

# DAY 1

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## FullStack development

- front end + middle layer + data layer Web site + web services + database management

## online shopping application using .NET

- Database:
  - MySQL + local database (local sql server)
- Business logic :
  - Product catalog logic
  - Shopping cart
  - order proccesing
  - Payment and billing
  - Authentication and Authorization
  - shipment (Delivery)
- Service layer:
  - Product Catalog service
  - Shopping cart service
  - order proccesing service
  - Payment process and billing service
  - Authentication service
  - Authorization service
  - shipment (Delivery) service

## light weight , business logic accessed by via HTTP request REST ful web services

- Web Site:
  - web user interface + online web application management
  - web pages + validation + state management, web security, caching, personalization, multilingual web, etc..
  - Responsive UI

## Baby step Learning:

- Hello world using Visual Studio.NET
- learn basics of C# Progtamming
- Learn Visual studio .NET Application Development Process

## Rules to create project

- Launch VS IDE
- create .NET Framework Console Application
- Start working with Project by modifying or adding C# code

## Console Class

- Two static major function
  - WriteLine, ReadLine

```
Console.ReadLine("hello world");  
Console.WriteLine();
```

- Everything in C# is defined within namespace
- Each class should be defined in namespace.
- Class can have static and nonstatic methods.
- Entrypoint function main is always methods.
- Command Arguments are always access through string[] args.
- public, private, protected and internal are access specifiers in C#.
- Class can have overloaded ctor.
- class expose private data members to outside using member functions as well as through properties.
- Properties always encapsulate private data members of instance.
- Properties can readonly or writeonly as well.
- It is good practice to write new class in separate file.
- this keyword in C# represent self reference of an instance.
- value is inbuilt keyword in C#