**In this video session we will learn about**  
1. DateTime data types  
2. DateTime functions available to select the current system date and time  
3. Understanding concepts - UTC time and Time Zone offset   
  
   
   
  
There are several built-in DateTime functions available in SQL Server. All the following functions can be used to get the current system date and time, where you have sql server installed.

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| **Function** | **Date Time Format** | **Description** |
| GETDATE() | 2012-08-31 20:15:04.543 | Commonly used function |
| CURRENT\_TIMESTAMP | 2012-08-31 20:15:04.543 | ANSI SQL equivalent to GETDATE |
| SYSDATETIME() | 2012-08-31 20:15:04.5380028 | More fractional seconds precision |
| SYSDATETIMEOFFSET() | 2012-08-31 20:15:04.5380028 + 01:00 | More fractional seconds precision + Time zone offset |
| GETUTCDATE() | 2012-08-31 19:15:04.543 | UTC Date and Time |
| SYSUTCDATETIME() | 2012-08-31 19:15:04.5380028 | UTC Date and Time, with More fractional seconds precision |

**Note**: **UTC**stands for **Coordinated Universal Time**, based on which, the world regulates clocks and time. There are slight differences between GMT and UTC, but for most common purposes, UTC is synonymous with GMT.   
  
To practically understand how the different date time datatypes available in SQL Server, store data, create the sample table **tblDateTime**.  
CREATE TABLE [tblDateTime]  
(  
 [c\_time] [time](7) NULL,  
 [c\_date] [date] NULL,  
 [c\_smalldatetime] [smalldatetime] NULL,  
 [c\_datetime] [datetime] NULL,  
 [c\_datetime2] [datetime2](7) NULL,  
 [c\_datetimeoffset] [datetimeoffset](7) NULL  
)  
  
**To Insert some sample data, execute the following query.**  
INSERT INTO tblDateTime VALUES (GETDATE(),GETDATE(),GETDATE(),GETDATE(),GETDATE(),GETDATE())  
  
Now, issue a select statement, and you should see, the different types of datetime datatypes, storing the current datetime, in different formats.