

Tugas Pendahuluan Modul 5
Konstruksi Perangkat Lunak
PRODI REKAYASA PERANGKAT LUNAK



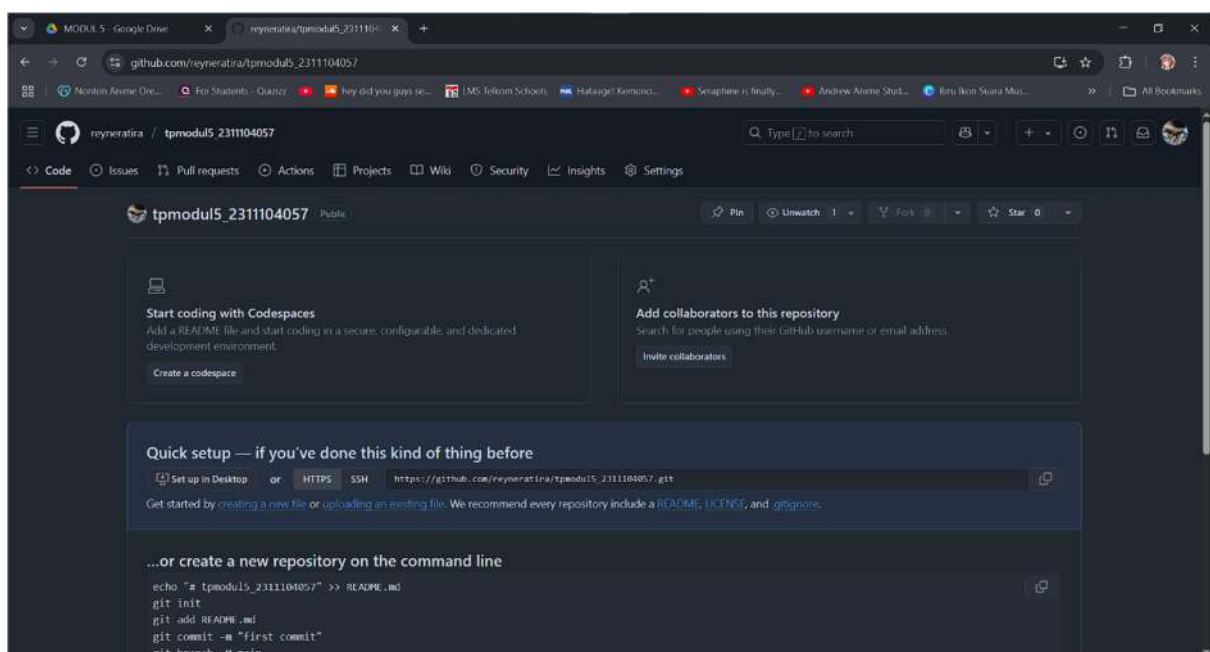
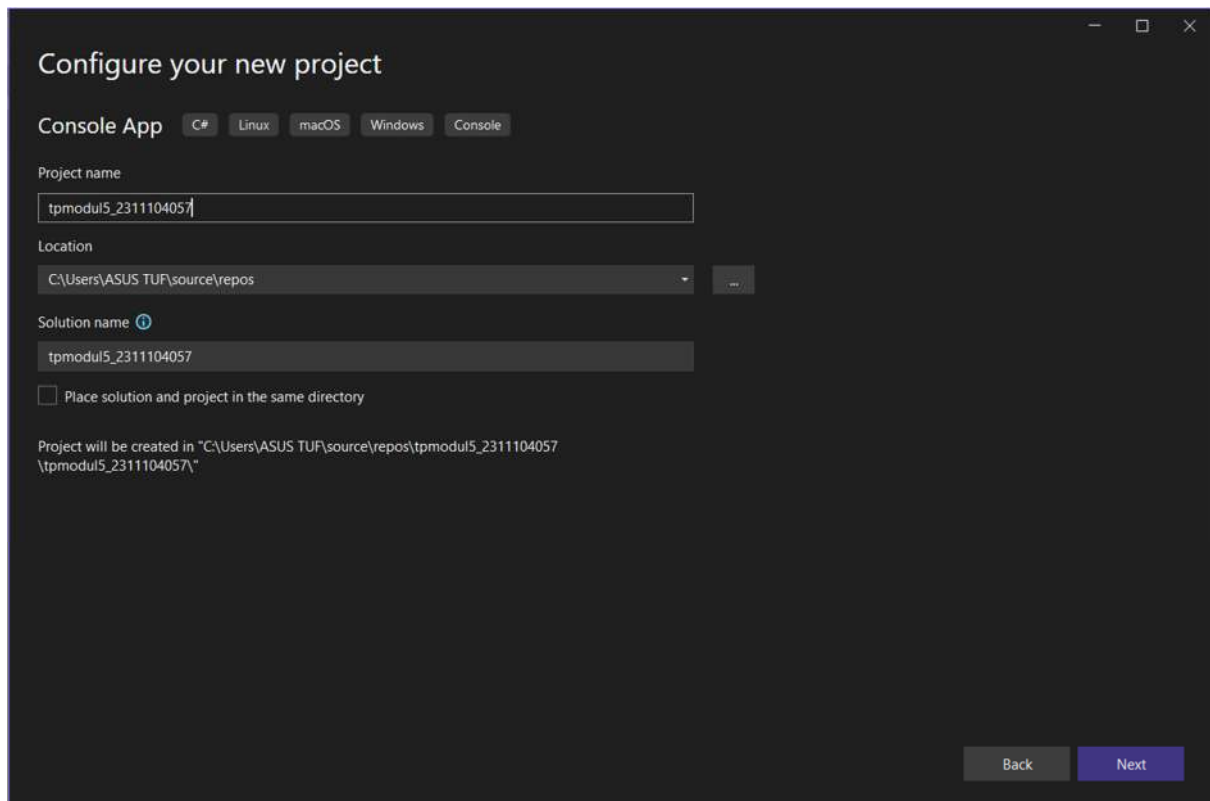
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PURWOKERTO

