

Core Data

# Core Data

- A set of APIs designed to simplify the persistence of data objects
- Provides a framework for saving model objects and retrieving them later
- Manages changes to object model, provides undo support, and ensures the consistency of relationships between model objects
- Object graph backed by a database (usually backed by SQL, but also can do XML (OS X only) or just in memory)

# Recipe

## Chocolate Frosting

- 6 Tls. unsalted butter
- 1 Tls. vegetable shortening
- 1 and 1/2 cup sugar
- 3 Tls. Cocoa
- 1 Tls. white corn syrup
- 7 Tls. evaporated milk
- 1 tsp. vanilla extract

Mix ingredients in a small saucepan over low heat. Cook until it forms a soft ball - about ten to fifteen minutes. Allow the mixture to cool for 15 minutes and then beat until it spreads. Use cooled chocolate pound cake.



Name

Description

Ingredients

# Database

## Table

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- Recipe

## Columns

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- Name
- Description
- Ingredients

# Core Data

Table

- Recipe

Columns

- Name
- Description
- Ingredients

=

EntityDescription

- Recipe

Attributes

- Name
- Description
- Ingredients

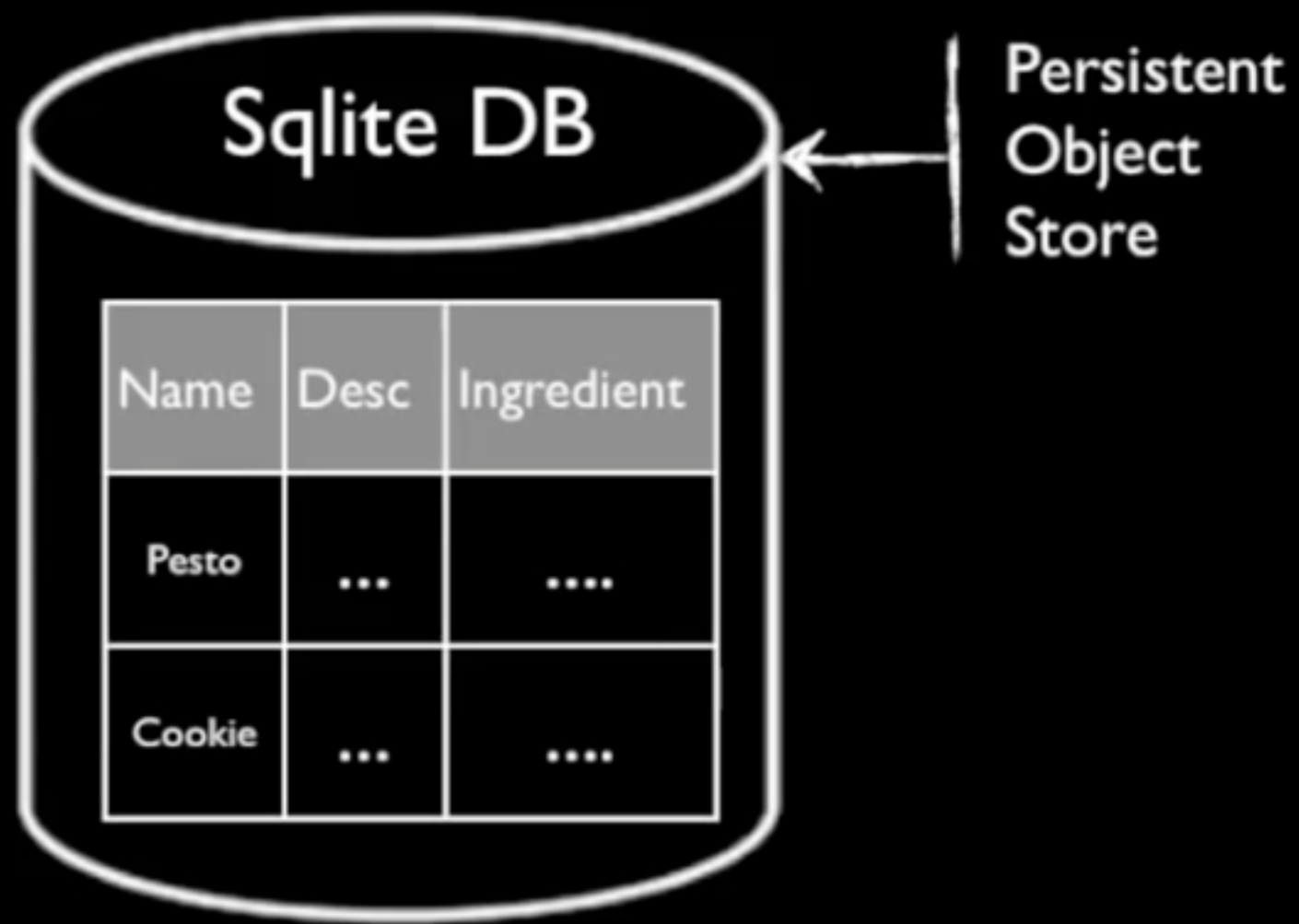
# Core Data

## Terminology



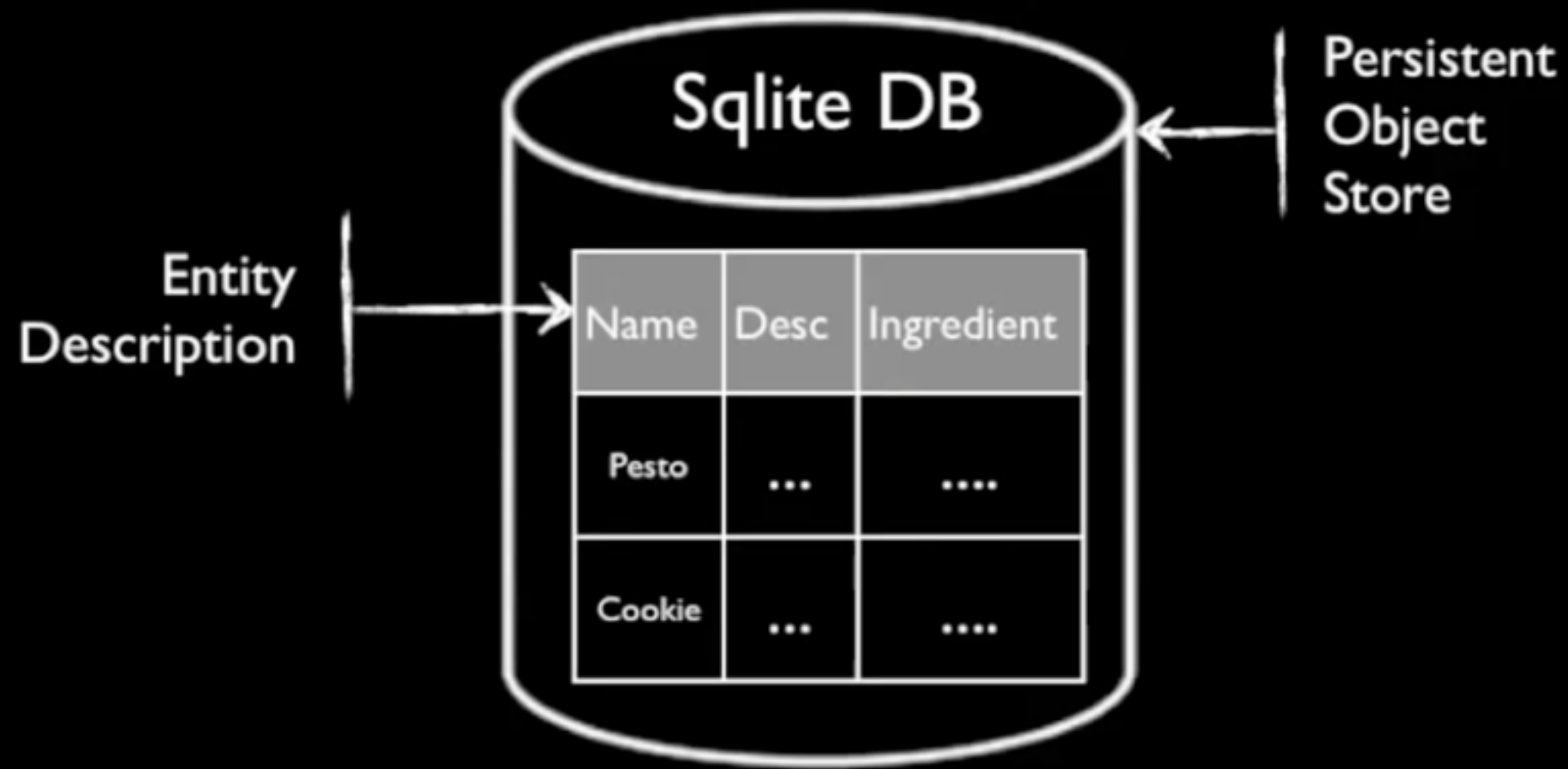
# Core Data

## Terminology



# Core Data

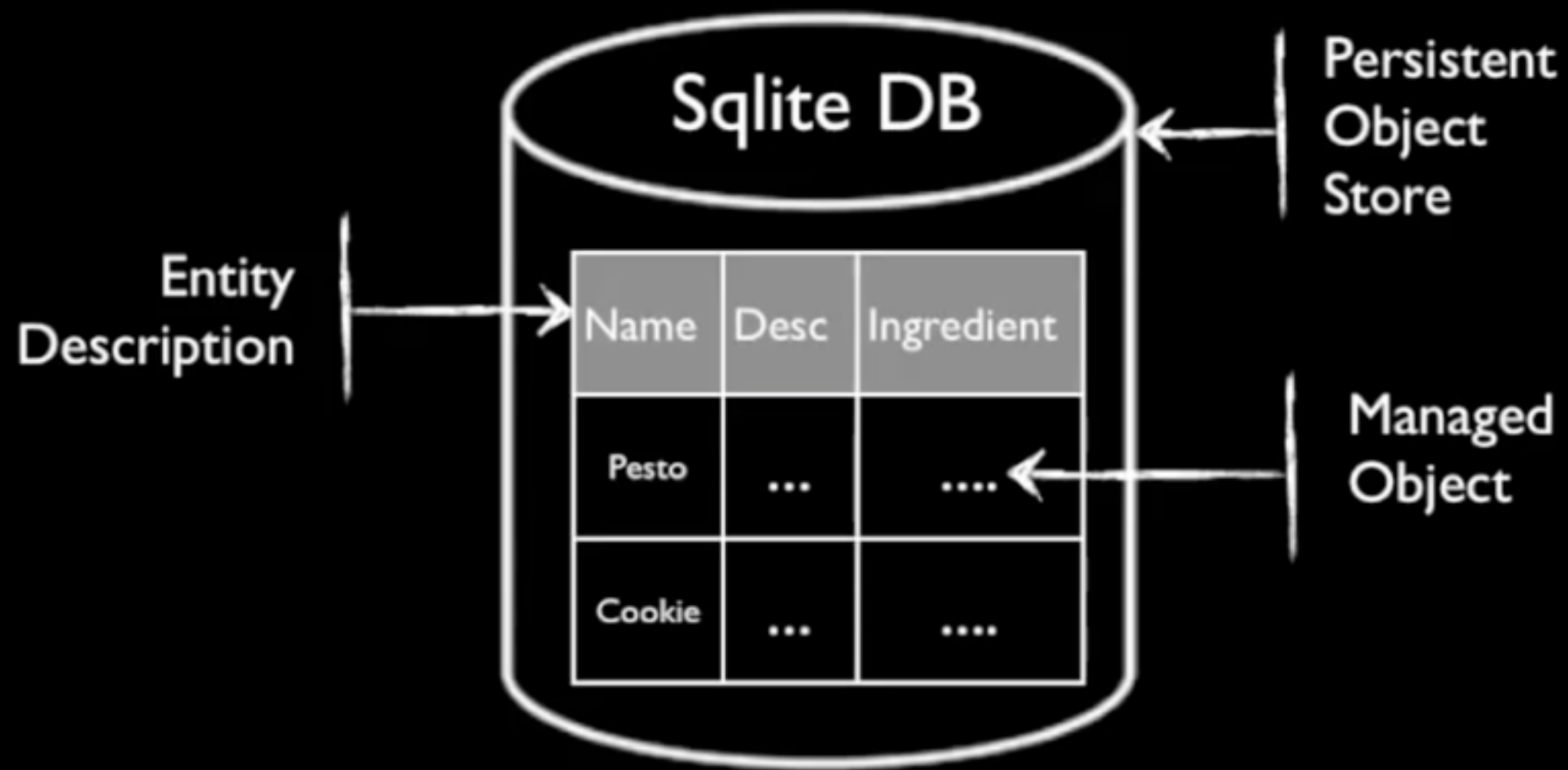
## Terminology





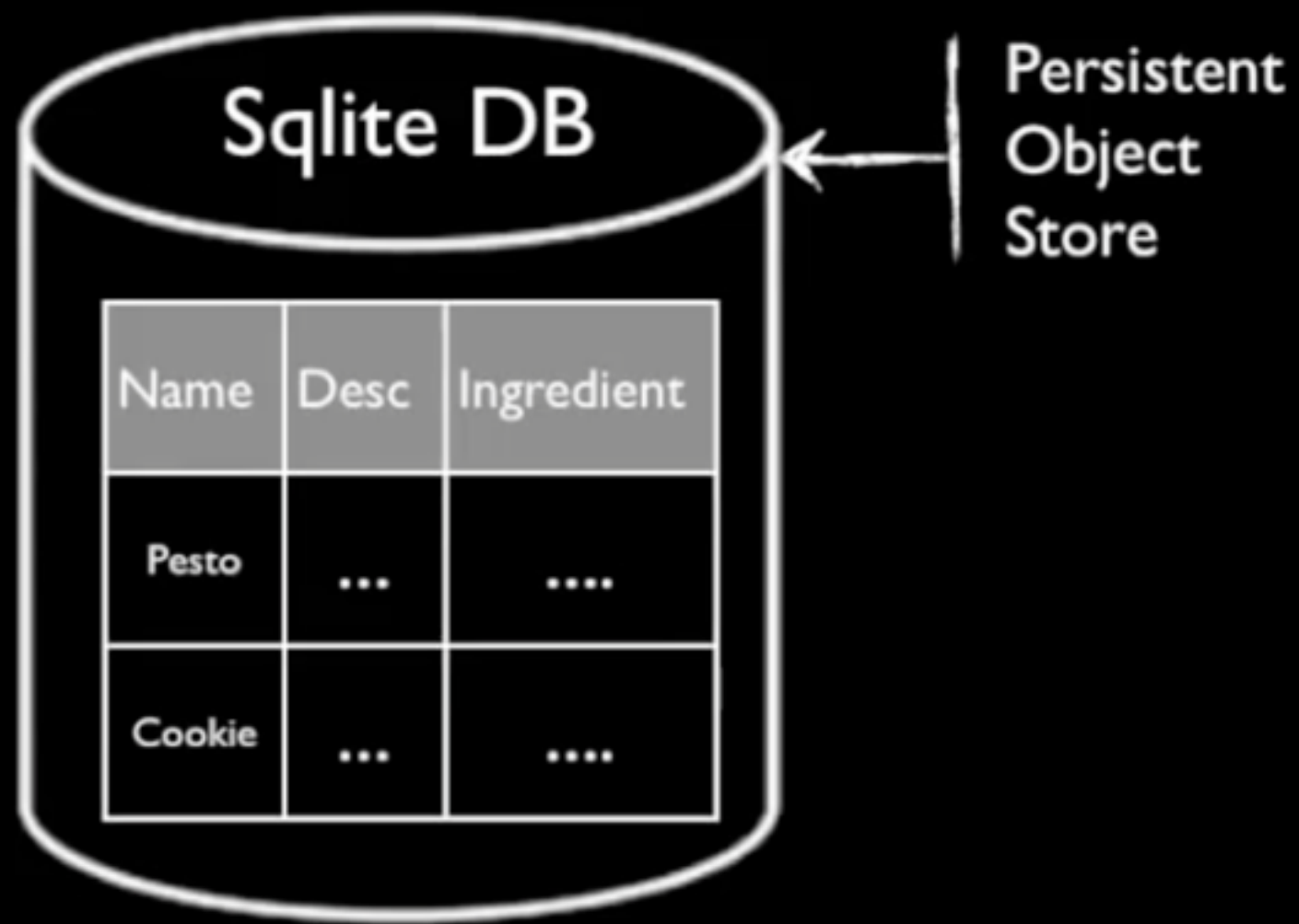
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## Terminology



