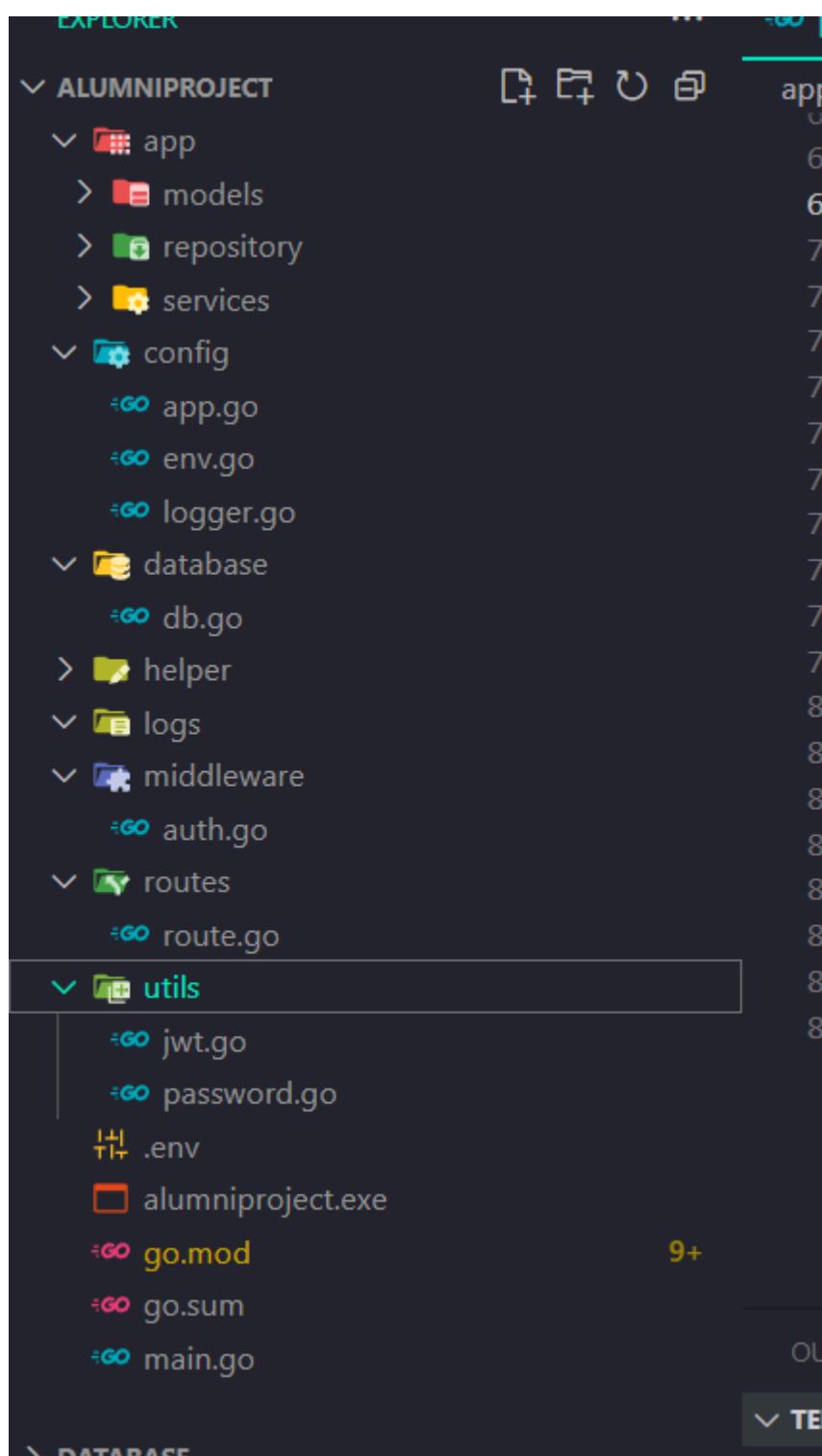
D4 TEKNIK INFORMATIKA

FAKULTAS VOKASI

UNIVERSITAS AIRLANGGA

2025

1. Clean Arsitektur



2. Model Trash

```
type TrashPekerjaan struct {
    ID           int     `json:"id"`
    NamaPekerjaan string `json:"nama_pekerjaan"`
    TempatKerja  string `json:"tempat_kerja"`
    DeletedAt    *time.Time `json:"deleted_at"`
}
```

```

}

type GetTrashPekerjaan struct {
    ID           int      `json:"id"`
    AlumniID     int      `json:"alumni_id"`
    NamaPerusahaan string  `json:"nama_perusahaan"`
    PosisiJabatan string  `json:"posisi_jabatan"`
    BidangIndustri string  `json:"bidang_industri"`
    LokasiKerja   string  `json:"lokasi_kerja"`
    StatusPekerjaan string  `json:"status_pekerjaan"`
    DeletedAt     *time.Time `json:"deleted_at"`
    CreatedBy     int      `json:"created_by"`
}

```

3. Repository Trash

```

func GetTrashPekerjaan() ([]models.GetTrashPekerjaan, error) {
    ctx, cancel := context.WithTimeout(context.Background(),
5*time.Second)
    defer cancel()

    query := `
        SELECT id, alumni_id, nama_perusahaan, posisi_jabatan,
bidang_industri,
                lokasi_kerja, status_pekerjaan, deleted_at,
created_by
        FROM pekerjaan_alumni
        WHERE deleted_at IS NOT NULL
        ORDER BY deleted_at DESC;
`


    rows, err := database.DB.QueryContext(ctx, query)
    if err != nil {
        return nil, err
    }
    defer rows.Close()

    var result []models.GetTrashPekerjaan
    for rows.Next() {
