

Yesterday:-

- 1) Non-generic collection:- IEnumerable
int[], obj[], ArrayList, Hashtable, Stack, Queue
- 2) Generic collection:- IEnumerable<>
List<>, Dictionary<>, foreach loop → use
- 3) Generic classes and Generic method.
- 4) Generic overloaded delegates
- 5) Tuples collection
- 6) ranges and indices
- 7) Dynamic Datatype:- initialize at runtime.
- 8) out parameter
- 9) Pass by value & Pass by reference.

Today:-

1) File 20 & Serialization

2) Reflection

Stream :- data in a channel -: bits and bytes.

System.io;

abstract Class Stream

Persist
↳ Data on the
hard drive

Class FileStream ✓

Class NetworkStream
Persist and transfers
data across the
network [TCP etc]

class CryptoStream
For encrypting
data and
transferring

class FileStream

5th/6th



FileStream fs = new FileStream("FilePath",
"C:/myApp/Data.txt",
FileMode.CreateOrOpen,

Enum

FileAccess.Write);

StreamWriter writer = new StreamWriter(fs)

↳ write() → one line

writer.WriteLine() → one line

writer.Flush();
writer.Close() → fs.Close();

For web:- Hotel App:- Console App. / logic should be in
all files



↳ Service Online

User → Show menu option [veg, non-veg, Both]

User → veg → Display list of items like
Name of Dish, Price

Same for non-veg → ↑

Both → combine menus
→ Name of Dish, Price

User → select multiple menus.

→ Display msg :- C.W ("order is on the way")

→ file.txt → Order No:-
list of ordered items & total bill.

< ?xml version="1.0" > xml schema

< Emp >

< Id > 10 < / Id >

< Name > Mugdha < / Name >

< Address > Pune < / Address >

< / Emp >

typeof (Emp)



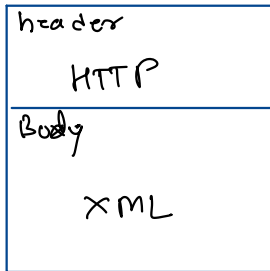
at the time
of
initialization

SOAP Formatter

[Simple Object Access Protocol]

SOAP Protocol = HTTP + XML ;

HTTP Packet



```
public class Cmath
```

```
{
    p. int Add (x,y)
    return int;
    p. int Sub (x,y)
    return (int);
}
```

Cmath.dll

Compile

Assembly asm = new Assembly();
asm.type = types;
Type[] types = new Type[2] {"Cmath", "Book"};

```
Type type = new Type()
{
    type.Name = "Cmath.Cmath";
    type.isPublic = true;
    type.isClass = true;
    type.isInterface = false;
    type.isSealed = false;
    type.isInherited = false;
    type.method = methods;
    Method[] methods = all methods[];
    method[0].Name = "Add";
    method[0].isPublic = true;
    method[0].isOverridden = false;
    method[0].ReturnType = "System.Int32";
    method[1].Name = "Sub";
    method.Parameters = new ParameterInfo[2]();
    parameter.Name = "x";
    parameter.ParameterType = "System.Int32";
    parameter.Count = 2;
}
```

Assembly
metadata

Resources
metadata

Type
metadata

MSIL

menu . dll

class menu

```

1      int      i
prop List < veg menu > veg_menus;
      ↳ = new List < veg menu > ();
      [0] = new Veg Menu ();
      ↳ obj. itemName = "  ",
3

```


namespace ReportApp

class ↳ Program ✓
↳ main

interface ↳ IReport ✓

abstract class ↳ abstract Report ✓
↳ Special Report ✓

class. { ↳ Report Factory ✓
↳ PDF ✓
↳ Docx ✓
↳ TXT ✓
↳ XML ✓

```
Type[] types  
= new Type[9];  
types[0] =  
    "Program"  
type[1] =  
    "IReport";
```