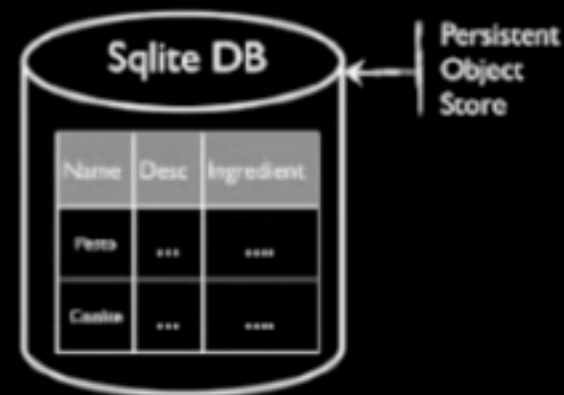
# Core Data

Accessing the Persistent Store



# Core Data

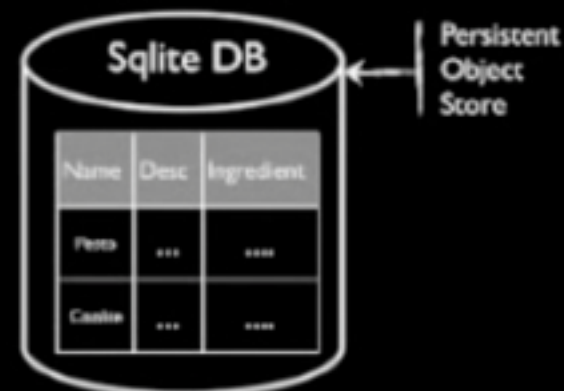
## Accessing the Persistent Store



# Core Data

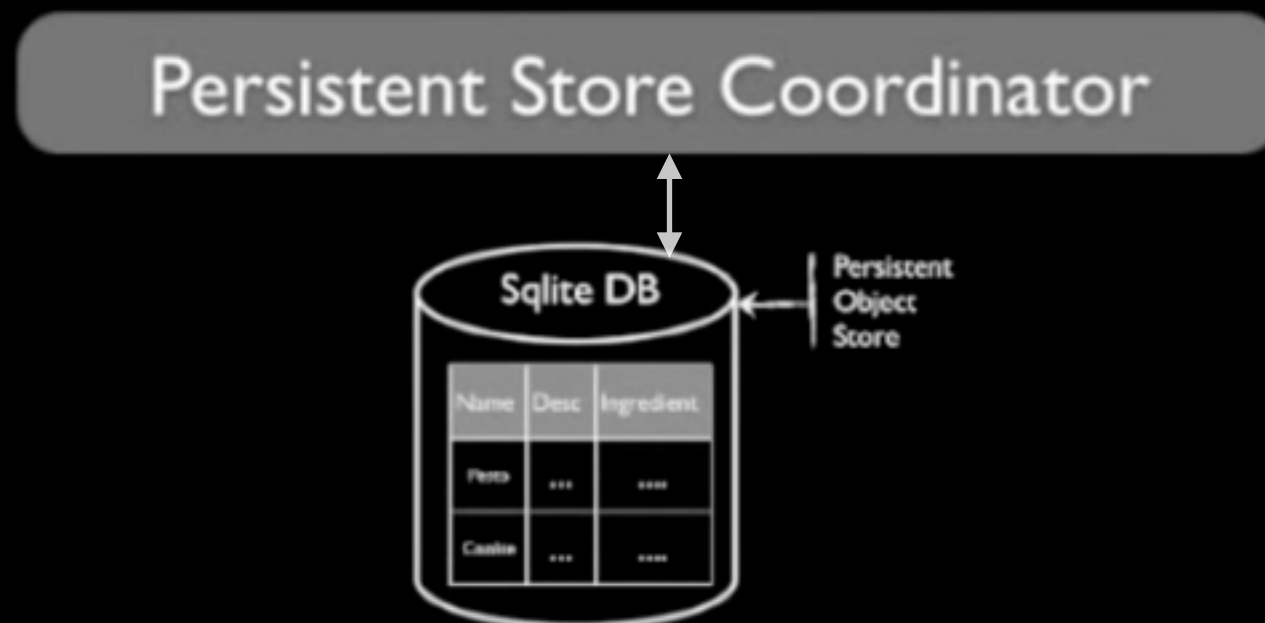
