TUGAS JURNAL
KONSTRUKSI PERANGKAT LUNAK

MODUL VII

JSON DESERIALIZATON

Disusun Oleh :

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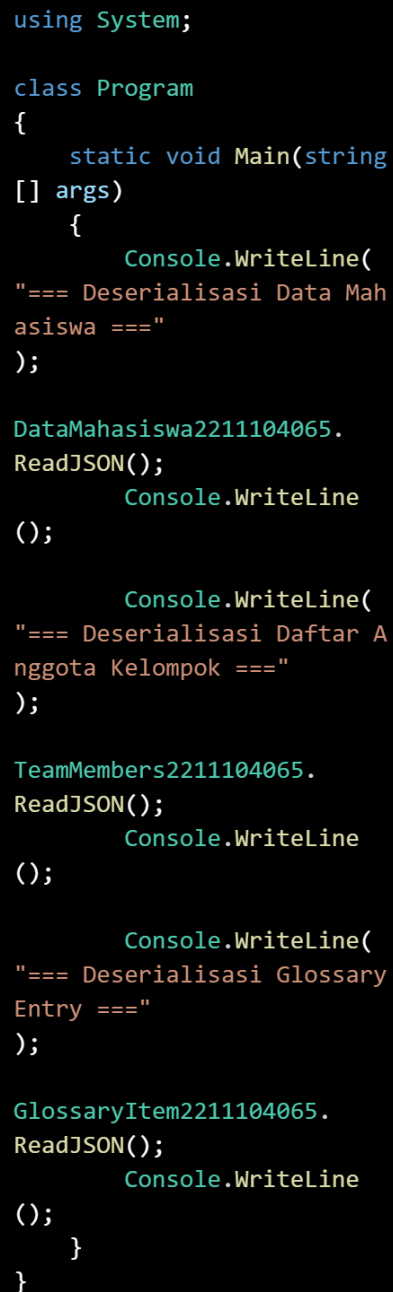
SE06-3

PROGRAM STUDI S1 SOFTWARE ENGINEERING

FAKULTAS INFORMATIKA

TELKOM UNIVERSITY PURWOKERTO

2024

TUGAS JURNAL

A. Program.cs

```csharp
using System;

class Program
{
    static void Main(string[] args)
    {
        Console.WriteLine(
"=== Deserialisasi Data Mah
asiswa ==="
);

DataMahasiswa2211104065.
ReadJSON();
        Console.WriteLine
();

        Console.WriteLine(
"=== Deserialisasi Daftar A
nggota Kelompok ==="
);

TeamMembers2211104065.
ReadJSON();
        Console.WriteLine
();

        Console.WriteLine(
"=== Deserialisasi Glossary
Entry ==="
);

GlossaryItem2211104065.
ReadJSON();
        Console.WriteLine
();
    }
}
```
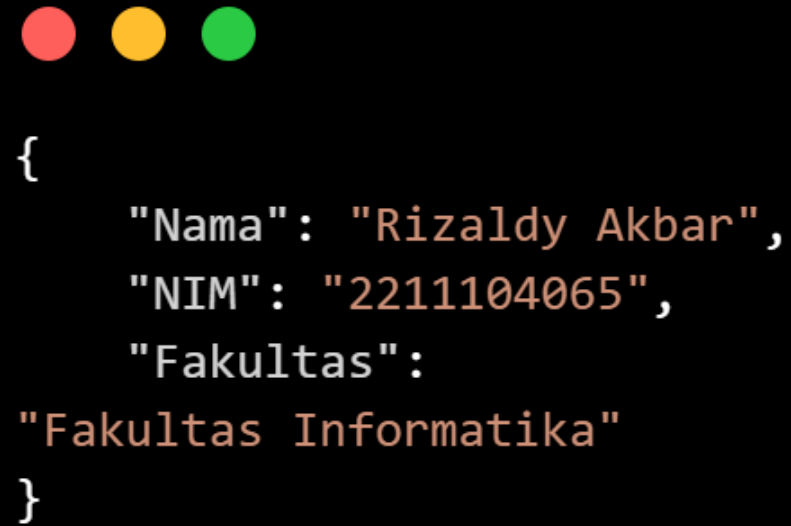
B. DataMahasiswa2211104065

```csharp
using System;
using System.IO;
using System.Text.Json;

public class DataMahasiswa2211104065
{
    public string? Nama {
get; set; }
    public string? NIM {
get; set; }
    public string? Fakultas
 { get; set; }

    public static void
ReadJSON()
    {
        string filePath =
"jurnal7_1_2211104065.json"
;
        string json = File.
ReadAllText(filePath);
        var data =
JsonSerializer.Deserialize<
DataMahasiswa2211104065>(
json);
        Console.WriteLine(
$"Nama: {data?.Nama}\nNIM:
{data?.NIM}\nFakultas: {
data?.Fakultas}");
    }
}
```

