GENERAL ASSEMBLY

MOBILE DEVELOPMENT

LESSON 16
CORE DATA

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LEARNING OBJECTIVES

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- Review writing to files via assignment
- Introduction to databases
- Introduction to Core Data
- In class assignment

GETTING STARTED

PERSISTENCE IN-CLASS ASSIGNMENT

IN-CLASS ASSIGNMENT: PLAYER ROSTER

- Create an app that lists your favorite player names in a plist
- The first view will be a list of player notes in the form of strings that is stored and read from a file in either the documents or temporary folder. Either print out all of the notes in the debug area or [bonus] list them in a table view.
- The second view of the app will be a table view controller with player names for each cell.
- Bonus: assign signatures to players. hint: player plist will be a dictionary of player name and signature id.

GETTING STARTED

INTRODUCTION TO DATABASES

GETTING STARTED

INTRODUCTION TO CORE DATA

CORE DATA

- An object persistance framework
- Very powerful, very complicated
- Lots of boilerplate

CORE DATA

- Managed object model (MOM): a file that represents the data model, essentially the database schema.
- Entity: essentially a class definition in Core Data
- Attribute: a property of an entity (a member variable)
- Relationship: link between two entities. This is where entity (table) relationships are defined.
- Managed object: an entity that we want to store in Core Data. Its instances are placed in managed object context.
- Managed object context: this is the virtual representation of our data. This instance of our data can be manipulated as we like and saved when we are ready.

CORE DATA

- We always work on the managed object context
- A series of operations are performed on the MOC (insert, fetch & update, delete), then saved when we want them to persist

IN CLASS ASSIGNMENT

IN-CLASS ASSIGNMENT

- Update the students app in starter code to save and load data with Core Data.
- Bonus: create a second class, StudentStore class to interact with the Student object and Core Data. This could be a singleton object.