.NET Developer Toolkit

# THE REPOSITORY PATTERN

# What we'll cover

- What is Repository Pattern & why do we use it?
- Build # 1 No Repository
- Change is hard…
- Build # 2a Build with Repository
- Build # 2b Switch out our implementation

# Ingredients

- .NET 6 SDK (free)
- VS Code (free)
- Docker (for our 2x persistence platforms) (free)
- Insomnia (free)

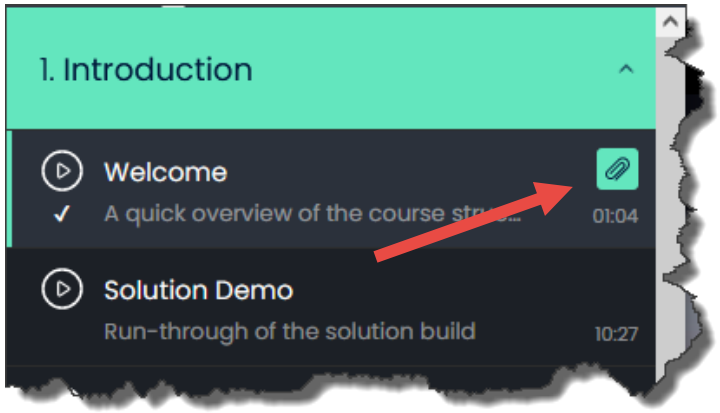
# Another API build!

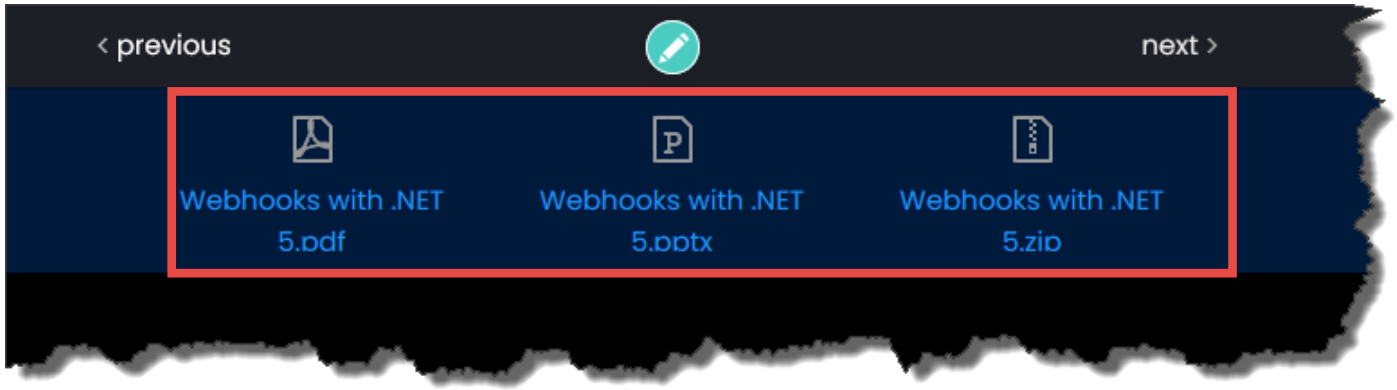
- We will use a minimal API to demonstrate the repository pattern
- We will do a full build to keep each module self-contained
- The focus however is on the repository pattern
  - Check out my full minimal API build on YouTube

# Suggested pre-requisites

- Dependency Injection Module
- User Secrets
- Minimal API Build (YouTube Channel)