n

C. jurnal7_1_2211104065

```json
{
    "Nama": "Rizaldy Akbar",
    "NIM": "2211104065",
    "Fakultas":
"Fakultas Informatika"
}
```

D. TeamMembers2211104065

```csharp
using System;
using System.Collections.
Generic;
using System.IO;
using System.Text.Json;

public class TeamMember
{
    public string? NIM {
get; set; }
    public string?
Firstname { get; set; }
    public string? Lastname
 { get; set; }
    public int Age { get;
set; }
    public string? Gender
 { get; set; }
}

public class
TeamMembers2211104065
{
    public List<TeamMember>
? Members { get; set; }

    public static void
ReadJSON()
    {
        string filePath =
"jurnal7_2_2211104065.json"
;
        string json = File.
ReadAllText(filePath);
        var data =
JsonSerializer.Deserialize<
TeamMembers2211104065>(json
);

        Console.WriteLine(
"Team member list:");
        foreach (var member
 in data.Members)
        {
            Console.
WriteLine($"{member.NIM} {
member.Firstname} {member.
Lastname} ({member.Age} {
member.Gender})");
        }
    }
}
```

E. jurnal7_2_2211104065

```
{
    "Members": [
        {
            "NIM":
"2211104065",
            "Firstname":
"Rizaldy",
            "Lastname":
"Akbar",
            "Age": 20,
            "Gender":
"Male"
        },
        {
            "NIM":
"2211104070",
            "Firstname":
"Alya",
            "Lastname":
"Putri",
            "Age": 20,
            "Gender":
"Female"
        }
    ]
}
```

