

**Jurnal Modul 7**  
**Konstruksi Perangkat Lunak**  
**PRODI REKAYASA PERANGKAT LUNAK**



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**PURWOKERTO**

## Jurnal Modul 7

### 1. Read Json 1

```
33 0 references
34 class DataMahasiswa2311104057
35 {
36     0 references
37     public void ReadJSON()
38     {
39         string path = "jurnal7_1_2311104057.json";
40         string jsonString = File.ReadAllText(path);
41         Mahasiswa data = JsonSerializer.Deserialize<Mahasiswa>(jsonString);
42
43         Console.WriteLine("====Data Mahasiswa====");
44         Console.WriteLine("Nama : " + data.firstName + " " + data.lastName);
45         Console.WriteLine("Jenis Kelamin : " + data.gender);
46         Console.WriteLine("Umur : " + data.age);
47         Console.WriteLine("Alamat : " + data.address.streetAddress + ", " + data.address.city + ", " + data.address.state);
48         Console.WriteLine("Daftar Mata Kuliah : ");
49         foreach (var course in data.courses)
50         {
51             Console.WriteLine(course.code + " - " + course.name);
52         }
53     }
54 }
55
```

```
11 Console.ReadKey(); // supaya konsol tidak langsung tertutup
12
13 Console.WriteLine("Membaca file JSON dan menampilkan data mahasiswa... ");
14 DataMahasiswa_2311104060 mahasiswa = new DataMahasiswa_2311104060();
15 mahasiswa.ReadJSON("jurnal7_1_2311104057.json");
16
```

Menggunakan JsonSerializer.Deserialize untuk mengekstrak isi dari Json ke dalam Objek Mahasiswa yang telah dibuat  
Lalu menggunakan console writeline untuk menampilkan atribut yang di miliki objek  
Tambahkan foreach loop untuk menampilkan isi dari List courses

Fungsi digunakan di dalam main Program.cs

```
Membaca file JSON dan menampilkan data mahasiswa...
Name      : Reyner Prasetyo
Gender    : male
Age       : 19
Address   : Adipura, Purwokerto, Jawa Tengah
Courses   :
- CRI2C4: Konstruksi Perangkat Lunak
- CRI2XX: Nama Mata Kuliah

D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3\modul7_kelompok_3\bin\Debug\net8.0\modul7_kelompok_3.exe (process 19508) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

### 2. Push

```

D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(master)+8 (0.106s)
git checkout -b dev-reyner
Switched to a new branch 'dev-reyner'

D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(dev-reyner)+4 (0.077s)
git add .

D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(dev-reyner)+4 (0.137s)
git commit -m "menambahkan class DataMahasiswa"
[dev-reyner 00e8447] menambahkan class DataMahasiswa
4 files changed, 36 insertions(+), 4 deletions(-)
create mode 100644 modul7_kelompok_3/jurnal7_2_2311104057.json

```

### 3. Read Json 2

```

namespace modul7_kelompok_3
{
    1 reference
    public class Member_Reyner
    {
        0 references
        public string firstName { get; set; }
        0 references
        public string lastName { get; set; }
        0 references
        public string gender { get; set; }
        0 references
        public int age { get; set; }
        0 references
        public string nim { get; set; }
    }
    2 references
    class TeamMembers_2311104057
    {
        This property has 0 reference(s). (Alt+2)
        0 references
        public List<Member_Reyner> members { get; set; }

        1 reference
        public void ReadJSON(string path)
        {
            string jsonData = File.ReadAllText(path);
            var team = JsonSerializer.Deserialize<TeamMembers_2311104057>(jsonData);

            Console.WriteLine("Team member list:");
            foreach (var member in team.members)
            {
                Console.WriteLine($"{member.nim} {member.firstName} {member.lastName} ({member.age} {member.gender})");
            }
        }
    }
}

```

```

7 Console.WriteLine("\nSelesai.");
8 Console.ReadKey(); // Supaya konsol tidak langsung tertutup
9
10 Console.WriteLine("Membaca file JSON dan menampilkan data anggota kelompok... ");
11 TeamMembers_2311104057 team = new TeamMembers_2311104057();
12 team.ReadJSON("jurnal7_2_2311104057.json");

```

### Prinsip yang sama dengan ReadJson 1

