Entity Framework Core

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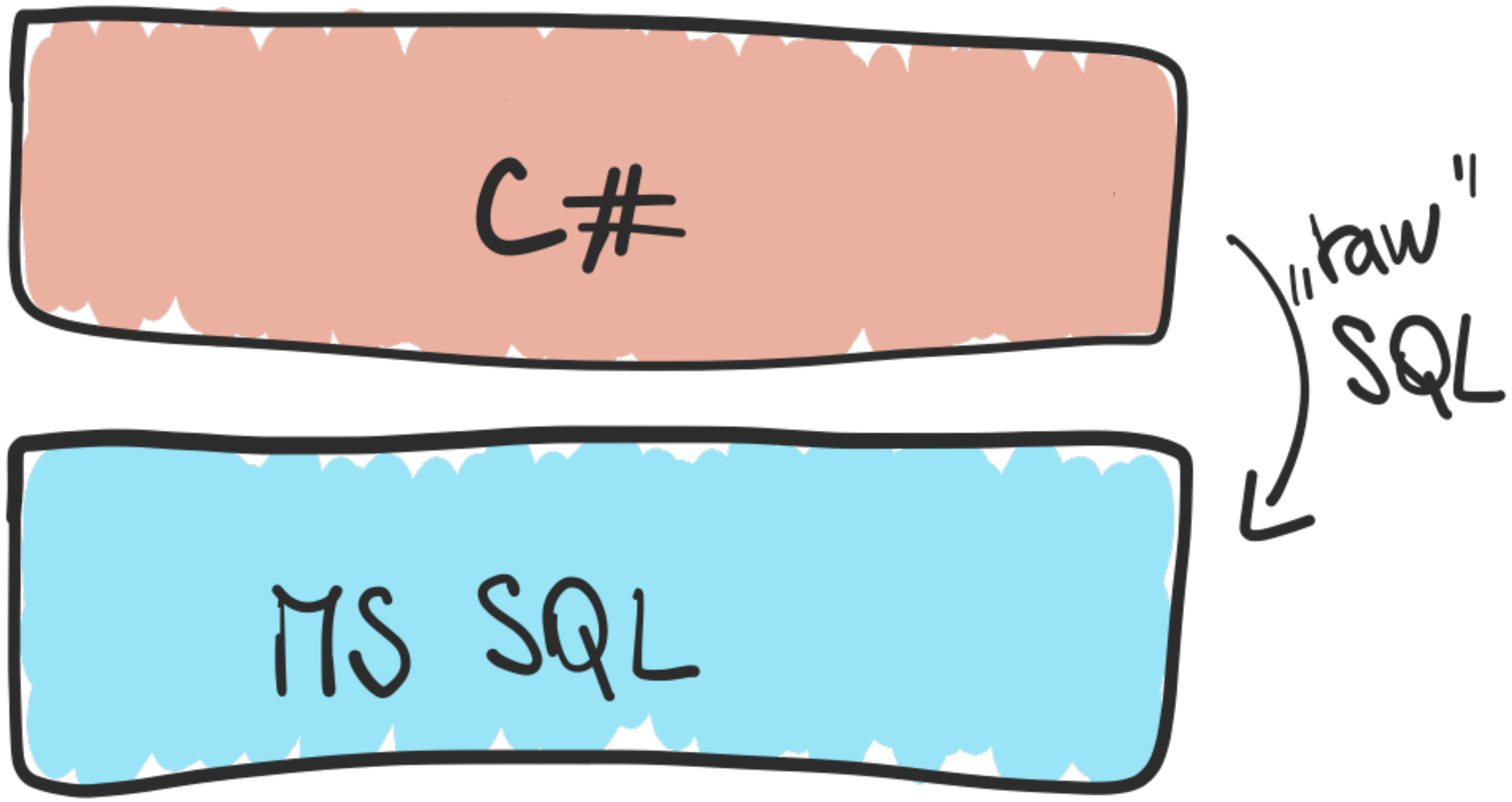
Short Definition

EF Core can serve as an object-relational mapper (O/RM), enabling .NET developers to work with a database using .NET objects, and eliminating the need for most of the data-access code they usually need to write.

EF Core supports many database engines.

