



SWIFT - 4

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IOS APPLICATION
 **DEVELOPMENT**

Agenda

- Table View
- Navigation
- Dealing with Data

Table View

Table View

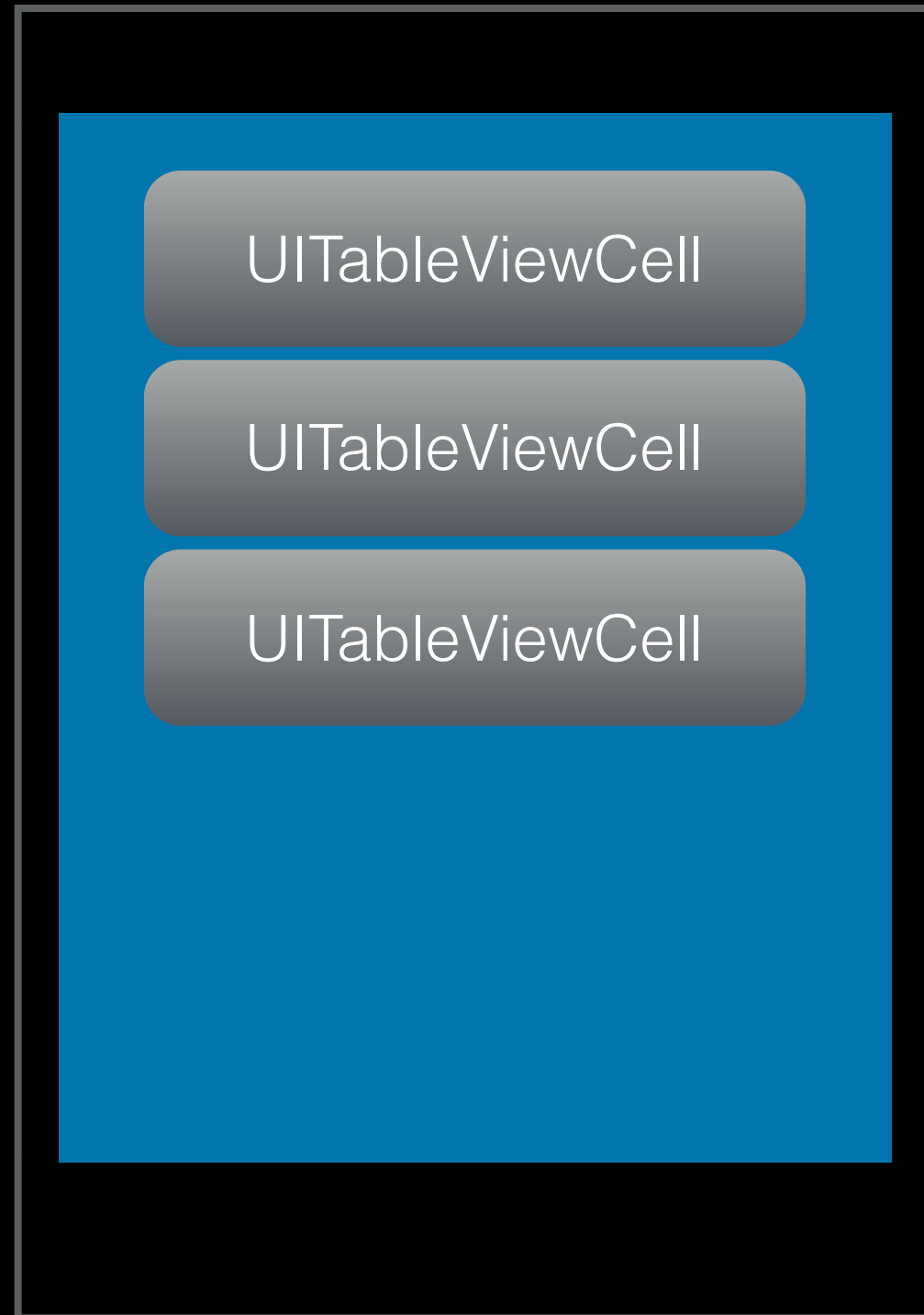


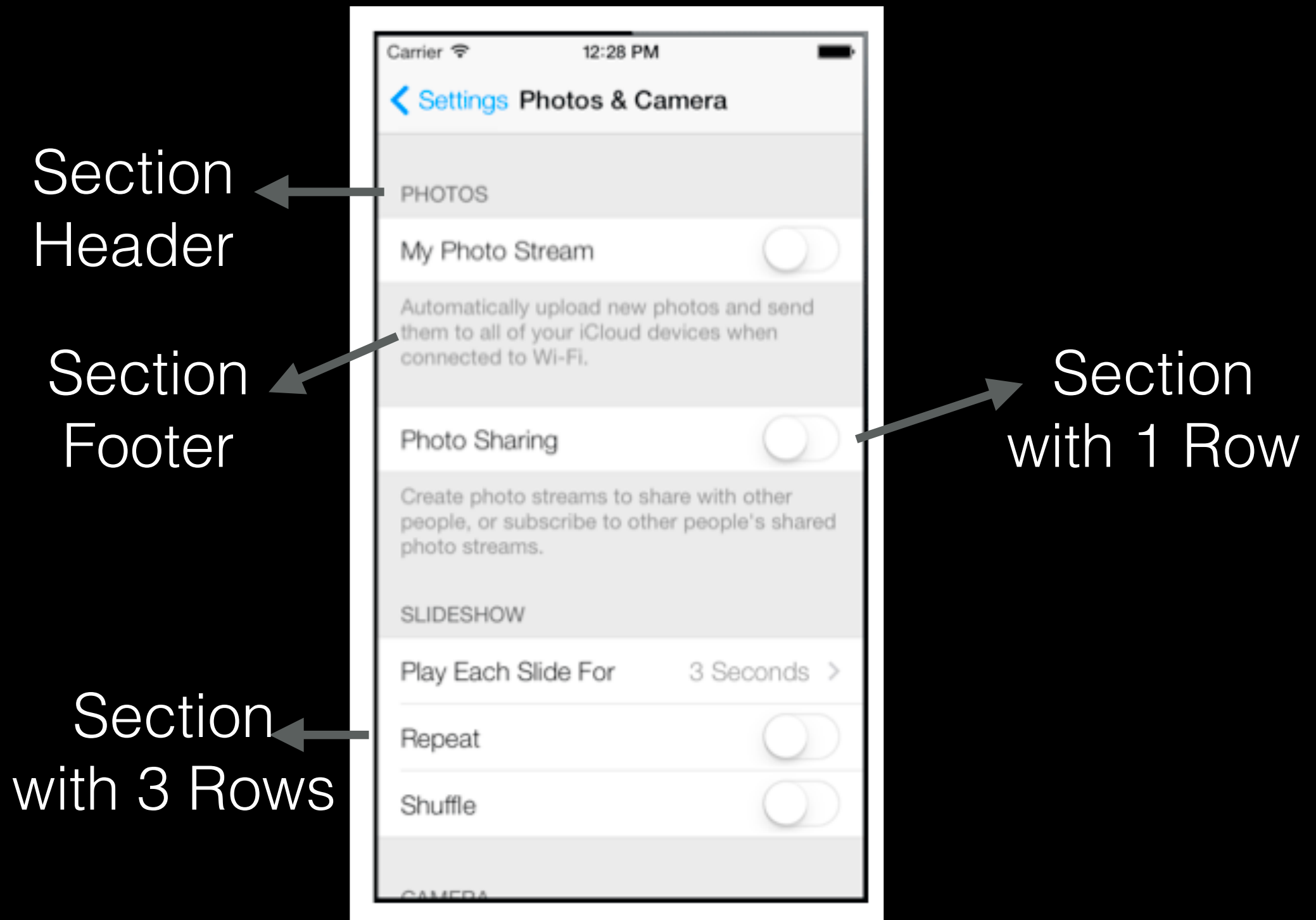
Table View

Table View is a list with Sections and Rows

Table View is widely used to implement lists

It is used to implement dynamic UI

Table View



IndexPath

```
indexPath: NSIndexPath
```

```
indexPath.row;
```

```
indexPath.section;
```