Tugas Pendahuluan Modul 5

1. GitHub dan Git

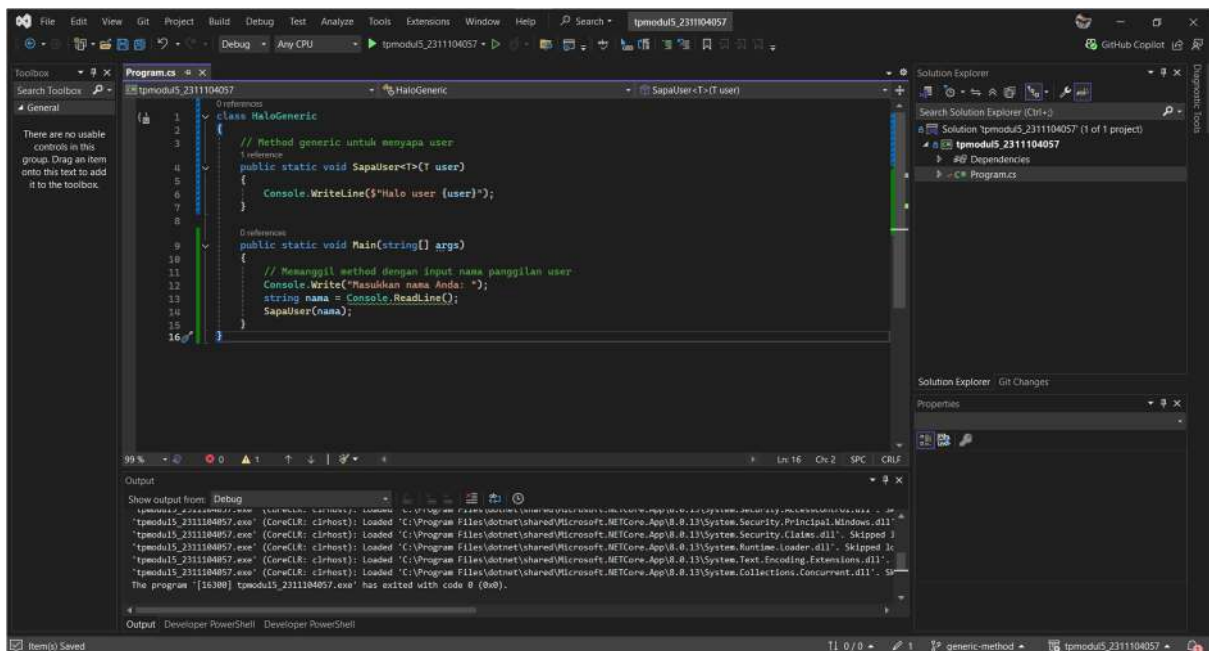
Link : https://github.com/reynaratira/tpmodul5_2311104057



2. Membuat branch baru (generic-method)

```
Developer PowerShell
+ Developer PowerShell
*****
** Visual Studio 2022 Developer PowerShell v17.13.0
** Copyright (c) 2022 Microsoft Corporation
*****
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git checkout -b generic-method
Switched to a new branch 'generic-method'
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057>
```

3. Generic method



Penjelasan :

- Metode generic SapaUser akan menerima input dari berbagai tipe data dan mencetak pesan sapaan.