        var t models.GetTrashPekerjaan
        if err := rows.Scan(
            &t.ID,
            &t.AlumniID,
            &t.NamaPerusahaan,

```

```

        &t.PosisiJabatan,
        &t.BidangIndustri,
        &t.LokasiKerja,
        &t.StatusPekerjaan,
        &t.DeletedAt,
        &t.CreatedBy, // pastikan ada di SELECT
    ) ; err != nil {
    return nil, err
}
result = append(result, t)
}

return result, nil
}

```

4. Services Trash

```

func GetTrashPekerjaanService(c *fiber.Ctx) error {
    userRole := c.Locals("role").(string)
    userID := c.Locals("user_id").(int)

    allTrash, err := repository.GetTrashPekerjaan()
    if err != nil {
        return c.Status(500).JSON(fiber.Map{"error": "Gagal mengambil data trash"})
    }

    if userRole == "user" {
        var filtered []models.GetTrashPekerjaan
        for _, p := range allTrash {
            if p.CreatedBy == userID {
                filtered = append(filtered, p)
            }
        }
        return c.JSON(fiber.Map{
            "success": true,
            "count": len(filtered),
            "data": filtered,
        })
    }
    // Admin dapat semua
    return c.JSON(fiber.Map{
        "success": true,
    })
}

```

```

        "count": len(allTrash),
        "data": allTrash,
    })
}

```

5. Routes Trash

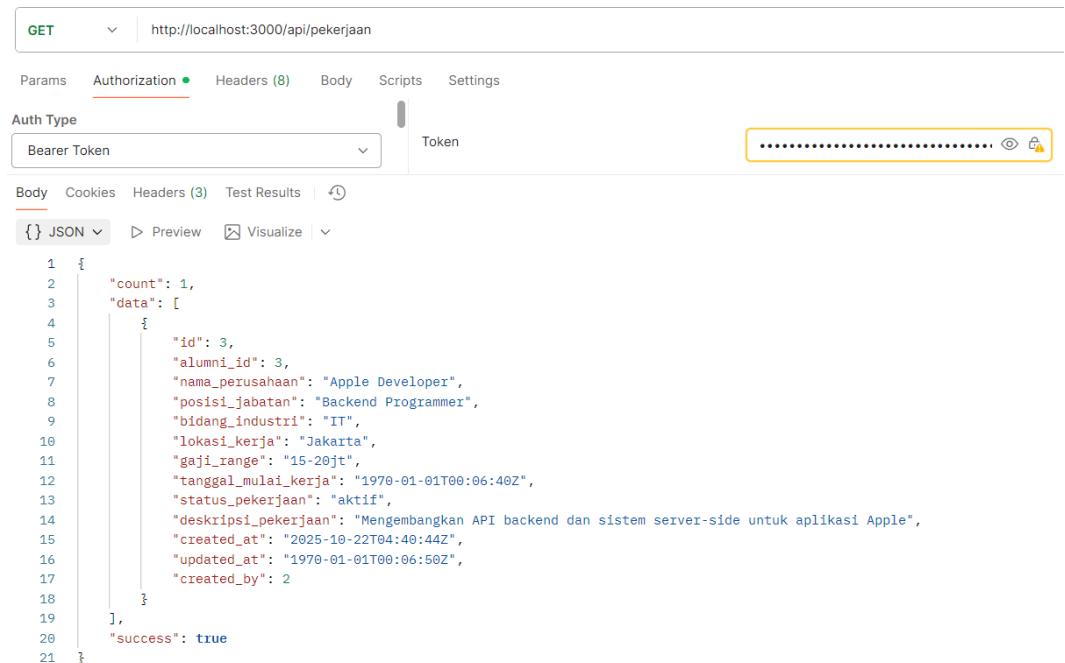
```

// Pekerjaan routes
pekerjaan := protected.Group("/pekerjaan")
pekerjaan.Get("/trash", service.GetTrashPekerjaanService) //

