Core Data Concepts

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Sprint 3 and data mapping

- In sprint 3, we are going to ask you to resolve any issues of what data you are using or saving

- Require that you map every high-fidelity wireframe to specific data sources.

- Where I get data and how I save data are key ideas for most non-game mobile apps (and even for many games)

Why save *any* data directly to a mobile device?

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Firebase   vs.   CoreData

What *should* be saved on a mobile device?

What is Core Data?

"Core Data is an object graph management and persistence framework."

What is Core Data?

"Core Data is a model layer technology. Core Data helps you build the model layer that represents the state of your app. Core Data is also a persistent technology, in that it can persist the state of the model objects to disk."

What is Core Data?

"Core Data focuses on objects rather than the traditional table-driven relational database approach. When storing data, you are actually storing an object's contents, where an object is represented by an Objective-C/Swift class that inherits the NSManagedObject class. A typical application will have several objects used together, forming an object graph."
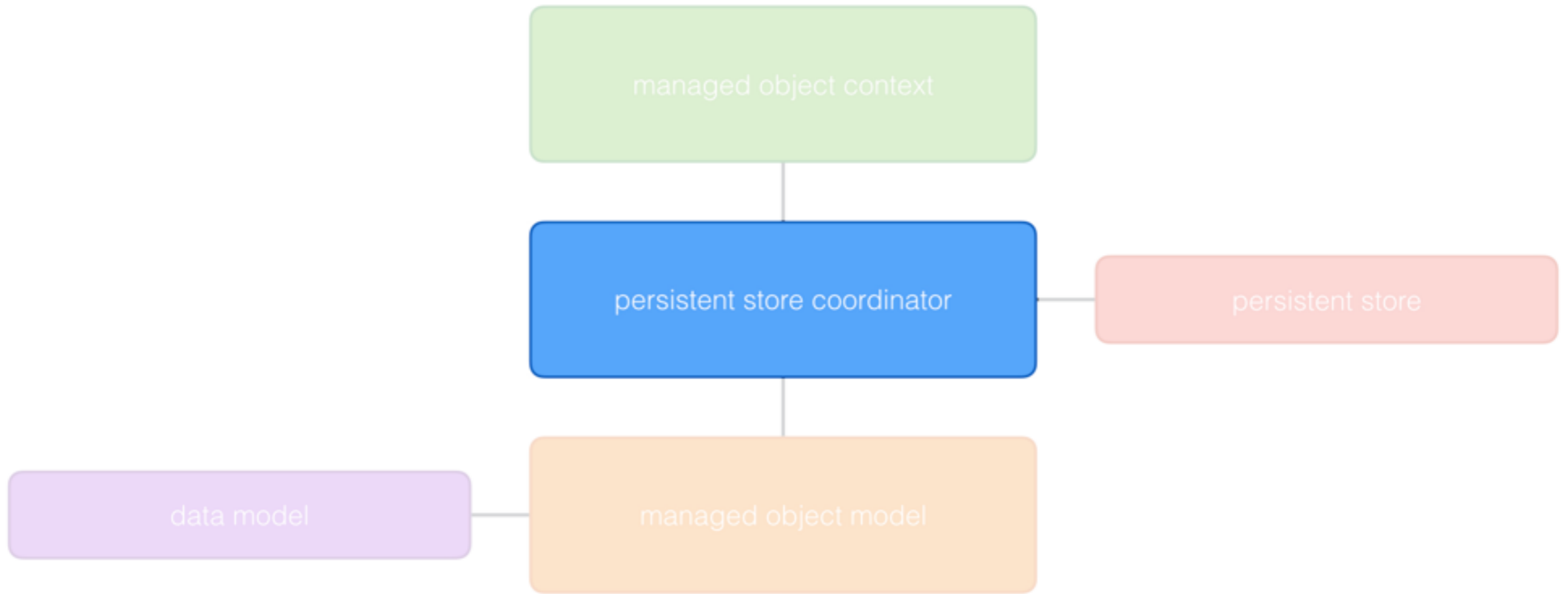
What is Core Data?
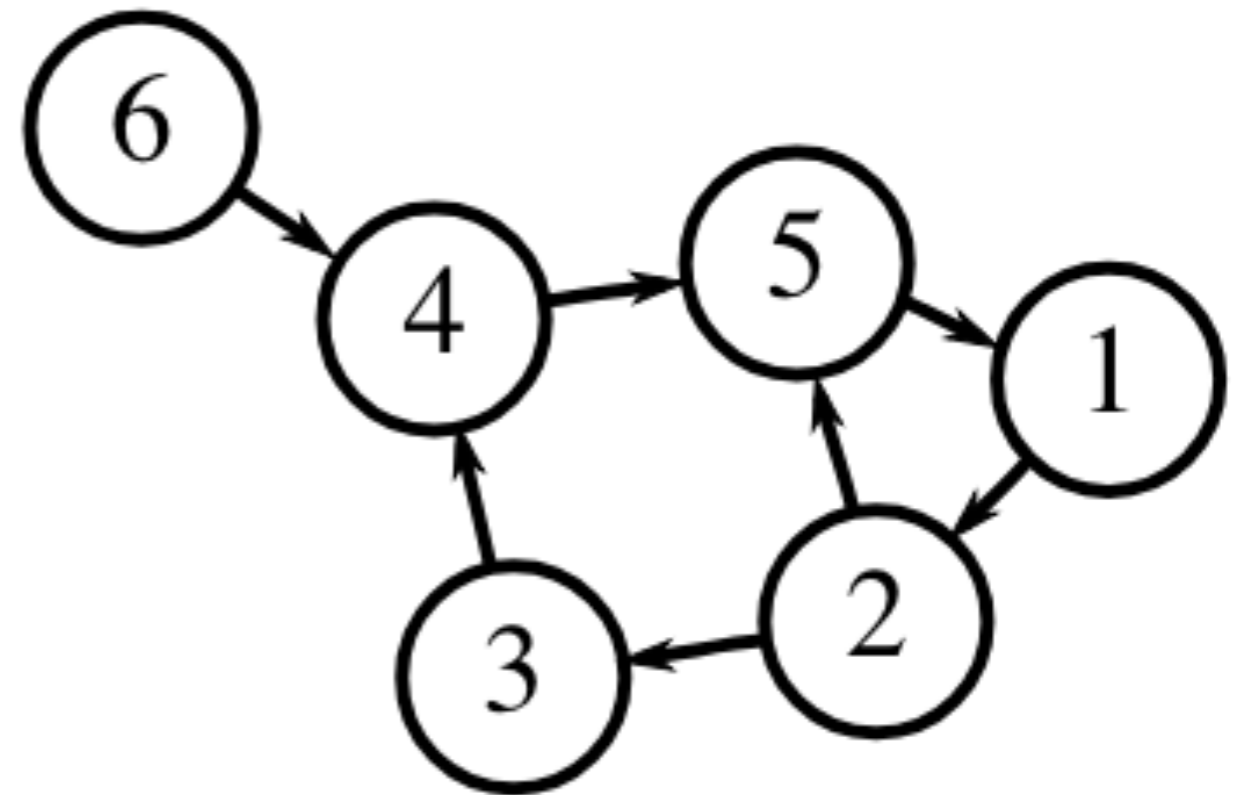
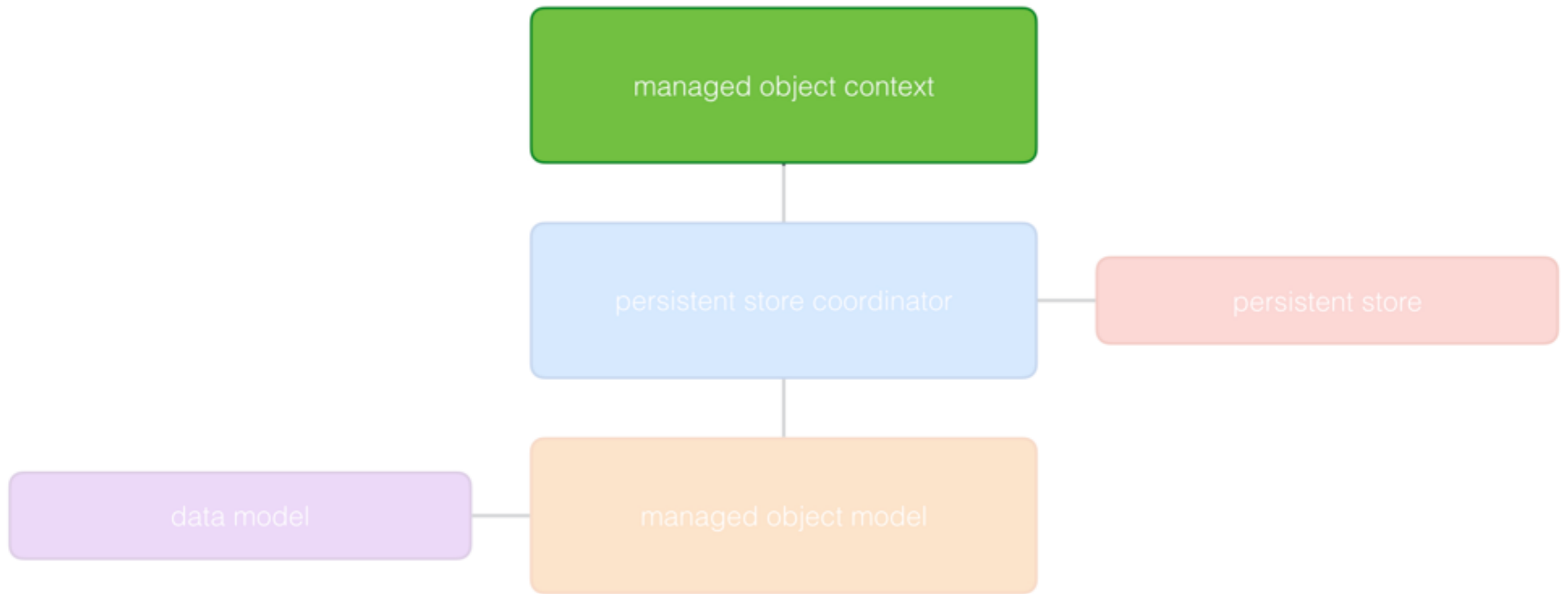# The 3 Components of the Core Data Stack
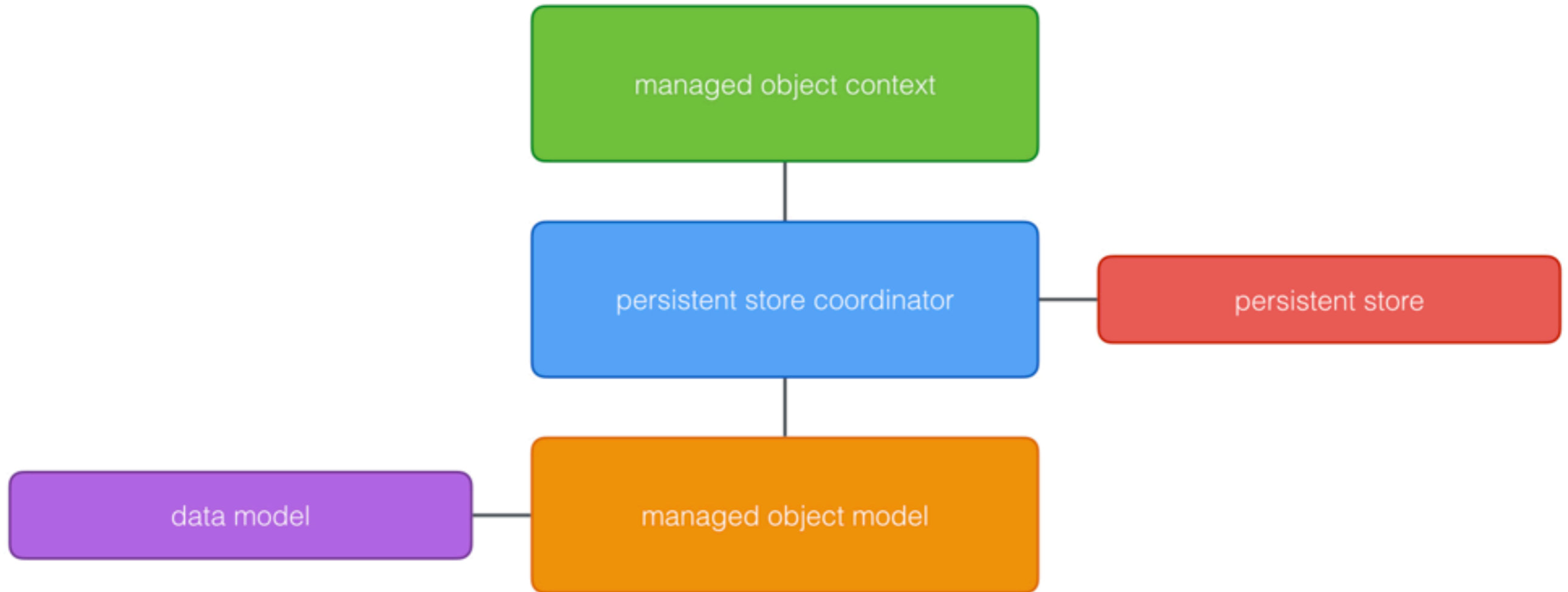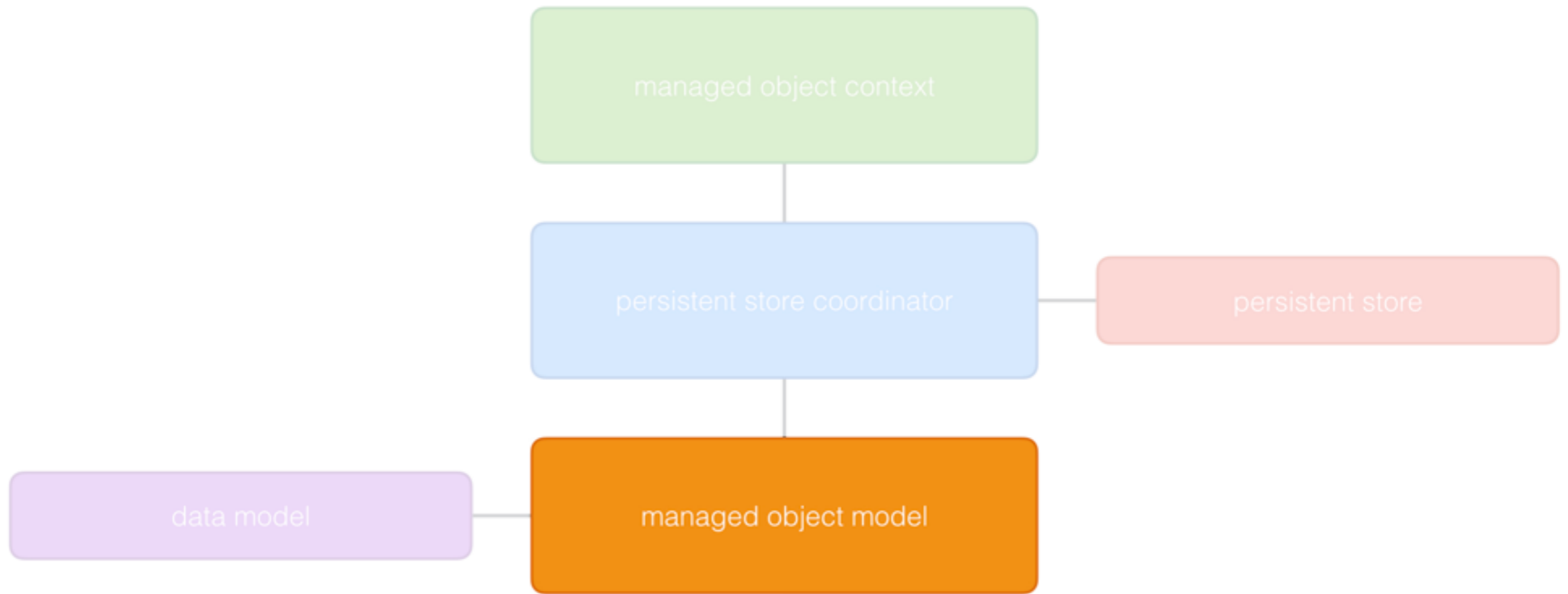
The **NSManagedObjectModel** describes a schema used by the app. It's a compiled, binary version of the data model that we create graphically in Xcode at the beginning of the project.