## Accessing the Persistent Store

Persistent Store Coordinator



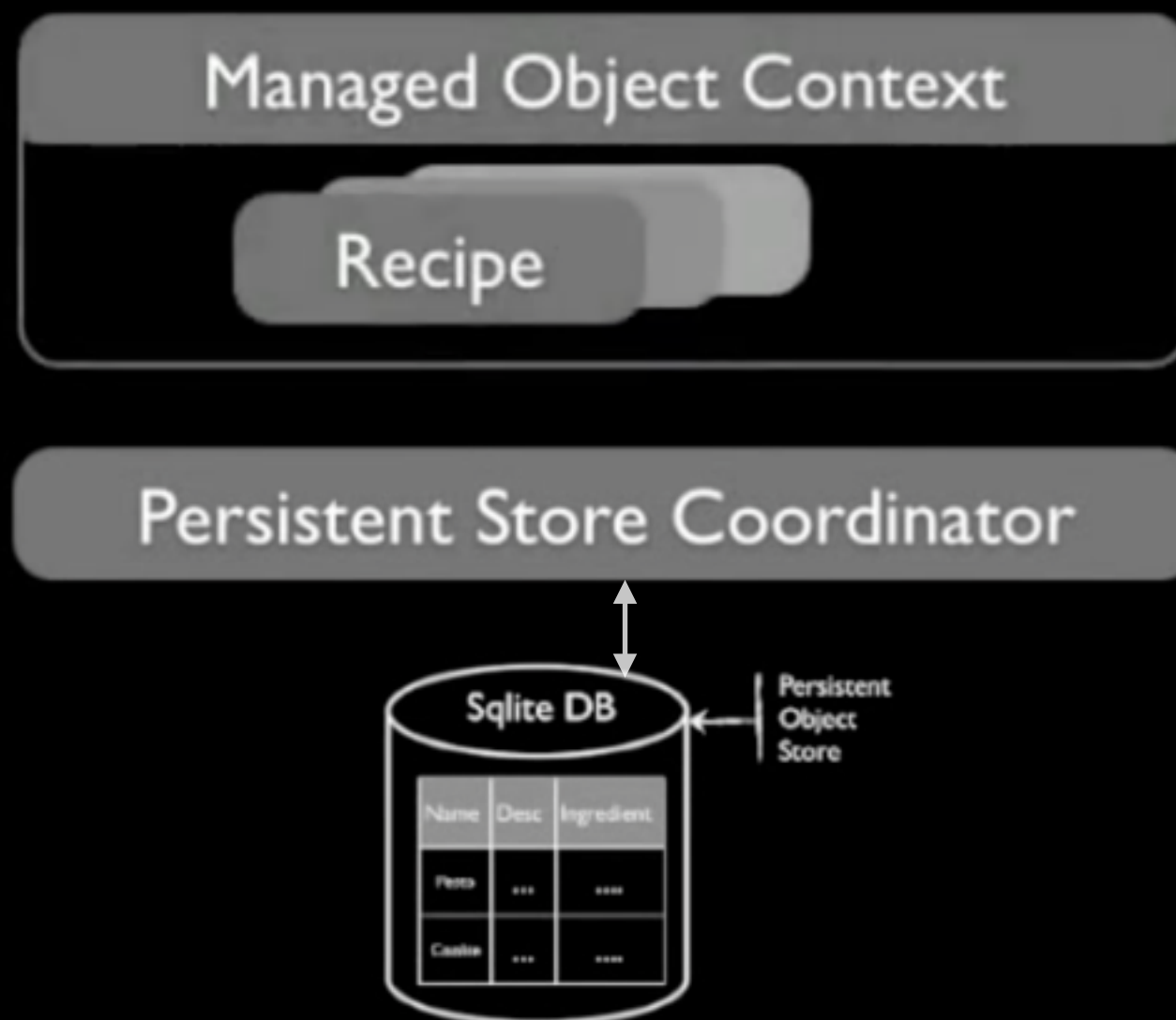
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## Accessing the Persistent Store