```

6. CRUD Mongodb

a. Get Pekerjaan (User)



GET http://localhost:3000/api/pekerjaan

Auth Type: Bearer Token

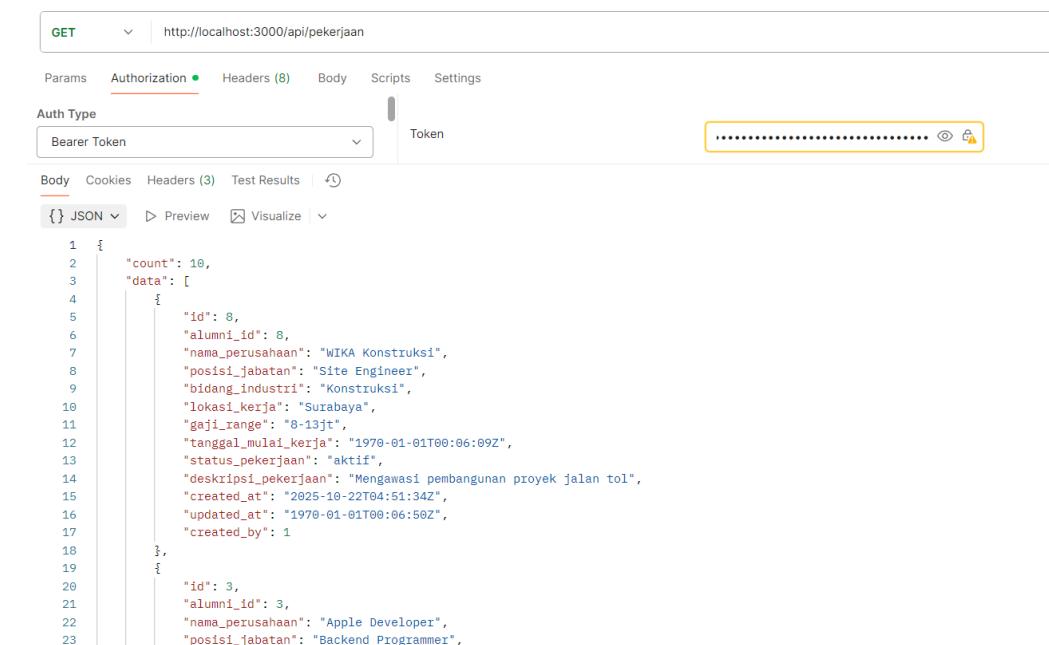
Body: {} JSON

```

1 {
2   "count": 1,
3   "data": [
4     {
5       "id": 3,
6       "alumni_id": 3,
7       "nama_perusahaan": "Apple Developer",
8       "posisi_jabatan": "Backend Programmer",
9       "bidang_industri": "IT",
10      "lokasi_kerja": "Jakarta",
11      "gaji_range": "15-20jt",
12      "tanggal_mulai_kerja": "1970-01-01T00:06:40Z",
13      "status_pekerjaan": "aktif",
14      "deskripsi_pekerjaan": "Mengembangkan API backend dan sistem server-side untuk aplikasi Apple",
15      "created_at": "2025-10-22T04:40:44Z",
16      "updated_at": "1970-01-01T00:06:50Z",
17      "created_by": 2
18    }
19  ],
20  "success": true
21 }