# Course Downloads

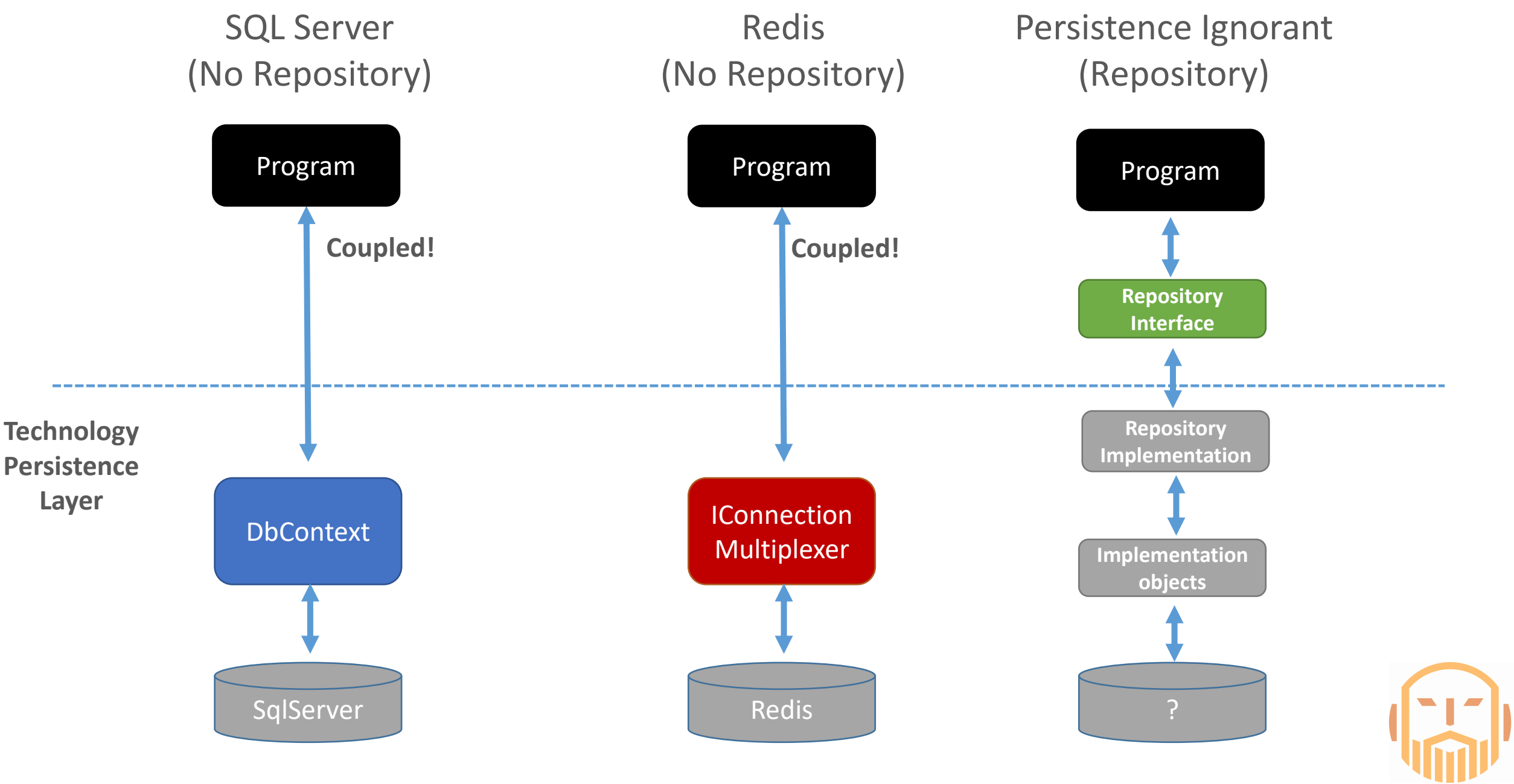