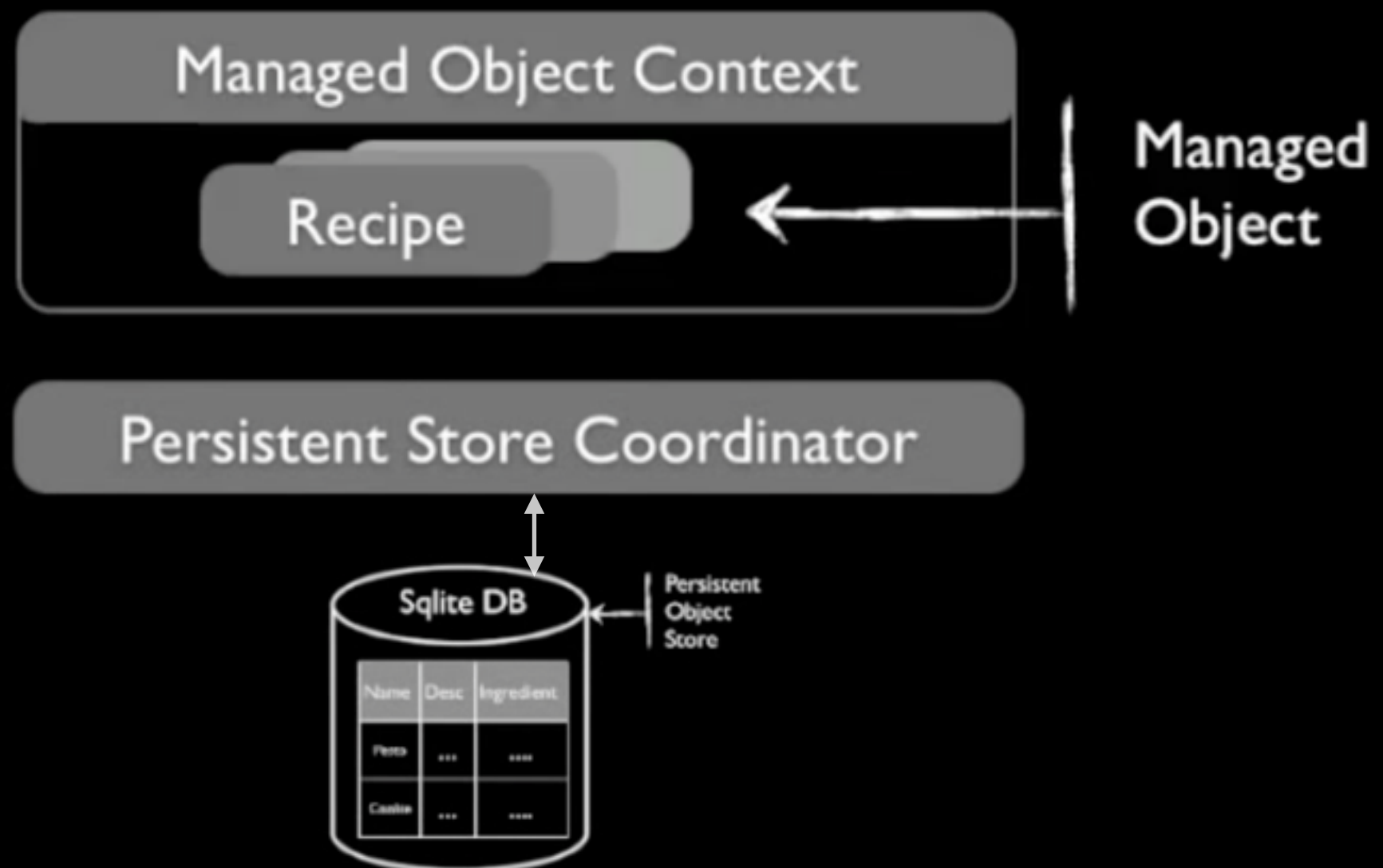
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## Accessing the Persistent Store