```

b. Get Pekerjaan (Admin)



GET http://localhost:3000/api/pekerjaan

Auth Type: Bearer Token

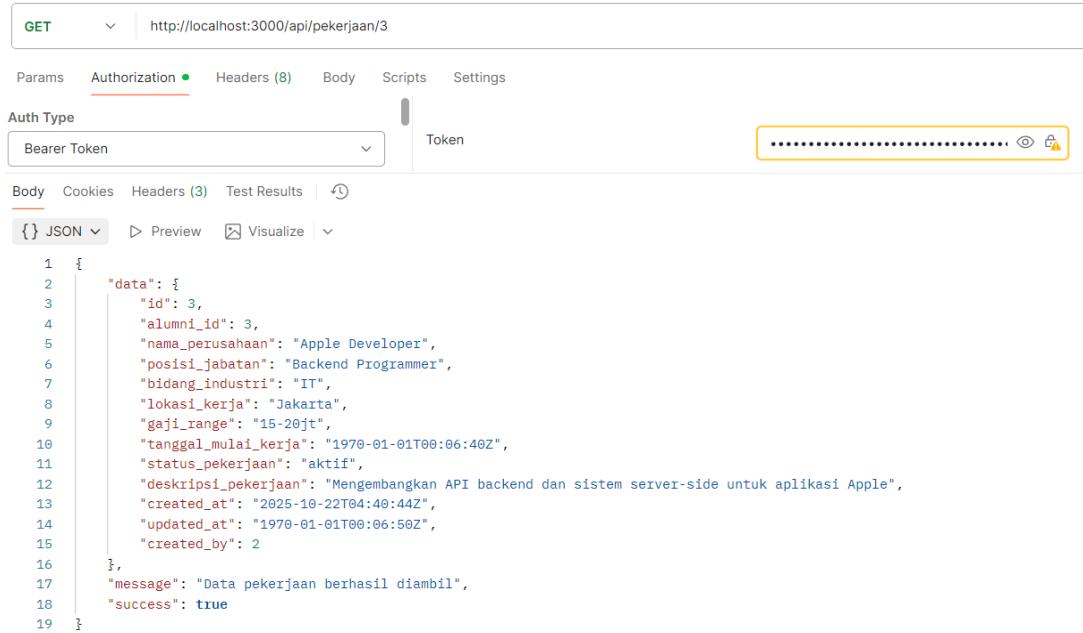
Body: {} JSON

```

1 {
2   "count": 10,
3   "data": [
4     {
5       "id": 8,
6       "alumni_id": 8,
7       "nama_perusahaan": "WIKA Konstruksi",
8       "posisi_jabatan": "Site Engineer",
9       "bidang_industri": "Konstruksi",
10      "lokasi_kerja": "Surabaya",
11      "gaji_range": "8-13jt",
12      "tanggal_mulai_kerja": "1970-01-01T00:06:09Z",
13      "status_pekerjaan": "aktif",
14      "deskripsi_pekerjaan": "Mengawasi pembangunan proyek jalan tol",
15      "created_at": "2025-10-22T04:51:34Z",
16      "updated_at": "1970-01-01T00:06:50Z",
17      "created_by": 1
18    },
19    {
20      "id": 3,
21      "alumni_id": 3,
22      "nama_perusahaan": "Apple Developer",
23      "posisi_jabatan": "Backend Programmer",

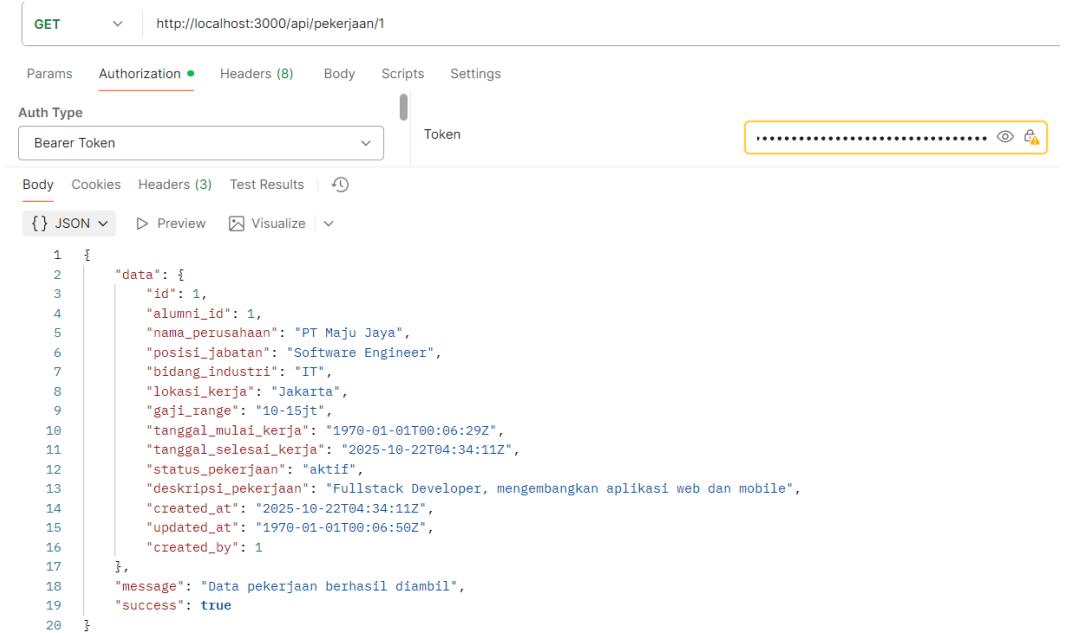
```