```

Membaca file JSON dan menampilkan data anggota kelompok...
Team member list:
2311104060 Aulia Jasifa (19 female)
2311104068 Ilham Assidaq (19 male)
2311104070 Alvin Bagus (19 male)

D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3\modul7_kelompok_3\bin\Debug\net8.0\modul7_kelompok_3.exe (process 20732) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

### 4. Push

```

D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(dev-reyner) (0.076s)
git add .

D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(dev-reyner)±3 (0.144s)
git commit -m "menambahkan class TeamMembers"
[dev-reyner d8d85dd] menambahkan class TeamMembers
3 files changed, 44 insertions(+)
create mode 100644 modul7_kelompok_3/TeamMembers_2311104057.cs

```

#### 4. Read Json 3

```

class GlossaryItem_2311104057
{
    0 references
    public Glossary glossary { get; set; }

    1 reference
    public static void ReadJSON()
    {
        string json = File.ReadAllText("jurnal7_3_2311104057.json");
        var data = JsonConvert.DeserializeObject<GlossaryItem_2311104060>(json);

        var glossEntry = data?.glossary?.GlossDiv?.GlossList?.GlossEntry;

        if (glossEntry != null)
        {
            Console.WriteLine("GlossEntry:");
            Console.WriteLine($"ID: {glossEntry.ID}");
            Console.WriteLine($"GlossTerm: {glossEntry.GlossTerm}");
            Console.WriteLine($"Acronym: {glossEntry.Acronym}");
            Console.WriteLine($"Abbrev: {glossEntry.Abbrev}");
            Console.WriteLine($"GlossDef.Para: {glossEntry.GlossDef.para}");
        }
    }
}

Console.WriteLine("\nSelesai.");
Console.ReadKey(); // Supaya konsol tidak langsung tertutup

Console.WriteLine("Membaca file JSON dan menampilkan GlossEntry");
GlossaryItem_2311104057.ReadJSON();
Console.WriteLine("\nSelesai.");

```

Menggunakan JsonConvert.DeserializeObject untuk mengekstrak isi dari objek di dalam file json dengan memori yang lebih efisien

Mengecek apakah glossEntry dalam Json kosong. Jika tidak maka akan dilanjutkan dengan proses penampilan isi dari Json dengan menggunakan Console.WriteLine.

```

Membaca file JSON dan menampilkan GlossEntry
GlossEntry:
ID: SGML
GlossTerm: Standard Generalized Markup Language
Acronym: SGML
Abbrev: ISO 8879:1986
GlossDef.Para: A meta-markup language, used to create markup languages such as DocBook.

Selesai.

```

#### 5. Push



```
D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(dev-reyner) (0.086s)
git add .
```

```
D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(dev-reyner)±5 (0.169s)
git commit -m "menambahkan class GlossaryItem"
```

```
[dev-reyner 4dbf928] menambahkan class GlossaryItem
5 files changed, 100 insertions(+), 1 deletion(-)
create mode 100644 modul7_kelompok_3/GlossaryItem_2311104057.cs
create mode 100644 modul7_kelompok_3/jurnal7_3_2311104057.json
```

```
D:\KULIAH\SEMESTER 4\KPL Praktikum\kelompok\Modul07\modul7_kelompok_3 git:(dev-reyner) (2.497s)
git push origin dev-reyner
```

```
Enumerating objects: 25, done.
Counting objects: 100% (25/25), done.
Delta compression using up to 8 threads
Compressing objects: 100% (20/20), done.
Writing objects: 100% (20/20), 2.73 KiB | 931.00 KiB/s, done.
Total 20 (delta 14), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (14/14), completed with 4 local objects.
remote:
remote: Create a pull request for 'dev-reyner' on GitHub by visiting:
remote:   https://github.com/reyneraaira/modul7_kelompok_3/pull/new/dev-reyner
remote:
To https://github.com/reyneraaira/modul7_kelompok_3.git
 * [new branch]      dev-reyner -> dev-reyner
```