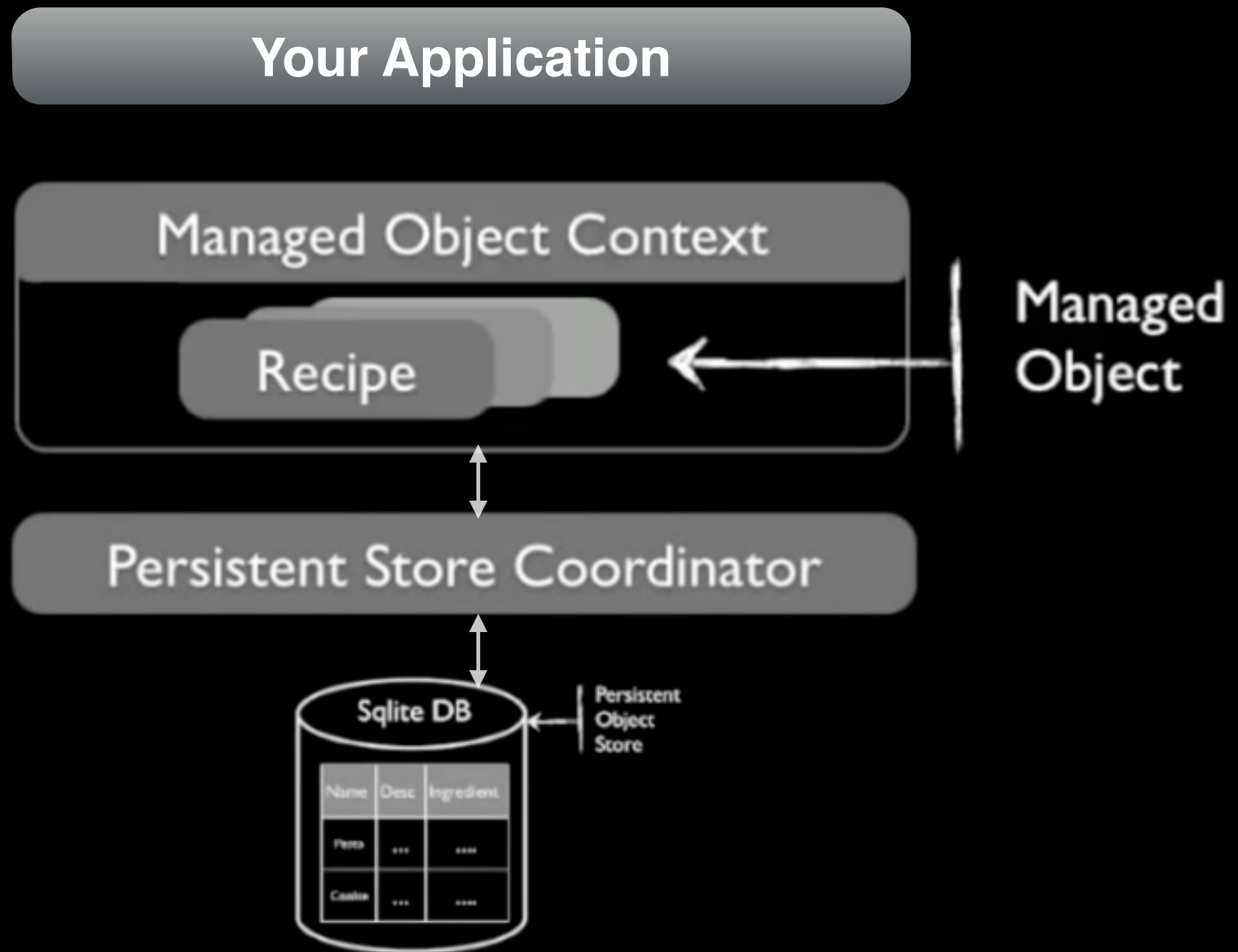
# Core Data

## Accessing the Persistent Store



# Core Data

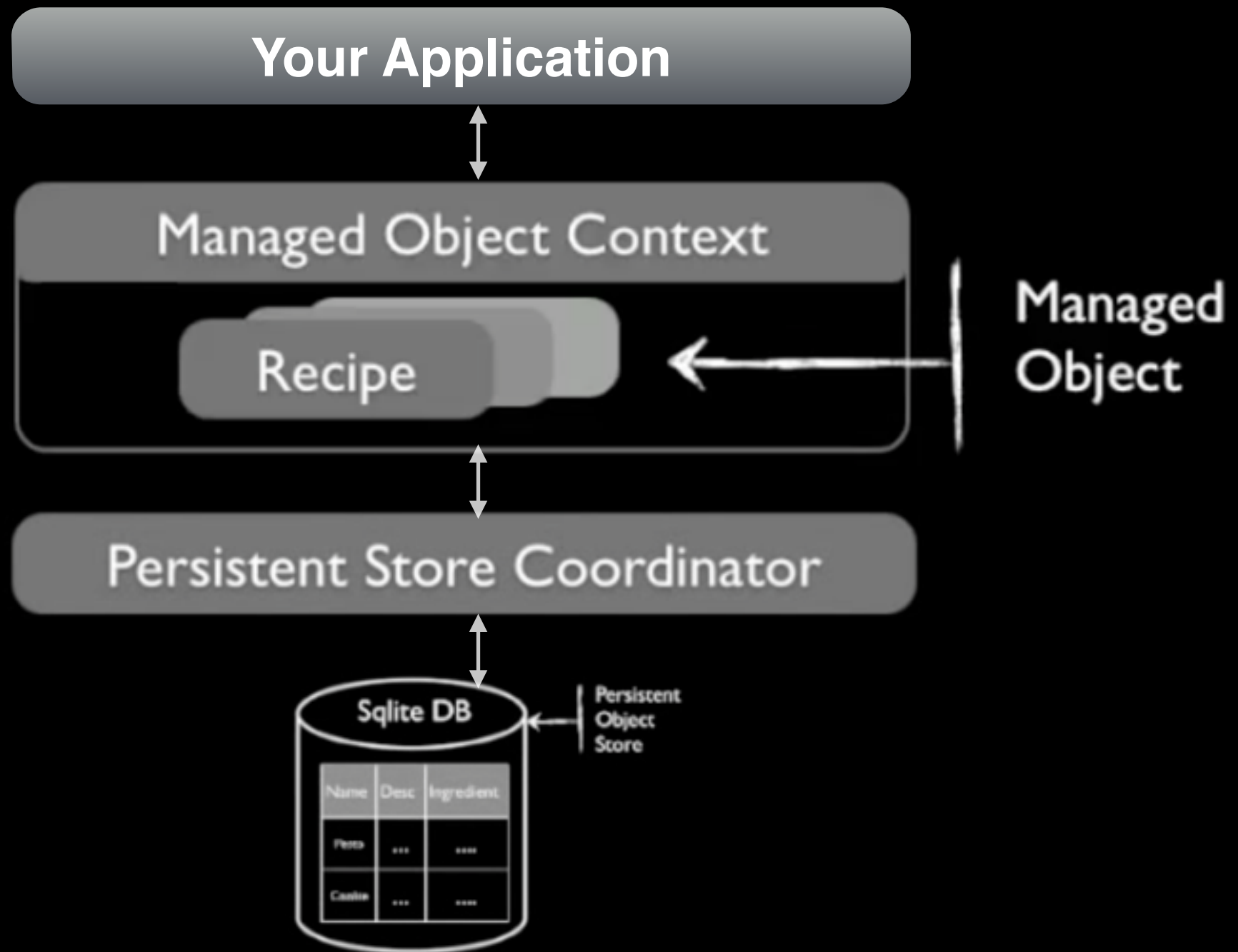
## Accessing the Persistent Store





# Core Data

## Accessing the Persistent Store



Demo

# What was covered

- Core Data stack
- Creating data model
- Using managed objects
- Fetching, deleting, updating
- NSFetchedResultsController
- Relationships between managed objects
- Accessing sqlite db from terminal
- Sorting, filtering, counting
- Fetched properties
- Notifications on data changes
- Using NSUndoManager
- Migration