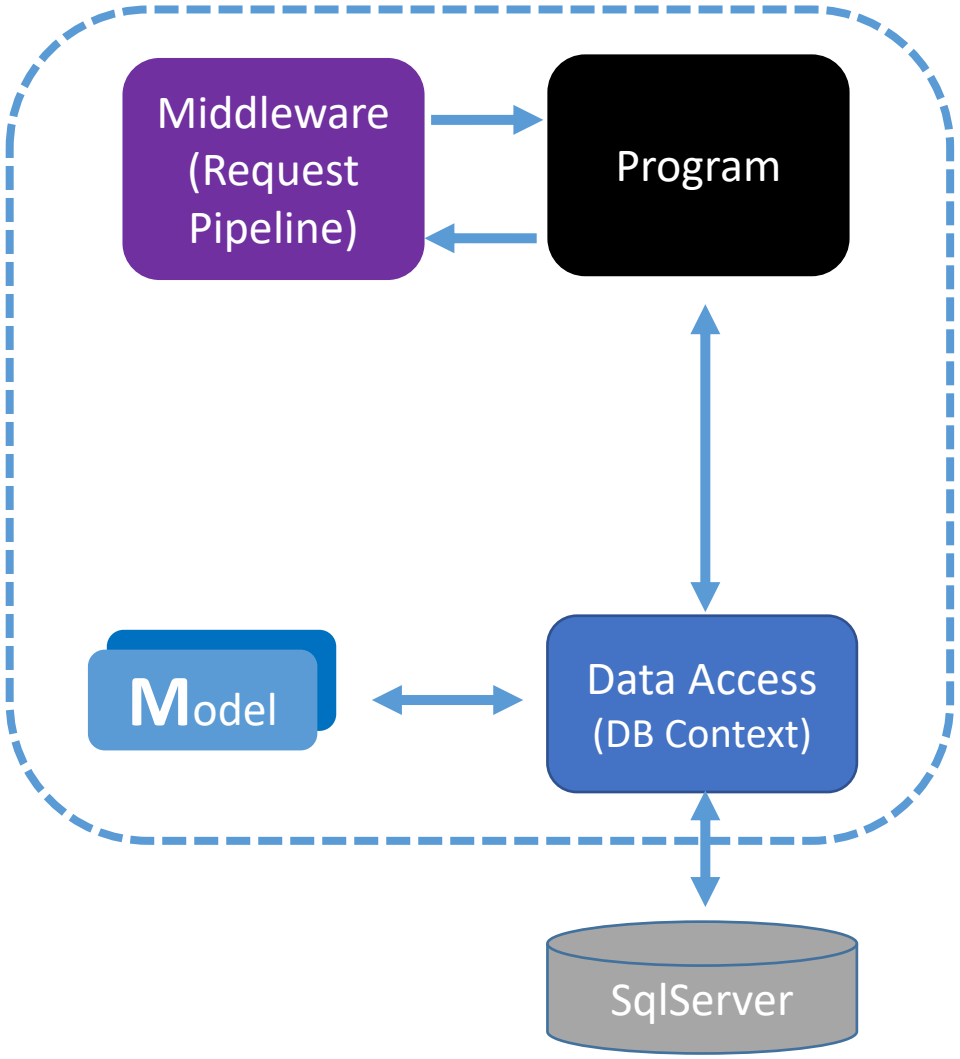
# What is the Repository Pattern?