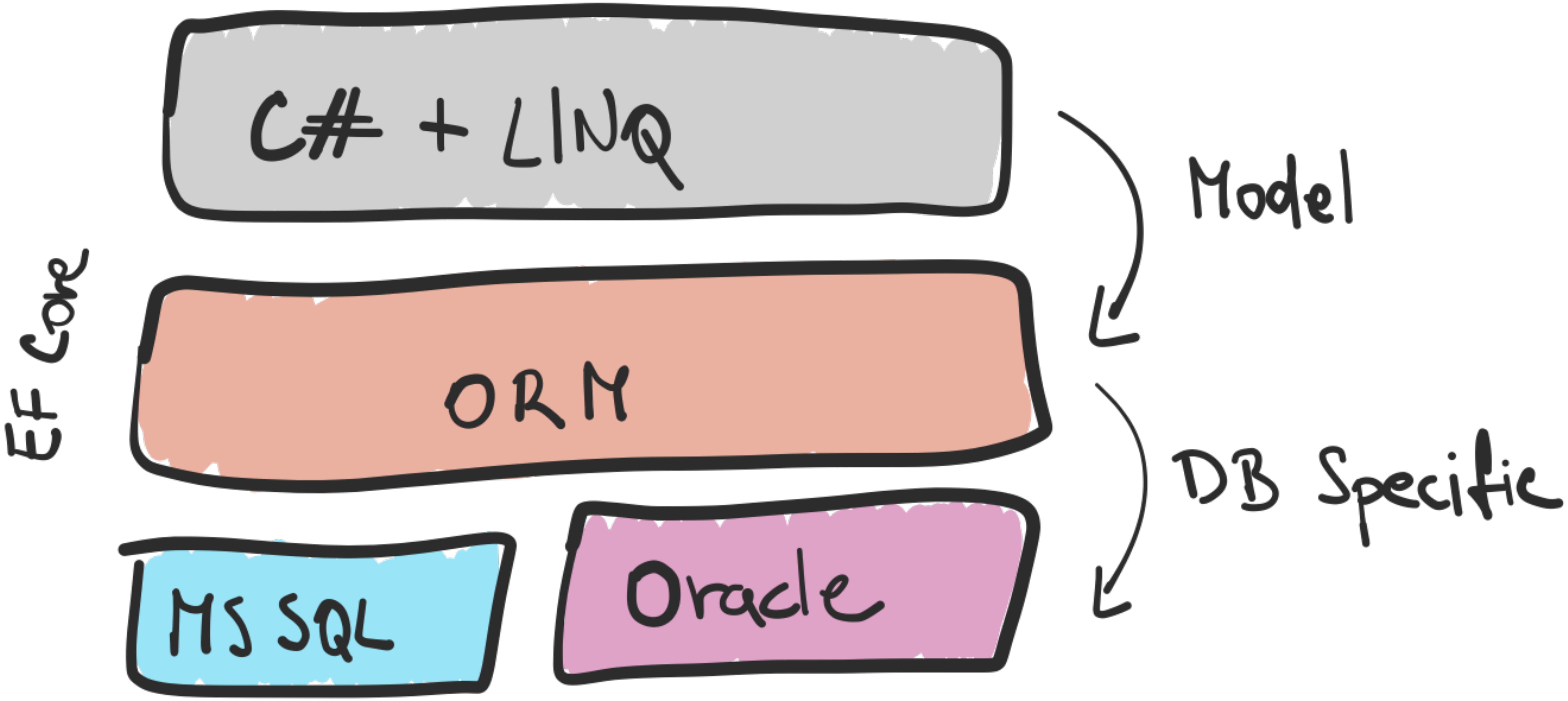
Basics

Platform Specific



Basics

ORM



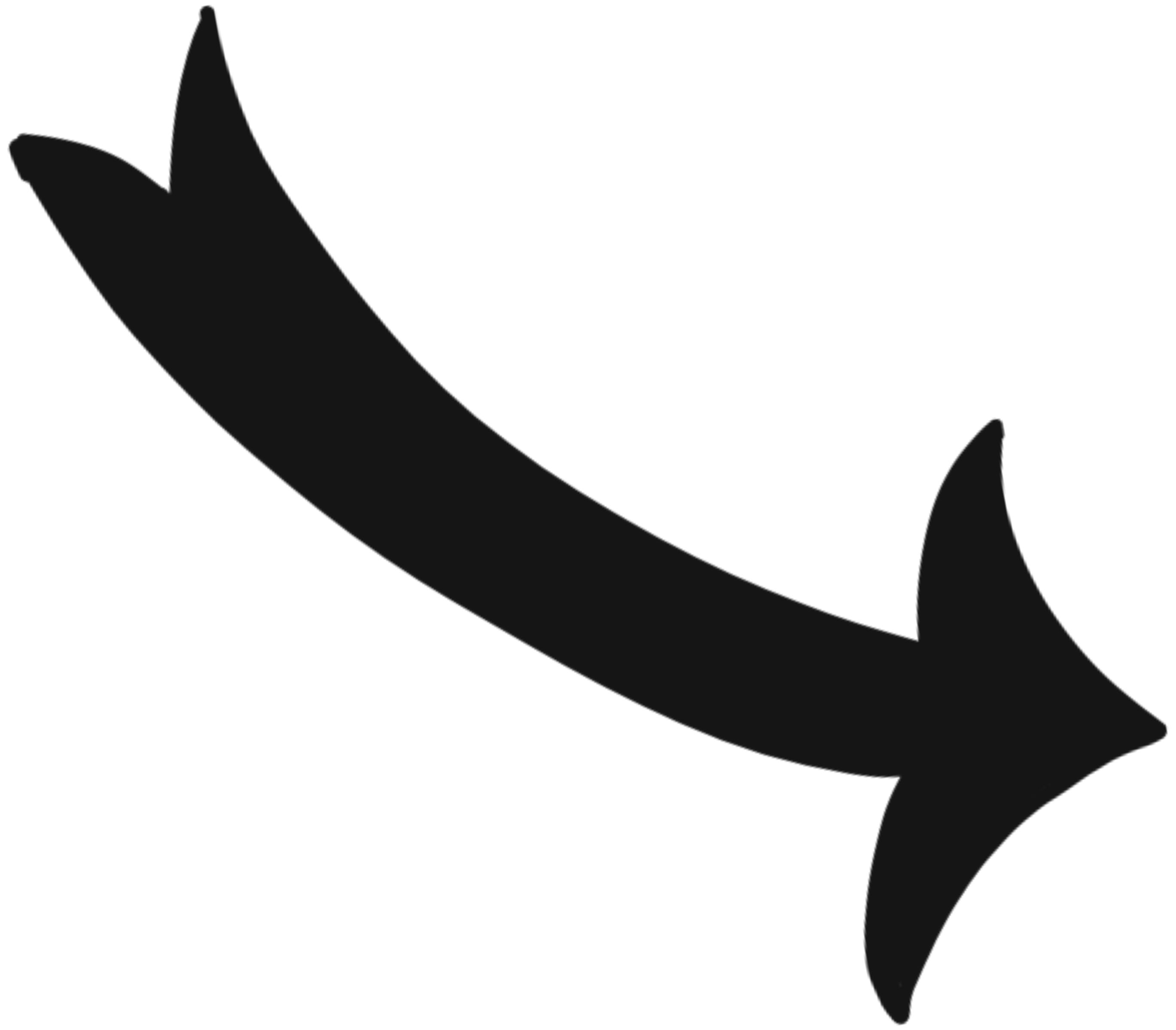
The Model

The model is responsible for performing data access. It is made up of entity classes and a context object that represents a session with the database, allowing you to query and save data.

Model can be hardcoded to match existing DB, generated from existing DB or created by hand and propagated to DB using migrations.