Section 0
Row 0

Section 1
Row 0

Section 2
Row 1

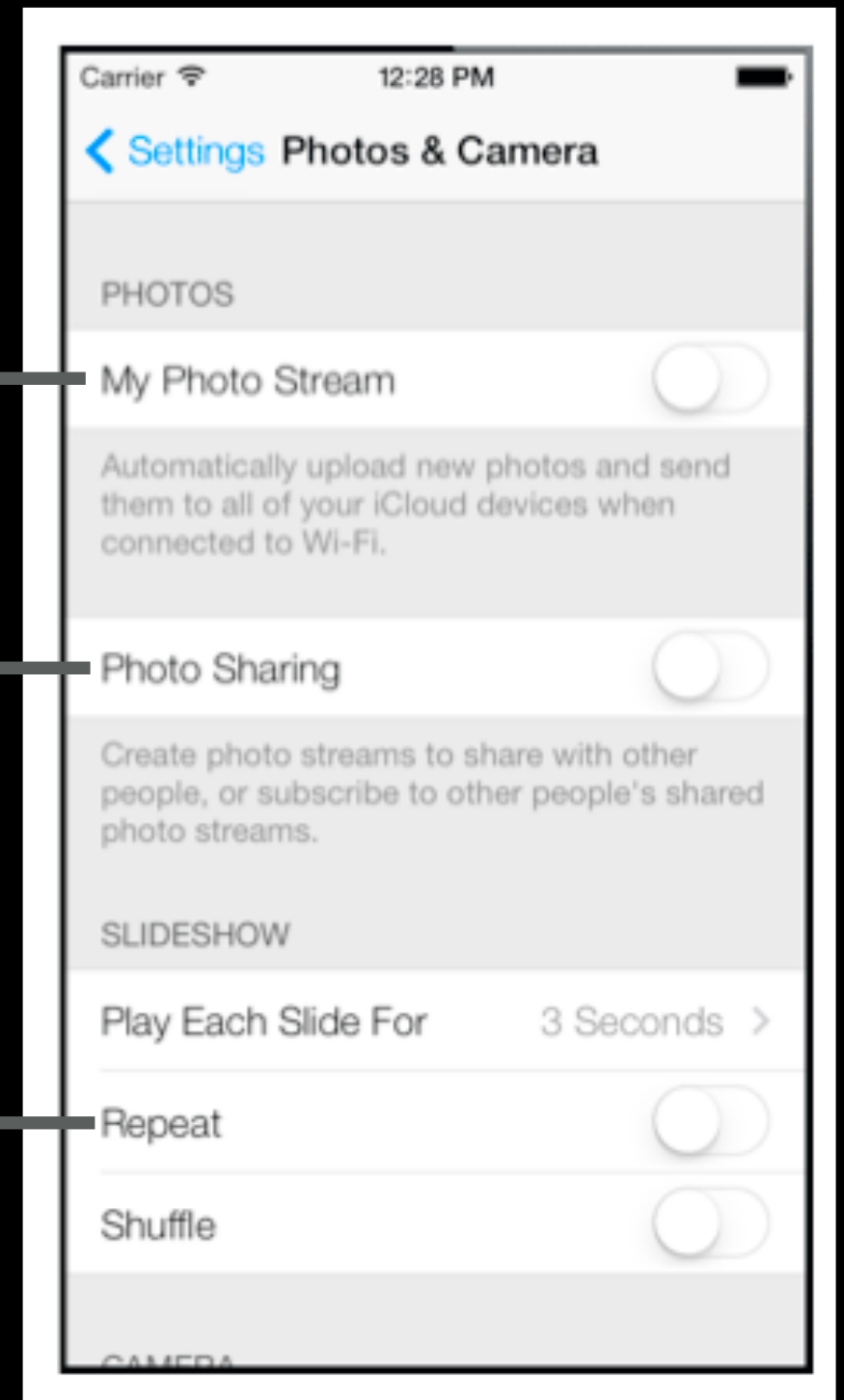


Table View

iOS builds table based on your answers

```
override func numberOfSectionsInTableView(tableView: UITableView) -> Int
```

```
override func tableView(tableView: UITableView, numberOfRowsInSection section: Int) -> Int
```

```
override func tableView(tableView: UITableView, cellForRowAtIndexPath indexPath: NSIndexPath) -> UITableViewCell
```


Table View

```
override func tableView(tableView: UITableView,  
titleForFooterInSection section: Int) -> String?
```

```
override func tableView(tableView: UITableView,  
titleForHeaderInSection section: Int) -> String?
```

```
override func tableView(tableView: UITableView,  
didSelectRowAtIndexPath indexPath: NSIndexPath)
```

Navigation

Navigation Controller

Navigation controller uses the stack concept, first in last out

Seen Screen

Navigation Controller

Navigation controller uses the stack concept, first in last out



Seen Screen

The diagram illustrates a stack data structure. It consists of two horizontal rectangular boxes stacked vertically. The top box is light gray and contains the text 'Seen Screen'. The bottom box is a solid blue color and is currently empty.

Navigation Controller

Navigation controller uses the stack concept, first in last out



Seen Screen

The diagram illustrates a stack data structure. It consists of three horizontal rectangular boxes stacked vertically. The top box is light gray and contains the text "Seen Screen". The two boxes below it are blue and are currently empty, representing the elements in the stack.

Navigation Controller

Navigation controller uses the stack concept, first in last out

A diagram illustrating a stack structure. It consists of four horizontal rectangular boxes stacked vertically. The top box is light gray and contains the text "Seen Screen". The three boxes below it are blue and are empty, representing a stack where the top element is the most recently added.