c. Get Pekerjaan/ID (User)



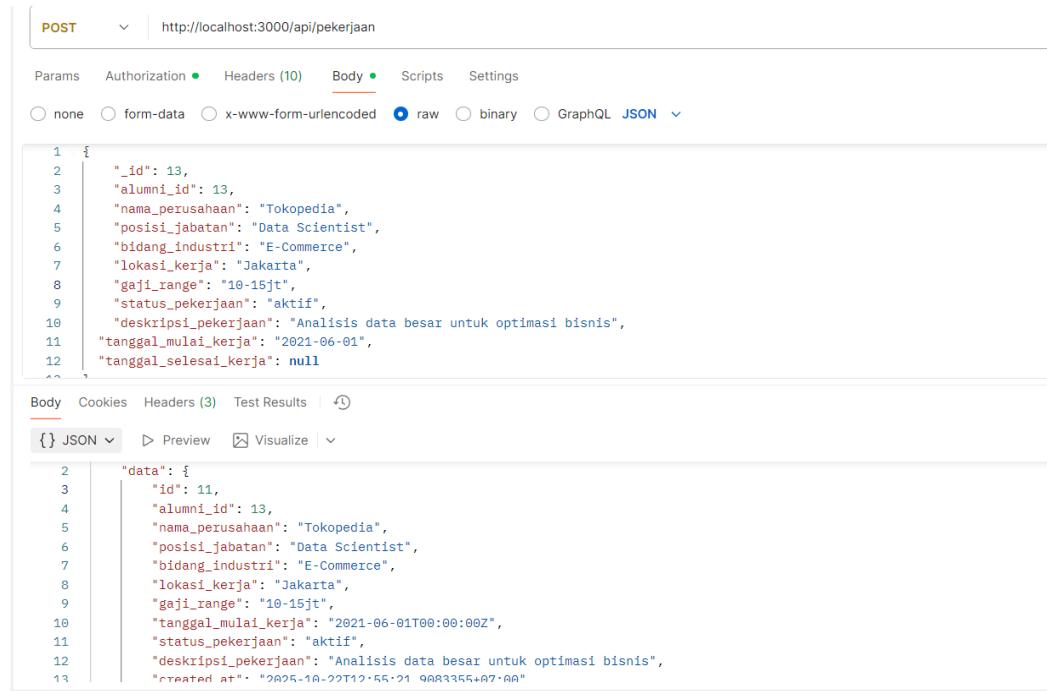
```
1 {
2   "data": {
3     "id": 3,
4     "alumni_id": 3,
5     "nama_perusahaan": "Apple Developer",
6     "posisi_jabatan": "Backend Programmer",
7     "bidang_industri": "IT",
8     "lokasi_kerja": "Jakarta",
9     "gaji_range": "15-20jt",
10    "tanggal_mulai_kerja": "1970-01-01T00:06:40Z",
11    "status_pekerjaan": "aktif",
12    "deskripsi_pekerjaan": "Mengembangkan API backend dan sistem server-side untuk aplikasi Apple",
13    "created_at": "2025-10-22T04:40:44Z",
14    "updated_at": "1970-01-01T00:06:50Z",
15    "created_by": 2
16  },
17  "message": "Data pekerjaan berhasil diambil",
18  "success": true
19 }
```

