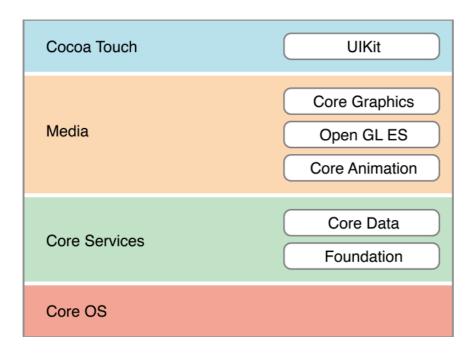
# Major Frameworks

### Framework

it's a directory that includes a shared library, header files to access the code stored in that library and other resources such as image and sound files.

a shared library defines functions and methods that apps can call.



#### Foundation Framework

- 1. create and manage collections, such as arrays and dictionaries;
- 2. access images and other resources stored in your app;
- 3. create and manage strings;
- 4. post and observe notifications;
- 5. create date and time objects;
- 6. automatically discover devices on IP network;
- 7. manipulate URL streams;
- 8. execute code asynchronously.

#### UIKit Framework

- 1. construct and manage your user interface;
- 2. handle touch- and motion-based events;
- 3. present text and web content;
- 4. optimize your app for multitasking;
- 5. create custom user interface elements.

### Core Data Framework

1. save and retrieve objects from storage;

- 2. support basic undo/redo;
- 3. validate properties values automatically;
- 4. filter, group and organize data in memory;
- 5. support document-based applications.

## Core Graphics Framework(Quartz)

- 1. make path-based drawings;
- 2. use antialiased rendering;
- 3. add gradients, images, and colors;
- 4. use coordinate-space transformations;
- 5. create, display, and parse PDF documents.

### Core Animation Framework

- 1. create custom animations:
- 2. add timing functions to graphics;
- 3. support key frame animation;
- 4. specify graphical layout constraints;
- 5. Group multiple-layer changes into an atomic update.

## OpenGL ES Framework

- 1. create 2D and 3D graphics;
- 2. make more complex graphics, such as data visualization, flight simulation, or video games;
- 3. access underlying graphics hardware.