

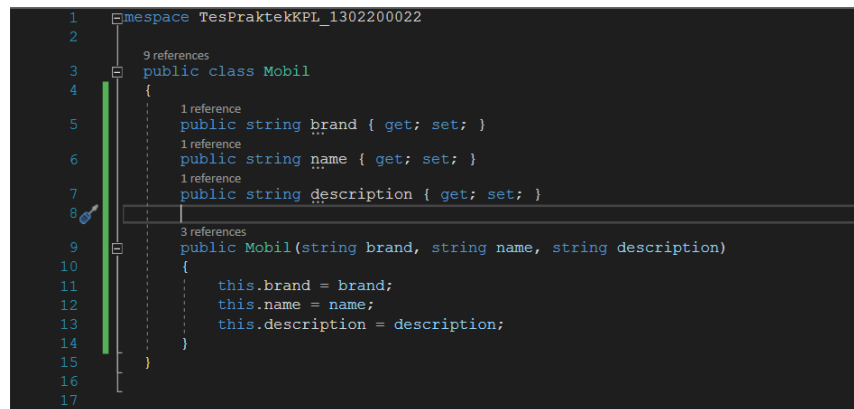
## Tes Teori KPL

1. Jelaskan apa itu Version Control System!  
Version control merupakan sistem / cara yang digunakan untuk melakukan rekaman perubahan pada file ataupun aplikasi yang dibuat agar nantinya setiap versi yang buat dapat diakses kembali
2. Apa perbedaan antara git dengan GitHub  
Git merupakan sistem version control sedangkan github merupakan suatu platform git untuk melakukan version control
3. Apa itu design pattern  
Design pattern merupakan sebuah struktur pengkodean yang digunakan untuk memecahkan solusi dari pengembangan perangkat lunak
4. Sebutkan 3 contoh design pattern  
MVC, singleton
5. Sebutkan manfaat penerapan design pattern pada kode!  
Design pattern memudahkan suatu pengembangan perangkat lunak dengan masing2 template yang telah ditetapkan sehingga code dapat lebih mudah untuk dipahami serta dimaintenance dengan baik

## Tes Praktek KPL

## 1. Source Code

- Class Mobil



```
1 namespace TesPraktekKPL_1302200022
2
3     9 references
4     public class Mobil
5     {
6         1 reference
7         public string brand { get; set; }
8         1 reference
9         public string name { get; set; }
10        1 reference
11        public string description { get; set; }
12
13        3 references
14        public Mobil(string brand, string name, string description)
15        {
16            this.brand = brand;
17            this.name = name;
18            this.description = description;
19        }
20    }
```

- MobilController (CRUD)

```

5 namespace TesPraktekKPL_1302200022.Controllers
6 {
7     [Route("api/[controller]")]
8     [ApiController]
9     public class MobilController : ControllerBase
10    {
11        private static List<Mobil> MobilList = new List<Mobil>()
12        {
13            new Mobil("Toyota", "Prius", "Red"),
14            new Mobil("BMW", "i7", "White"),
15            new Mobil("Honda", "NSX", "Purple")
16        };
17        // GET: api/<MobilController>
18        [HttpGet]
19        public IEnumerable<Mobil> Get()
20        {
21            return MobilList;
22        }
23
24        // GET api/<MobilController>/5
25        [HttpGet("{id}")]
26        public Mobil Get(int id)
27        {
28            return MobilList[id];
29        }
30
31        // POST api/<MobilController>
32        [HttpPost]
33        public void Post([FromBody] Mobil value)
34        {
35            MobilList.Add(value);
36        }
37
38        // PUT api/<MobilController>/5
39        [HttpPut("{id}")]
40        public void Put(int id, [FromBody] string value)
41        {
42        }
43
44        // DELETE api/<MobilController>/5
45        [HttpDelete("{id}")]
46        public void Delete(int id)
47        {
48            MobilList.RemoveAt(id);
49        }
50    }
51 }

```

- Hasil API Swagger

GET

GET /api/Mobil

Parameters

No parameters

Execute Clear

Responses

Code Details

200

Response body

```

{
  "brand": "Toyota",
  "name": "Prius",
  "description": "Red"
},
{
  "brand": "BMW",
  "name": "i7",
  "description": "White"
},
{
  "brand": "Honda",
  "name": "NSX",
  "description": "Purple"
}

```

Response headers

```

content-type: application/json; charset=utf-8
date: Wed, 24 Jan 2024 06:45:50 GMT
server: Kestrel

```

Post

POST

/api/Mobil

Parameters

No parameters

Request body

application/json

```
{
  "brand": "BYD",
  "name": "Dolphin",
  "description": "Blue EV"
}
```

Execute

Clear

Responses

Curl

```
curl -X 'POST' \
  'https://localhost:7256/api/Mobil' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "brand": "BYD",
    "name": "Dolphin",
    "description": "Blue EV"
  }'
```

Request URL

https://localhost:7256/api/Mobil

Server response

Code	Details
200	<div>Response headers</div> <div><pre>content-length: 0 date: Wed, 24 Jan 2024 06:47:43 GMT server: Kestrel</pre></div>

Responses

Code	Description	Links
200	Success	No links

```
}
    "description": "Blue EV",
    "name": "Dolphin",
    "brand": "BYD"
  },
  {
    "description": "White",
    "name": "17",
    "brand": "BMW"
  },
  {
    "description": "Purple",
    "name": "M3X",
    "brand": "Honda"
  },
  {
    "description": "Blue EV",
    "name": "Dolphin",
    "brand": "BYD"
  }
]
```

Download

Delete

200

Response body

```
{
  "brand": "Toyota",
  "name": "Prius",
  "description": "Red"
},
{
  "brand": "BMW",
  "name": "17",
  "description": "White"
},
{
  "brand": "Honda",
  "name": "M3X",
  "description": "Purple"
},
{
  "brand": "BYD",
  "name": "Dolphin",
  "description": "Blue EV"
}
```

Download

DELETE

/api/Mobil/{id}

Cancel

Parameters

Name	Description
id * required	
integer(\$int32)	2
(path)	

ExecuteClear

Responses

Curl

curl -X 'DELETE' \n'https://localhost:7256/api/Mobil/2' \n-H 'accept: \*/\*'

Request URL

https://localhost:7256/api/Mobil/2

Server response

Code

Details

200

Response body

```
{\n  {\n    \"brand\": \"Toyota\",\n    \"name\": \"Prius\",\n    \"description\": \"Red\"\n  },\n  {\n    \"brand\": \"BMW\",\n    \"name\": \"iP\",\n    \"description\": \"White\"\n  },\n  {\n    \"brand\": \"BYD\",\n    \"name\": \"Dolphin\",\n    \"description\": \"Blue EV\"\n  }\n}
```

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Link Github:

[https://github.com/naufalchairurrijal/TesTahap2\\_KPL](https://github.com/naufalchairurrijal/TesTahap2_KPL)