# What is the Repository Pattern?

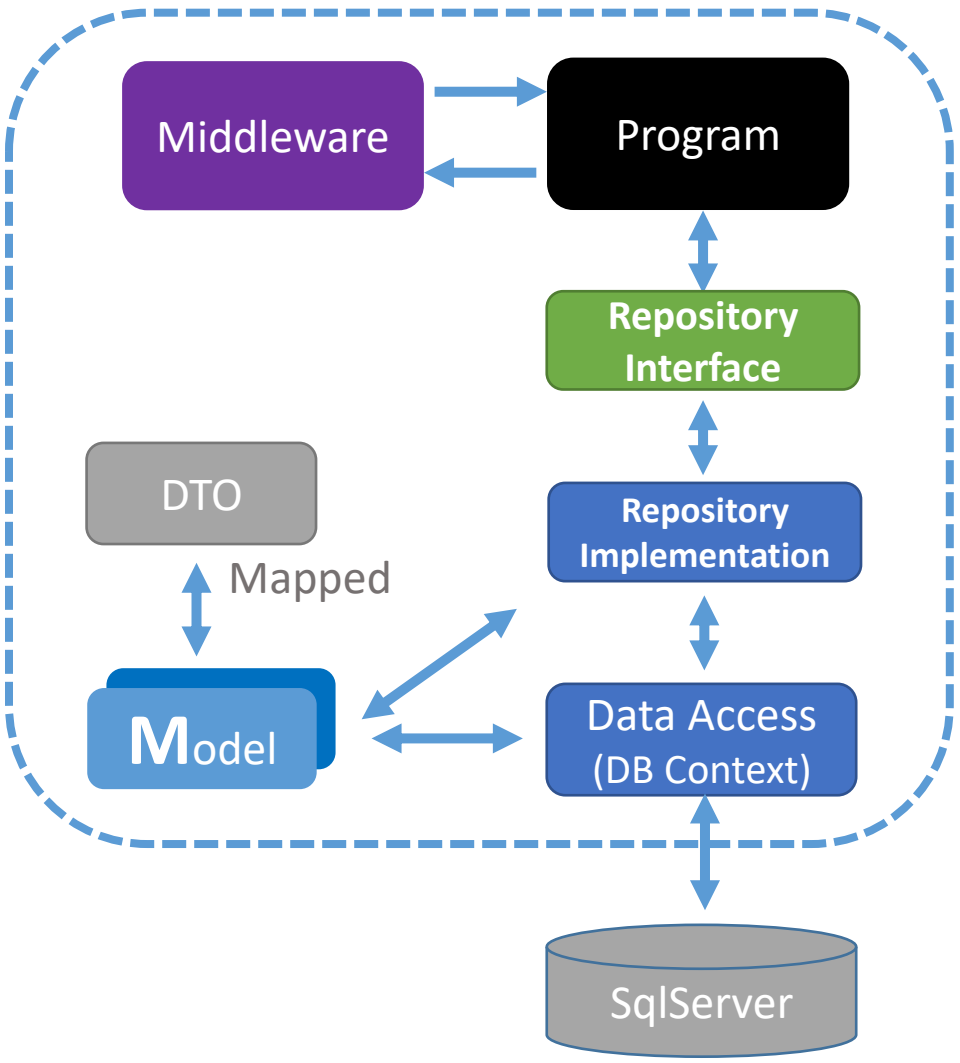
- Repositories encapsulate data access implementation
- Decouple implementation / technology from the domain model
  - Consumers of the repository are “persistence ignorant’”
- Code maintainability is enhanced
  - You can swap implementations with reduced effort


SQL Server
(No Repository)
Redis
(No Repository)
Persistence Ignorant
(Repository)
Program
Program
Program
Coupled!
Coupled!
Repository
Interface
Technology
Persistence
Layer
Repository
Implementation
DbContext
IConnection
Multiplexer
Implementation
objects
SqlServer
Redis
?