Hasil Run :

```
Microsoft Visual Studio Debug Console
Masukkan nama Anda: Reyner
Halo user Reyner

C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057\tpmodul5_2311104057\bin\Debug\net8.0\tpmodul5_2311104057.exe (process 19724) 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 . . .
```

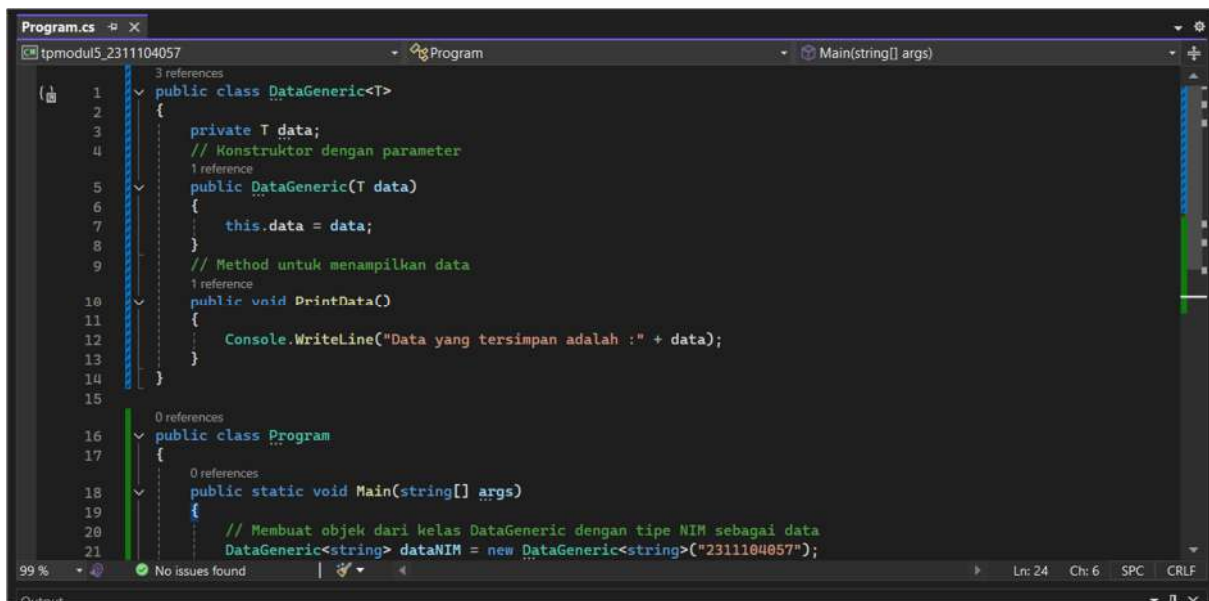
4. Git commit dan push

```
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git push origin -u generic-method
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 620 bytes | 620.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'generic-method' on GitHub by visiting:
remote:   https://github.com/reynerratira/tpmodul5_2311104057/pull/new/generic-method
remote:
To https://github.com/reynerratira/tpmodul5_2311104057.git
 * [new branch]      generic-method -> generic-method
branch 'generic-method' set up to track 'origin/generic-method'.
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057>
```

5. Membuat branch baru (generic-class)

```
branch 'generic-method' set up to track 'origin/generic-method'.
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git checkout -b generic-class
Switched to a new branch 'generic-class'
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057>
```