d. Get Pekerjaan/ID (Admin)



```
1 {
2   "data": {
3     "id": 1,
4     "alumni_id": 1,
5     "nama_perusahaan": "PT Maju Jaya",
6     "posisi_jabatan": "Software Engineer",
7     "bidang_industri": "IT",
8     "lokasi_kerja": "Jakarta",
9     "gaji_range": "10-15jt",
10    "tanggal_mulai_kerja": "1970-01-01T00:06:29Z",
11    "tanggal_selesai_kerja": "2025-10-22T04:34:11Z",
12    "status_pekerjaan": "aktif",
13    "deskripsi_pekerjaan": "Fullstack Developer, mengembangkan aplikasi web dan mobile",
14    "created_at": "2025-10-22T04:34:11Z",
15    "updated_at": "1970-01-01T00:06:50Z",
16    "created_by": 1
17  },
18  "message": "Data pekerjaan berhasil diambil",
19  "success": true
20 }
```

e. Post Pekerjaan (Admin)



```
POST http://localhost:3000/api/pekerjaan
```

Params Authorization Headers (10) Body Scripts Settings

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

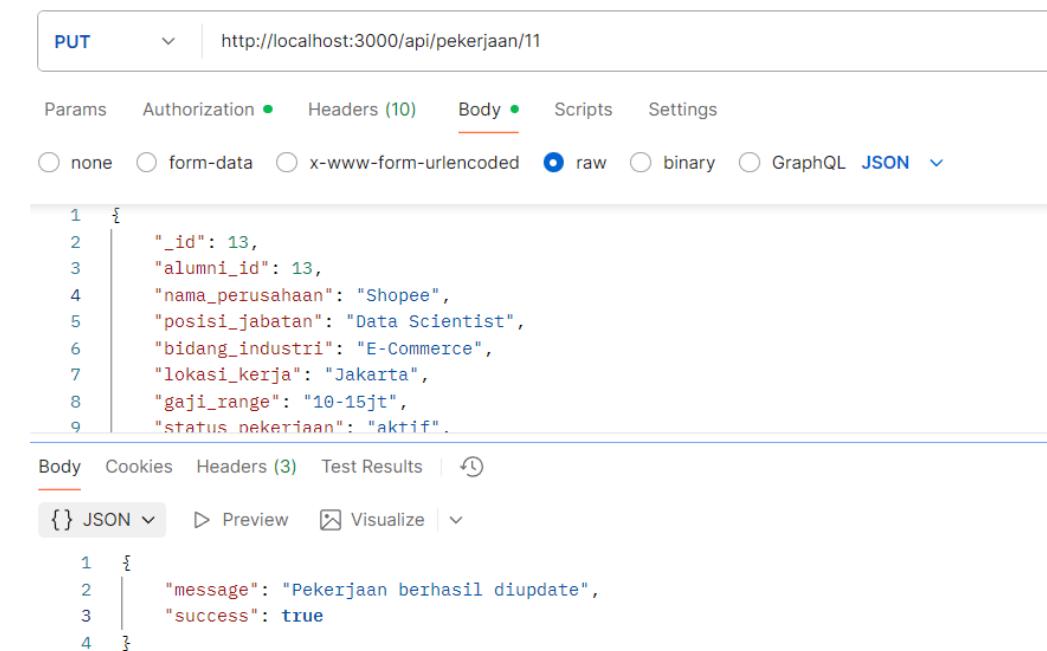
```
1 {
2   "_id": 13,
3   "alumni_id": 13,
4   "nama_perusahaan": "Tokopedia",
5   "posisi_jabatan": "Data Scientist",
6   "bidang_industri": "E-Commerce",
7   "lokasi_kerja": "Jakarta",
8   "gaji_range": "10-15jt",
9   "status_pekerjaan": "aktif",
10  "deskripsi_pekerjaan": "Analisis data besar untuk optimasi bisnis",
11  "tanggal_mulai_kerja": "2021-06-01",
12  "tanggal_selesai_kerja": null
}
```