Code first

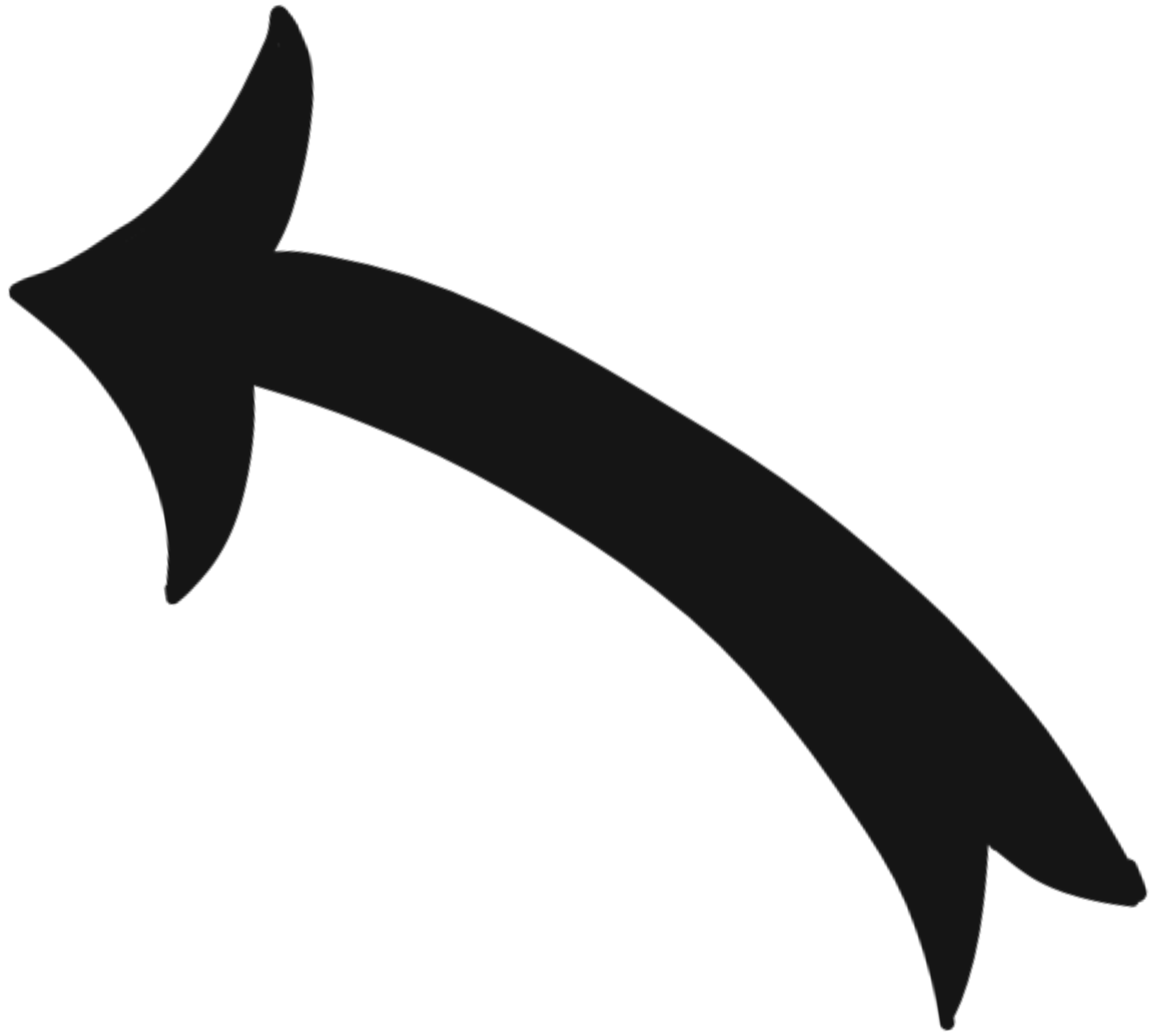
```
public class Blog
{
    public int BlogId { get; set; }
    public string Url { get; set; }
}
```



```
create table Blogs (
    blogId int,
    url varchar(100)
)
```

DB first

```
public class Blog
{
    public int BlogId { get; set; }
    public string Url { get; set; }
}
```



```
create table Blogs (
    blogId int,
    url varchar(100)
)
```

Querying

```
using (var db = new BloggingContext())
{
    var blogs = db.Blogs
        .Where(b => b.Rating > 3)
        .OrderBy(b => b.Url)
        .ToList();
}
```

Saving Data

```
using (var db = new BloggingContext())
{
    var blog = new Blog {
        Url = "http://sample.com"
    };
    db.Blogs.Add(blog);
    db.SaveChanges();
}
```

Q & A