# No Repository

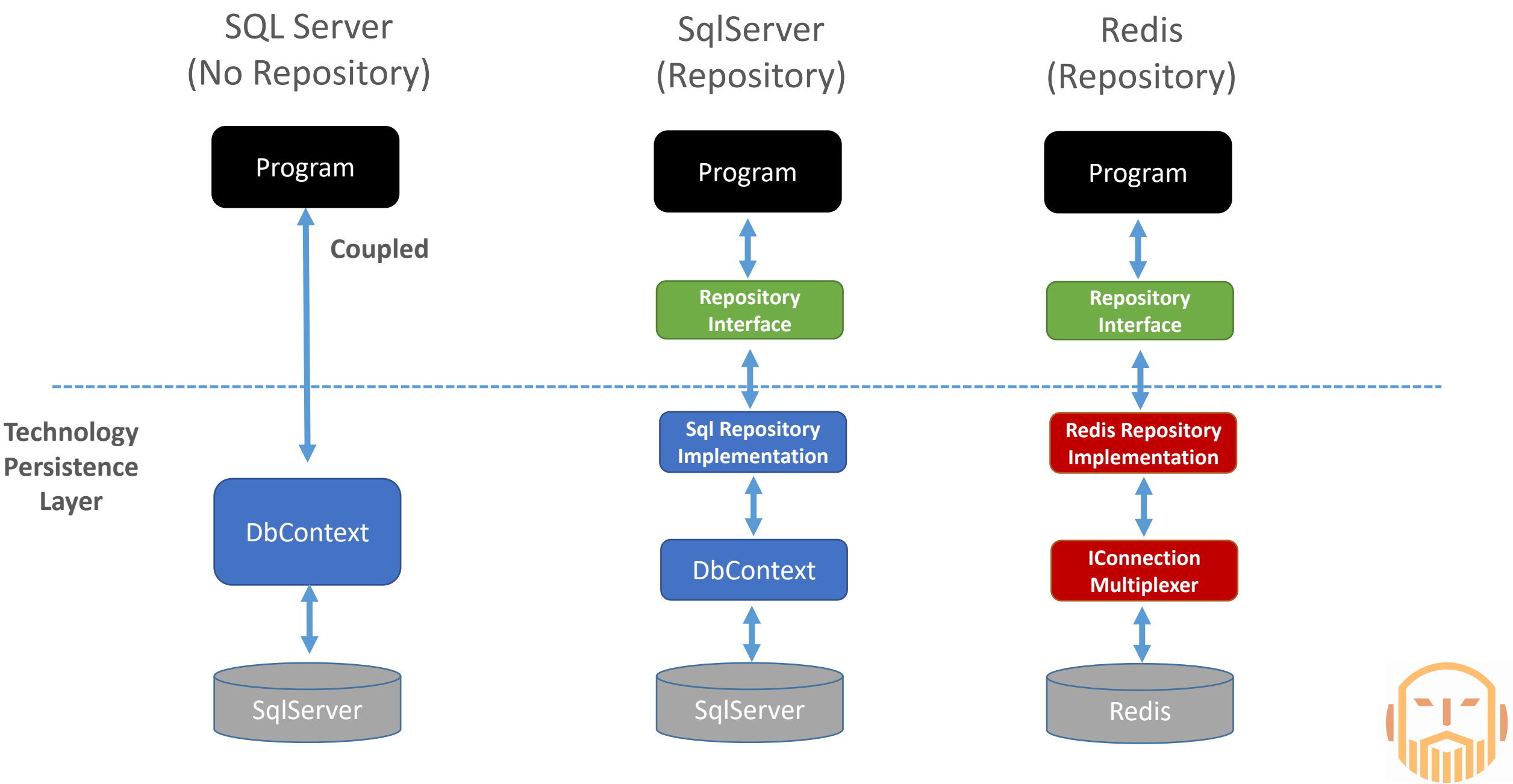



# Repository (SqlServer)



# Let's Code!