Body Cookies Headers (3) Test Results

{ } JSON Preview Visualize

```
2 {
3   "data": {
4     "id": 11,
5     "alumni_id": 13,
6     "nama_perusahaan": "Tokopedia",
7     "posisi_jabatan": "Data Scientist",
8     "bidang_industri": "E-Commerce",
9     "lokasi_kerja": "Jakarta",
10    "gaji_range": "10-15jt",
11    "tanggal_mulai_kerja": "2021-06-01T00:00:00Z",
12    "status_pekerjaan": "aktif",
13    "deskripsi_pekerjaan": "Analisis data besar untuk optimasi bisnis",
14    "created_at": "2025-10-22T12:55:21.9883355+07:00"
}
```

f. Put Pekerjaan (Admin)



```
PUT http://localhost:3000/api/pekerjaan/11
```

Params Authorization Headers (10) Body Scripts Settings

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

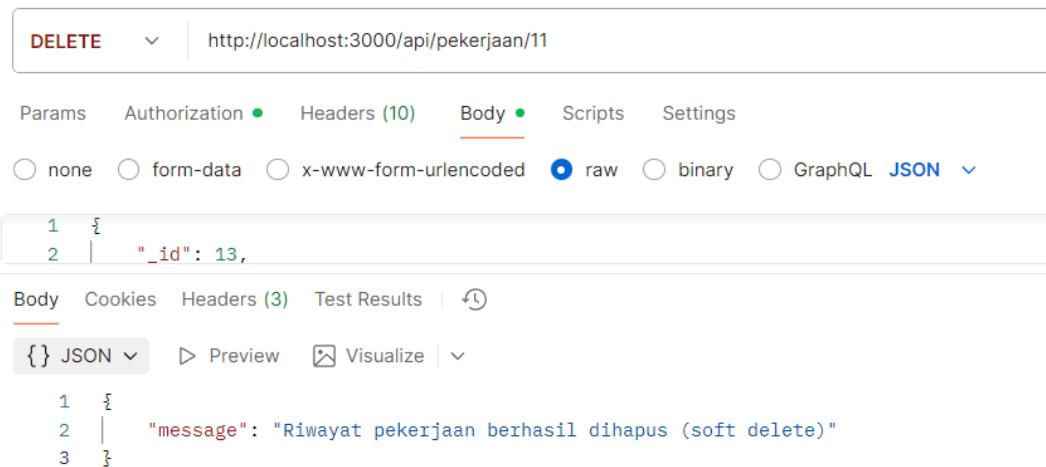
```
1 {
2   "_id": 13,
3   "alumni_id": 13,
4   "nama_perusahaan": "Shopee",
5   "posisi_jabatan": "Data Scientist",
6   "bidang_industri": "E-Commerce",
7   "lokasi_kerja": "Jakarta",
8   "gaji_range": "10-15jt",
9   "status_pekerjaan": "aktif".
}
```

Body Cookies Headers (3) Test Results

{ } JSON Preview Visualize

```
1 {
2   "message": "Pekerjaan berhasil diupdate",
3   "success": true
4 }
```

g. Delete Pekerjaan (Admin)



DELETE http://localhost:3000/api/pekerjaan/11

Params Authorization ● Headers (10) **Body** ● Scripts Settings

none form-data x-www-form-urlencoded raw binary GraphQL **JSON**

```
1 {  
2   "_id": 13,  
3 }
```

Body Cookies Headers (3) Test Results |

{ } **JSON** Preview Visualize |

```
1 {  
2   "message": "Riwayat pekerjaan berhasil dihapus (soft delete)"  
3 }
```

7. Link Github

<https://github.com/cococimoryy1/alumniproject-golang>