



Core Data iOS10 and Swift 3

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What is Core Data?

- Core Data is a Framework by Apple that acts as a bridge between your app and SQLite and other storage environment.
- Just like SQL, you can have tables, relationships and queries.
- It has advantages over SQLite that you do not need to know SQL syntax and you can represent objects and classes unlike relational database.

Important Terms

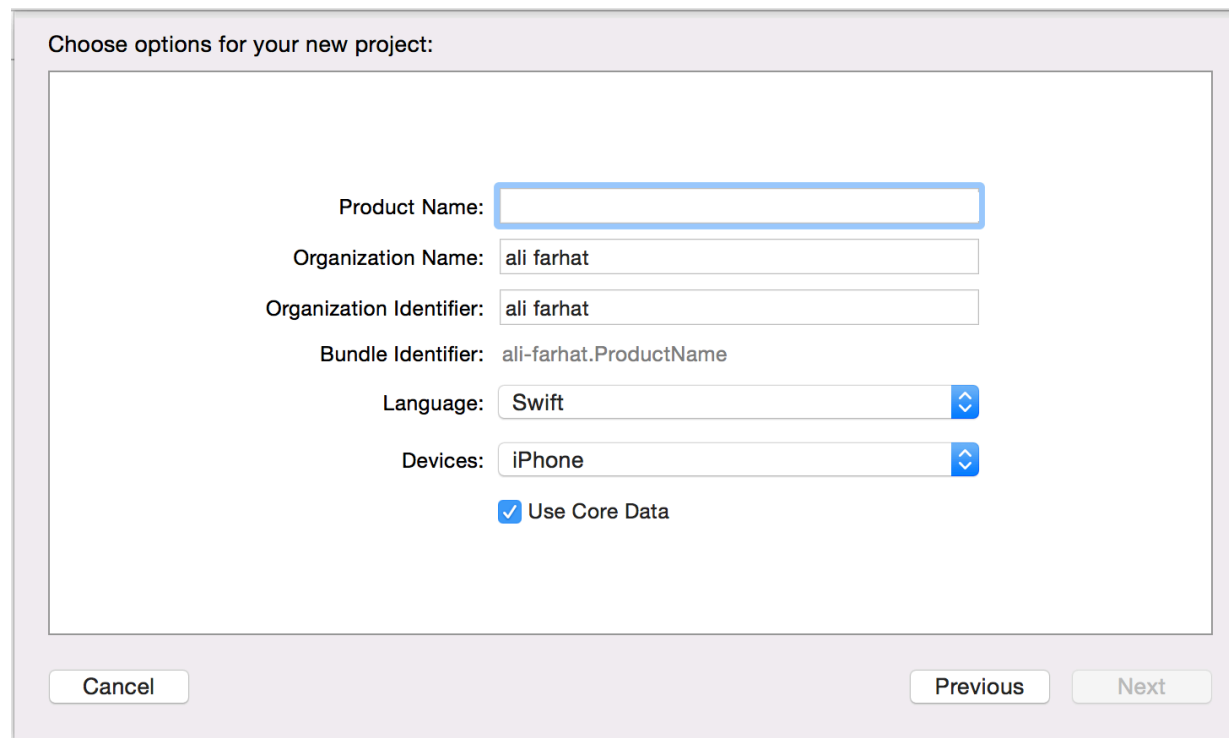
- Managed Object Model
 - A tool that allows you to model classes (entities), relationships, and queries. It is also used by core data frame work
- Managed Objects are
 - Refers to the objects that are created in your app. These are your data classes like contacts, contacts....
 - Each Managed object represents a row in your table (entity)

Important Terms

- Managed Object Context
 - Important object since it manages all relationships between context objects that are defined in the Model
 - It also keeps track of the status of the context objects
 - All interactions with the underlying database are done through the context
- Persistent Object Store
 - Refers to data storage environment on the device

Steps to use Core Data

- Create an app and make sure check to the core data checkmark



The screenshot shows the 'Choose options for your new project' dialog box in Xcode. The dialog has a title bar that says 'Choose options for your new project:'. Inside the dialog, there are several input fields and a checkbox. The 'Product Name' field is empty and has a blue border. The 'Organization Name' field contains 'ali farhat'. The 'Organization Identifier' field contains 'ali farhat'. The 'Bundle Identifier' field contains 'ali-farhat.ProductName'. The 'Language' dropdown menu is set to 'Swift'. The 'Devices' dropdown menu is set to 'iPhone'. At the bottom, there is a checkbox labeled 'Use Core Data' which is checked. At the very bottom of the dialog, there are three buttons: 'Cancel', 'Previous', and 'Next'.

Choose options for your new project:

Product Name:

Organization Name:

Organization Identifier:

Bundle Identifier:

Language:

Devices:

☒ Use Core Data

Cancel Previous Next

Steps to use Core Data

- Understand your business
- Understand your data
- Model your data by creating all the entities and any relationships

Steps to use Core Data

- In your code
 - Obtain the managed object context from the app delegate
 - Get the description of your entities
 - Change attributes values of your entities
 - Run commands using the context object to save or fetch records.

Lets Look at an example

<https://github.com/redsea1113/Core-Data-Startup>