# Change is hard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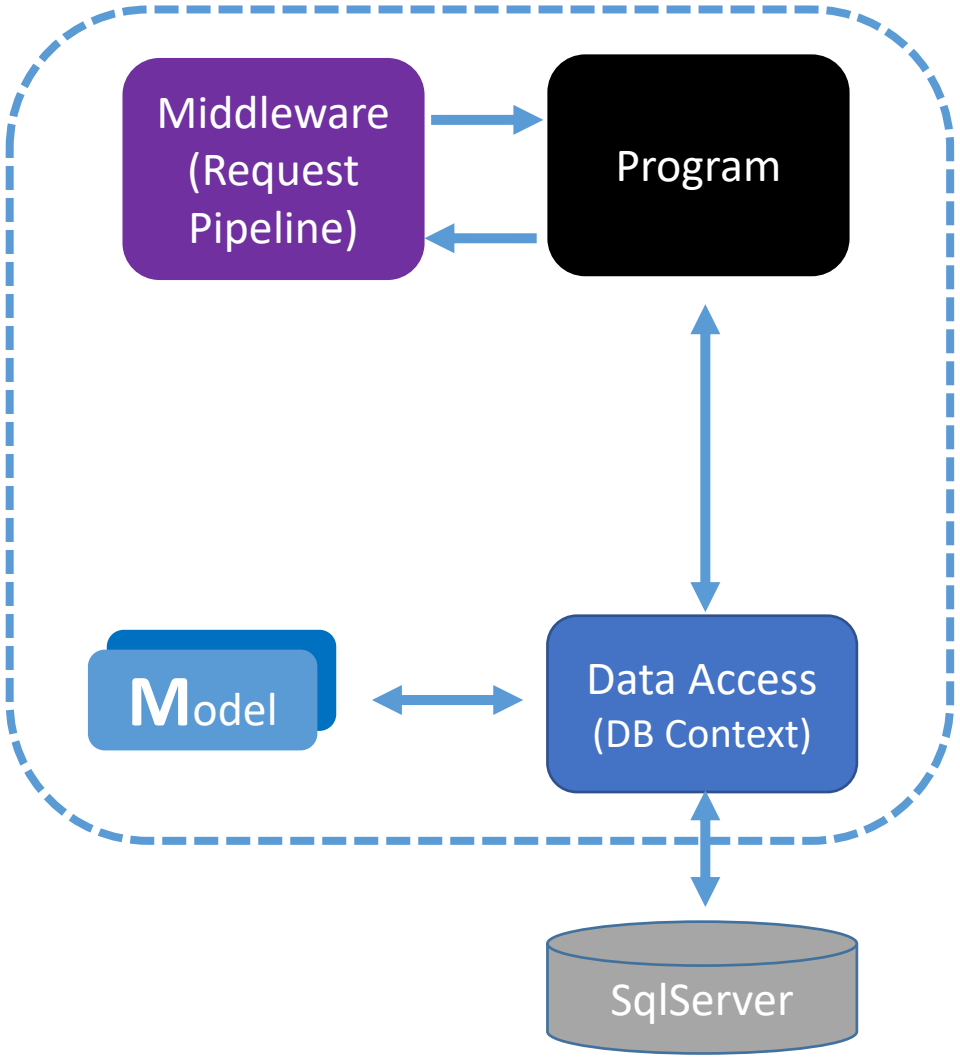
# No Repository

