

# Lesson 1 - Setup and Introduction

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Install [Visual Studio](#)

Install [SQL Server Management Studio](#)

Install [Git](#)

Sign up for [GitHub](#)

## What is Object Oriented Programming?

## What is .NET?

Object Oriented Framework for building applications using the C# programming language.  
What can .NET do?

- Desktop: Windows & macOS Applications
- Web Applications
- Web Services: Linux, Windows, macOS, and Docker
- Mobile Applications: iOS & Android
- Client-Server Applications
- Database Applications
- Cloud Services
- Machine Learning: ML.NET
- Game Development: Unity
- IoT Apps

Note: .NET also supports programming in F# and Visual Basic.

## What is a Database?

Storage of data in tabular format (rows and columns). Used to store data for websites and applications such as videos, images, usernames, passwords. Similar to Excel. Each Column has a title and data type. And most of the times each table has a column that serves as a primary key.

## What is SQL?

Structured Query Language is used to access and manipulate a database. There are different variations of SQL, but we will stick to the SQL Server by Microsoft.

## What is Version Control?

Version control keeps track of all the changes made to a repository, which is a collection of documents. It may be a collection of scripts or a app project or any collection of files. It keeps track of what changes are made, who made them, and when they were made. This is very crucial in managing projects, rolling back changes, and when multiple people are working on the same project.

## What is Git?

Git is the most widely used Version Control System. This is the VCS system that we will be using. Install git and test using `git --version`

## What is GitHub?

Hosting platform for version control and collaboration. Having a GitHub account is important when working in the Software industry and serves as a portfolio.

## What is Open Source?

Software Systems whose 'source', basically the code base is publicly accessible. So, anyone can look at the code, modify it and enhance it.