6. Generic class

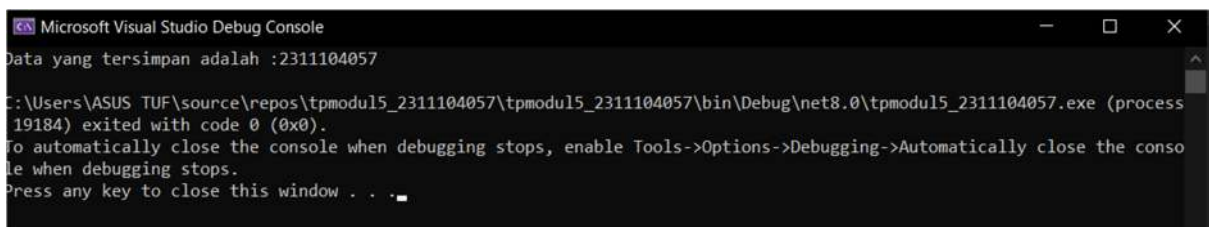


```
1 public class DataGeneric<T>
2 {
3     private T data;
4     // Konstruktor dengan parameter
5     public DataGeneric(T data)
6     {
7         this.data = data;
8     }
9     // Method untuk menampilkan data
10    public void PrintData()
11    {
12        Console.WriteLine("Data yang tersimpan adalah : " + data);
13    }
14 }
15
16 public class Program
17 {
18     public static void Main(string[] args)
19     {
20         // Membuat objek dari kelas DataGeneric dengan tipe NIM sebagai data
21         DataGeneric<string> dataNIM = new DataGeneric<string>("2311104057");
```

Penjelasan :

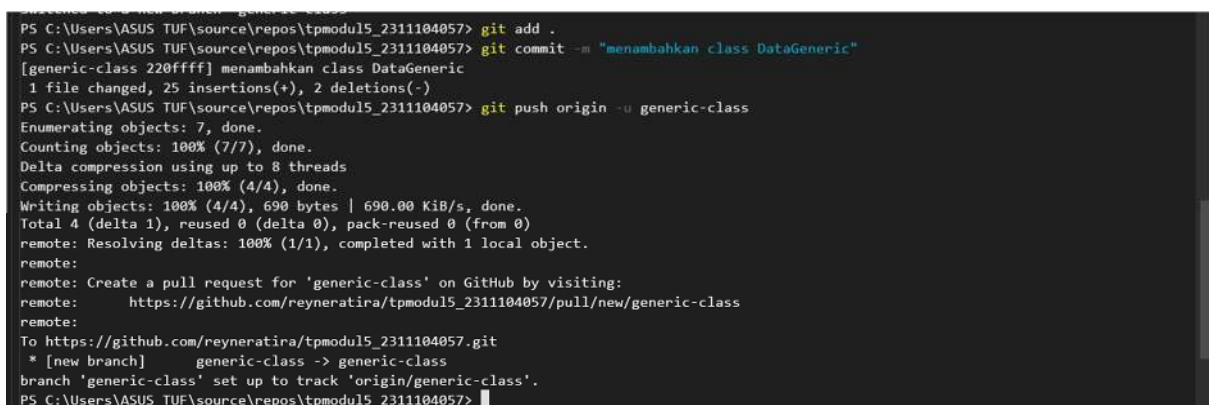
- T adalah tipe generic yang memungkinkan DataGeneric menyimpan berbagai jenis data.
- Konstruktor menerima satu parameter bertipe T dan menginisialisasi atribut data.
- PrintData() mencetak nilai data dengan format yang diminta.
- Dalam Main(), objek DataGeneric<string> dibuat dengan nilai NIM, lalu method PrintData() dipanggil untuk mencetaknya.

Hasil Run :



```
Microsoft Visual Studio Debug Console
Data yang tersimpan adalah :2311104057
C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057\tpmodul5_2311104057\bin\Debug\net8.0\tpmodul5_2311104057.exe (process 19184) 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 . . .
```

7. Git commit dan push



```
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git add .
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git commit -m "menambahkan class DataGeneric"
[generic-class 220ffff] menambahkan class DataGeneric
1 file changed, 25 insertions(+), 2 deletions(-)
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git push origin -u generic-class
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 690 bytes | 690.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'generic-class' on GitHub by visiting:
remote:   https://github.com/reynernatira/tpmodul5_2311104057/pull/new/generic-class
remote:
To https://github.com/reynernatira/tpmodul5_2311104057.git
 * [new branch]   generic-class -> generic-class
branch 'generic-class' set up to track 'origin/generic-class'.
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057>
```

8. Git merge dan push

```
Automatic merge failed; fix conflicts and then commit the result.
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git add .
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git commit -m "Merged HaloGeneric and DataGeneric classes"
[master 0d9ba7c] Merged HaloGeneric and DataGeneric classes
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057> git push origin master
>>
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 658 bytes | 658.00 KiB/s, done.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/reynaratira/tpmodul5_2311104057.git
   53d14ac..0d9ba7c  master -> master
PS C:\Users\ASUS TUF\source\repos\tpmodul5_2311104057>
```