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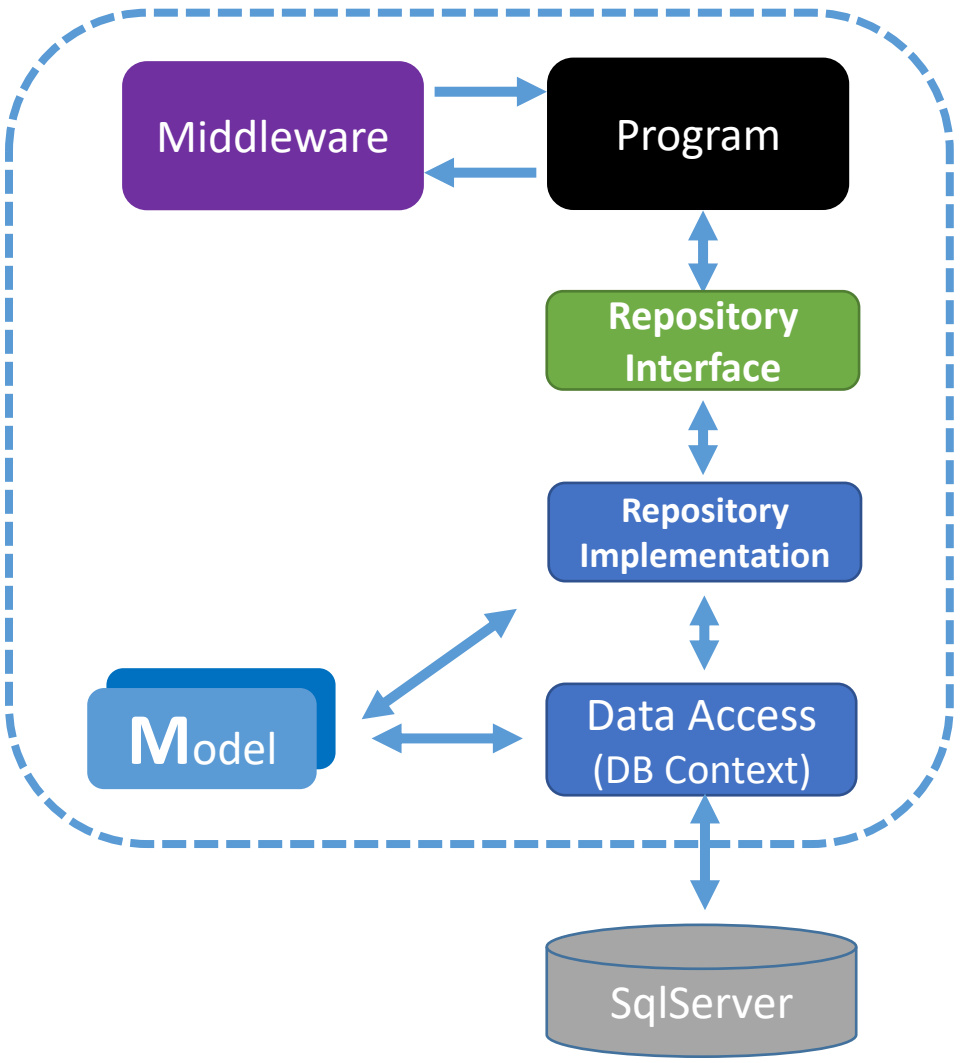
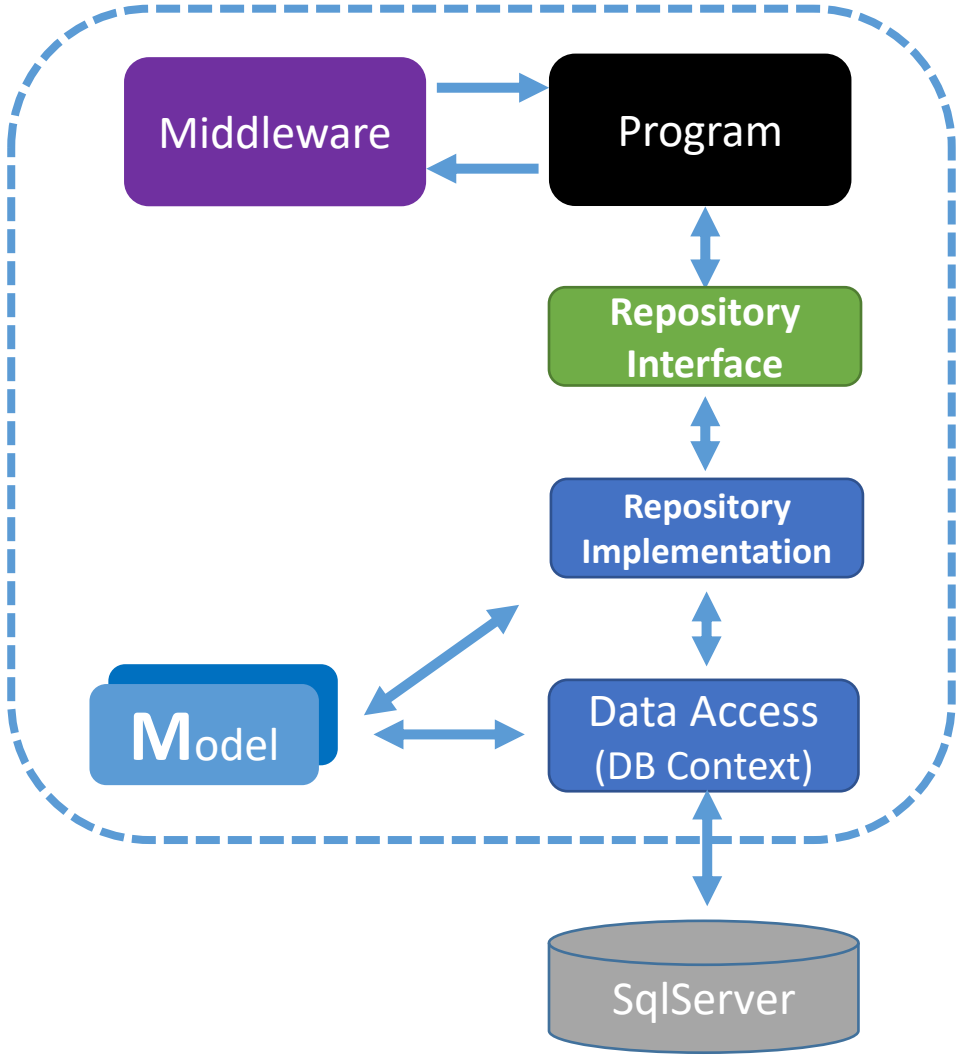


