

EFCORE : SHADOW PROPERTY

Shadow properties are the properties that are not defined in your .NET entity class directly

You configure it for the particular entity type in the entity data model. They can be configured in the `OnModelCreating()` method of the context class.

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Let's define this Student entity.



```
public class Student
{
    public int StudentID { get; set; }
    public string StudentName { get; set; }
    public DateTime? DateOfBirth { get; set; }
    public decimal Height { get; set; }
    public float Weight { get; set; }
}
```

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Use `Property()` method to
configure `CreatedDate` and
`UpdatedDate` as shadow
property

```
public class SchoolContext : DbContext
{
    public SchoolContext() : base()
    {
    }

    protected override void OnModelCreating(ModelBuilder modelBuilder) {
        modelBuilder.Entity<Student>().Property<DateTime>( "CreatedDate" );
        modelBuilder.Entity<Student>().Property<DateTime>( "UpdatedDate" );
    }

    public DbSet<Student> Students { get; set; }
}
```



Override the `SaveChanges()` method in the context class

```
public override int SaveChanges()
{
    var entries = ChangeTracker
        .Entries()
        .Where(e =>
            e.State == EntityState.Added
            || e.State == EntityState.Modified);

    foreach (var entityEntry in entries)
    {
        entityEntry.Property("UpdatedDate").CurrentValue = DateTime.Now;

        if (entityEntry.State == EntityState.Added)
        {
            entityEntry.Property("CreatedDate").CurrentValue = DateTime.Now;
        }
    }

    return base.SaveChanges();
}
```



Now you will automatically set values to **CreatedDate** and **UpdatedDate** shadow properties on any **SaveChange()** of the **SchoolContext**

Since EfCore introduced **interceptors**, you can use them instead of overriding the **SaveChanges()** method.






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