F. GlossaryItem2211104065

```csharp
using System;
using System.IO;
using System.Text.Json;

public class GlossaryItem2211104065
{
    public GlossaryData Glossary { get; set
; }

    public class GlossaryData
    {
        public GlossEntry GlossEntry { get;
set; }
    }

    public class GlossEntry
    {
        public string ID { get; set; }
        public string SortAs { get; set; }
        public string GlossTerm { get; set; }
        public string Acronym { get; set; }
        public string Abbrev { get; set; }
        public string Definition { get; set
; }
        public string[] SeeAlso { get; set; }
    }

    public static void ReadJSON()
    {
        string filePath =
"jurnal7_3_2211104065.json";
        string json = File.ReadAllText(
filePath);
        var data = JsonSerializer.Deserialize
<GlossaryItem2211104065>(json);

        var entry = data?.Glossary.GlossEntry
;
        Console.WriteLine("GlossEntry:");
        Console.WriteLine($"ID: {entry?.ID}"
);
        Console.WriteLine($"Term: {entry?.
GlossTerm}");
        Console.WriteLine($"Acronym: {entry?.
Acronym}");
        Console.WriteLine($"Abbrev: {entry?.
Abbrev}");
        Console.WriteLine($"Definition: {
entry?.Definition}");
        Console.WriteLine($"See Also: {string
.Join(", ", entry.SeeAlso)}");
    }
}
```
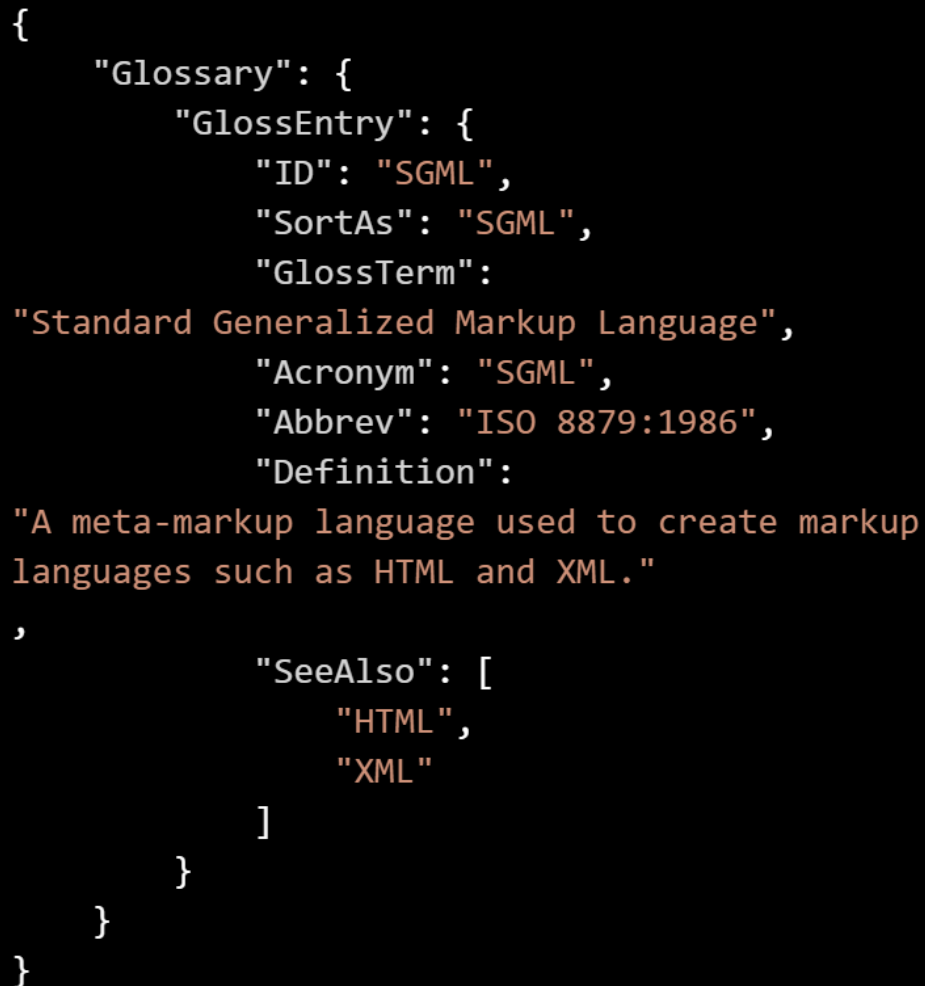
G. jurnal7_3_2211104065

```json
{
    "Glossary": {
        "GlossEntry": {
            "ID": "SGML",
            "SortAs": "SGML",
            "GlossTerm":
"Standard Generalized Markup Language",
            "Acronym": "SGML",
            "Abbrev": "ISO 8879:1986",
            "Definition":
"A meta-markup language used to create markup
languages such as HTML and XML."
,
            "SeeAlso": [
                "HTML",
                "XML"
            ]
        }
    }
}
```

H. Output

```
=== Deserialisasi Data Mahasiswa ===
Nama: Rizaldy Akbar
NIM: 2211104065
Fakultas: Fakultas Informatika

=== Deserialisasi Daftar Anggota Kelompok ===
Team member list:
2211104065 Rizaldy Akbar (20 Male)
2211104070 Alya Putri (20 Female)

=== Deserialisasi Glossary Entry ===
GlossEntry:
ID: SGML
Term: Standard Generalized Markup Language
Acronym: SGML
Abbrev: ISO 8879:1986
Definition: A meta-markup language used to create markup languages such as HTML and XML.
See Also: HTML, XML
```