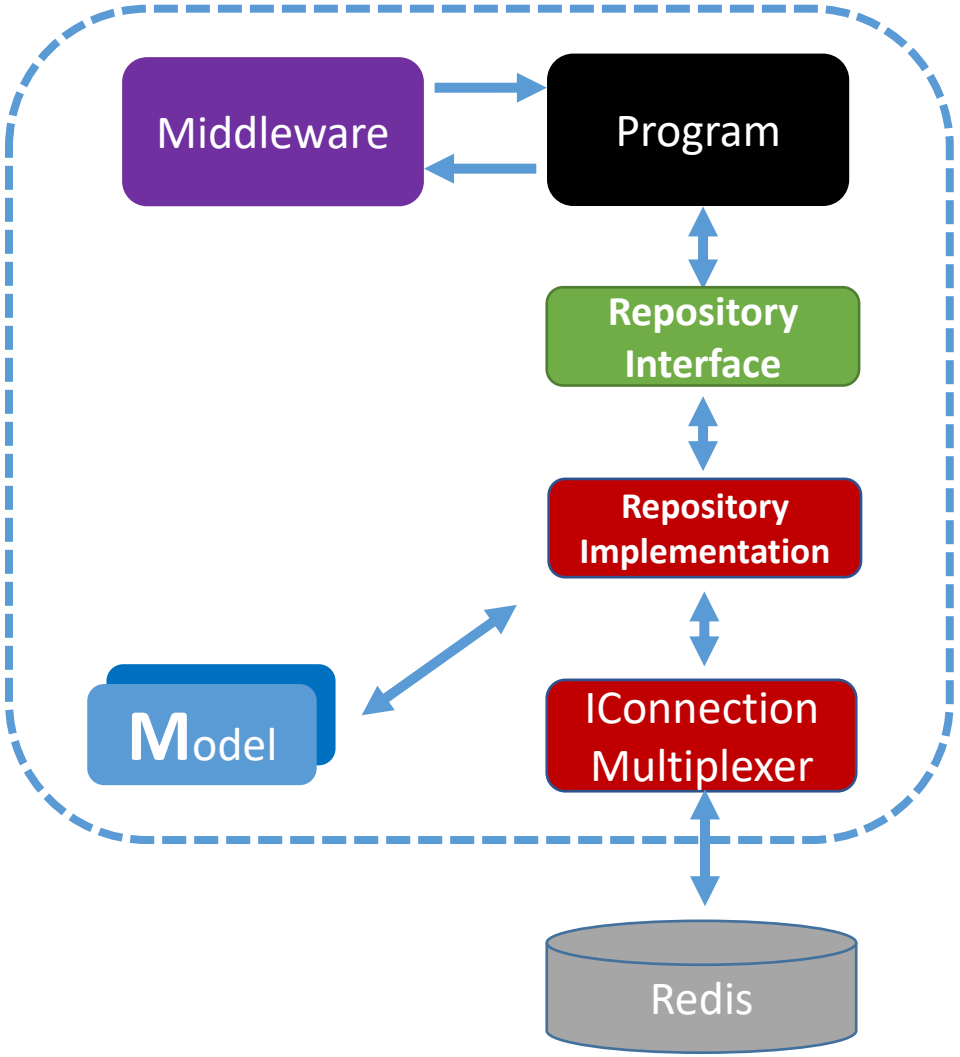
# Let's Code!

# Swap for Redis

# Repository (SqlServer)




# Repository (Redis)



# Let's Code!