

TUGAS JURNAL 9 KONTRUKSI PERANGKAT LUNAK

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Kelas : SE-07-02

Kelas Movie.cs



```
modul9_2311104069.http U  Movie.cs U X  MoviesController.cs U
09_API_Design_dan_Construction_Using_Swagger > modul9_2311104069 > modul9_2311104069 > Models > Movie.cs
1  namespace modul9_2311104069.Models
2  {
3      public class Movie
4      {
5          public string Title { get; set; }
6          public string Director { get; set; }
7          public List<string> Stars { get; set; }
8          public string Description { get; set; }
9
10         public Movie() { }
11     }
12 }
13
```

class Movie yang merepresentasikan struktur data dari sebuah film. Class ini memiliki empat properti utama, yaitu Title (judul film), Director (sutradara film), Stars (list aktor/aktris utama yang membintangi film), dan Description (deskripsi singkat tentang film). Tipe data untuk Title, Director, dan Description adalah string, sedangkan Stars bertipe List<string> untuk menampung beberapa nama pemain. Class ini digunakan untuk menyimpan dan memproses data film dalam aplikasi Web API.

Kelas MovieController.cs

```
modul9_2311104069.http U  Movie.cs U  MoviesController.cs U X
09_API_Design_dan_Construction_Using_Swagger > modul9_2311104069 > modul9_2311104069 > Controllers > MoviesController.cs
1  using Microsoft.AspNetCore.Mvc;
2  using modul9_2311104069.Models;
3
4  namespace modul9_2311104069.Controllers
5  {
6      [ApiController]
7      [Route("api/[controller]")]
8      public class MoviesController : ControllerBase
9      {
10         private static List<Movie> movies = new List<Movie>
11         {
12             new Movie
13             {
14                 Title = "The Shawshank Redemption",
15                 Director = "Frank Darabont",
16                 Stars = new List<string> { "Tim Robbins", "Morgan Freeman" },
17                 Description = "Two imprisoned men bond over a number of years."
18             },
19             new Movie
20             {
21                 Title = "The Godfather",
22                 Director = "Francis Ford Coppola",
23                 Stars = new List<string> { "Marlon Brando", "Al Pacino" },
24                 Description = "The aging patriarch of an organized crime dynasty transfers control to his reluctant son."
25             },
26             new Movie
27             {
28                 Title = "The Dark Knight",
29                 Director = "Christopher Nolan",
30                 Stars = new List<string> { "Christian Bale", "Heath Ledger" },
31                 Description = "Batman sets out to dismantle the remaining criminal organizations in Gotham."
32             }
33         };
34
35         [HttpGet]
36         public IActionResult GetAll()
37         {
38             return movies;
39         }
40
41         [HttpGet("{id}")]
42         public IActionResult GetById(int id)
43         {
44             if (id < 0 || id >= movies.Count)
45                 return NotFound();
46             return movies[id];
47         }
48     }
49 }
```

controller API yang menangani permintaan HTTP untuk data film. Di dalamnya terdapat list statis movies yang menyimpan beberapa data film sebagai contoh. Controller ini memiliki beberapa endpoint: GET untuk mengambil semua data film (GetAll) atau film tertentu

berdasarkan indeks (GetById), POST untuk menambahkan film baru ke list (AddMovie), dan DELETE untuk menghapus film berdasarkan indeks (DeleteMovie). Semua endpoint mengikuti pola REST API dan menggunakan atribut [HttpGet], [HttpPost], dan [HttpDelete] untuk menentukan jenis request yang ditangani, serta mengembalikan respon berupa data atau status hasil operasi

Lalu uji API Di swagger

POST /api/Movies

Parameters

No parameters

Request body

application/json

```
{
  "title": "Inception",
  "director": "Christopher Nolan",
  "stars": ["Leonardo DiCaprio", "Joseph Gordon-Levitt"],
  "description": "A thief who steals corporate secrets through dream-sharing technology."
}
```

200

Response body

```
[
  {
    "title": "The Shawshank Redemption",
    "director": "Frank Darabont",
    "stars": [
      "Tim Robbins",
      "Morgan Freeman"
    ],
    "description": "Two imprisoned men bond over a number of years."
  },
  {
    "title": "The Godfather",
    "director": "Francis Ford Coppola",
    "stars": [
      "Marlon Brando",
      "Al Pacino"
    ],
    "description": "The aging patriarch of an organized crime dynasty transfers control to his reluctant son."
  },
  {
    "title": "The Dark Knight",
    "director": "Christopher Nolan",
    "stars": [
      "Christian Bale",
      "Heath Ledger"
    ],
    "description": "Batman sets out to dismantle the remaining criminal organizations in Gotham."
  }
]
```

Response headers

```
content-type: application/json; charset=utf-8
date: Sun, 04 May 2025 15:10:05 GMT
server: Kestrel
```

```
    "Heath Ledger"
  ],
  "description": "Batman sets out to dismantle the remaining criminal organizations in Gotham."
},
{
  "title": "Inception",
  "director": "Christopher Nolan",
  "stars": [
    "Leonardo DiCaprio",
    "Joseph Gordon-Levitt"
  ],
  "description": "A thief who steals corporate secrets through dream-sharing technology."
}
]
```