The **NSPersistentStoreCoordinator** is responsible for persisting, loading, and caching data. While it is the heart of Core Data, we actually spend little time working with it directly.

The **NSManagedObjectContext** handles requests from the rest of the application to create, update, delete, and insert `NSManagedObject` instances. These are the parts of Core Data we work most directly with.

The 3 Components of the Core Data Stack
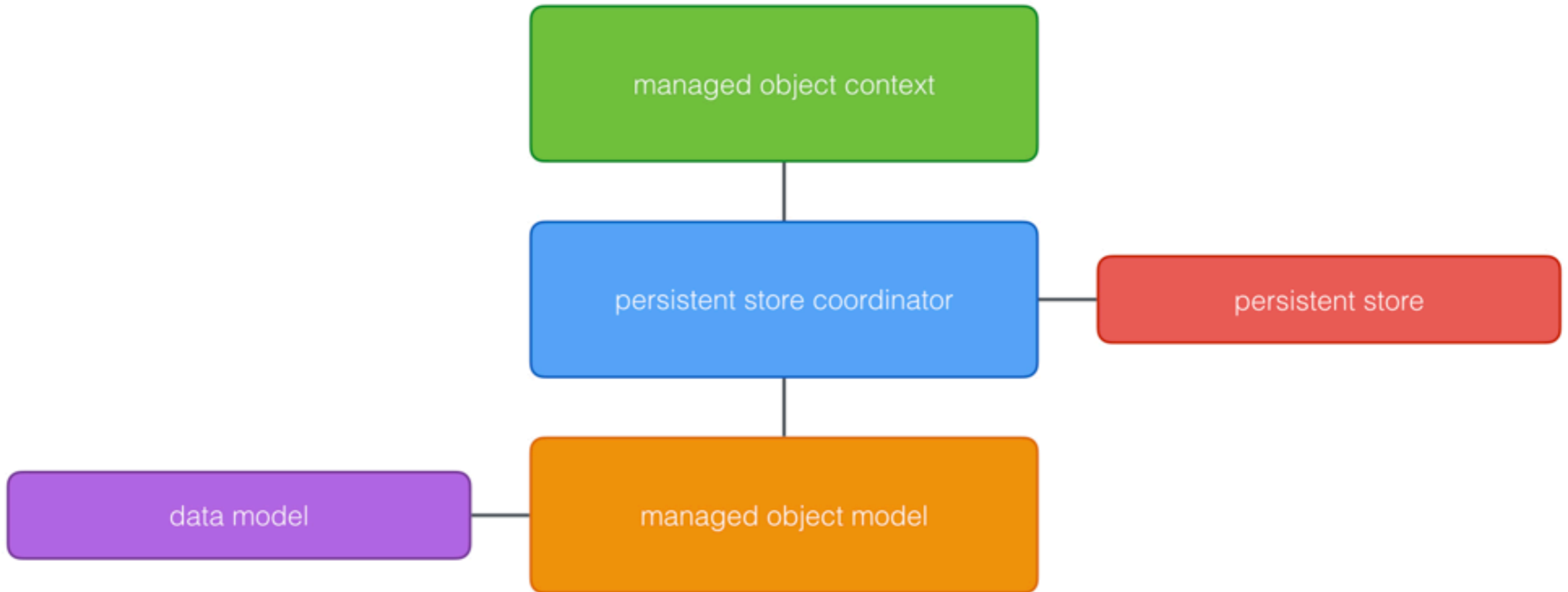
Looking at the Core Data stack in code

Using Core Data in the SuperHeroLibrary app

Qapla'