Seen Screen

Navigation Controller

Navigation controller uses the stack concept, first in last out



Seen Screen

The diagram illustrates a stack data structure. It consists of three horizontal rectangular boxes stacked vertically. The top box is light gray and contains the text "Seen Screen". The two boxes below it are blue and are currently empty, representing the elements in the stack.

Dealing with data

Storing data

User Defaults

Plist

Files

Database

Storing data

User Defaults

it is not about data, it
is about settings and
status

Plist

Files

Database

Storing data

User Defaults

Plist

Files

Database

It is structured files,
holds arrays and
dictionaries

Storing data

User Defaults

Plist

Files

Database



It is used to store text

Storing data

User Defaults

Plist

Files

Database

It is used to store structured searchable data with

Dealing with data

User Defaults

User Defaults

It is an easy way to save settings and flags

Data is stored in Key-Value form

User Defaults

```
let userDefaults =  
NSUserDefaults.standardUserDefaults();
```

Creates an instance of user defaults store

```
userDefaults.setValue  
("value", forKey: "key");
```

Sets “value” for “key”

```
userDefaults.valueForKey("key");
```

Reads value for “key”

Dealing with data PLIST Files

Plist files

pList = Property List

Structured files used to save array, dictionary and mixed structures

It is can be used to store data

PList files

```
var names = NSDictionary  
(contentsOfFile: path!);
```

Reads Contents of file to
dictionary

```
names.setValue  
("value", forKey: "key");
```

Sets “value” for “key”

```
names.writeFile(path, atomically:  
true);
```

Write back the new
dictionary to file

Getting File Path

Method of Getting file path depends on file location

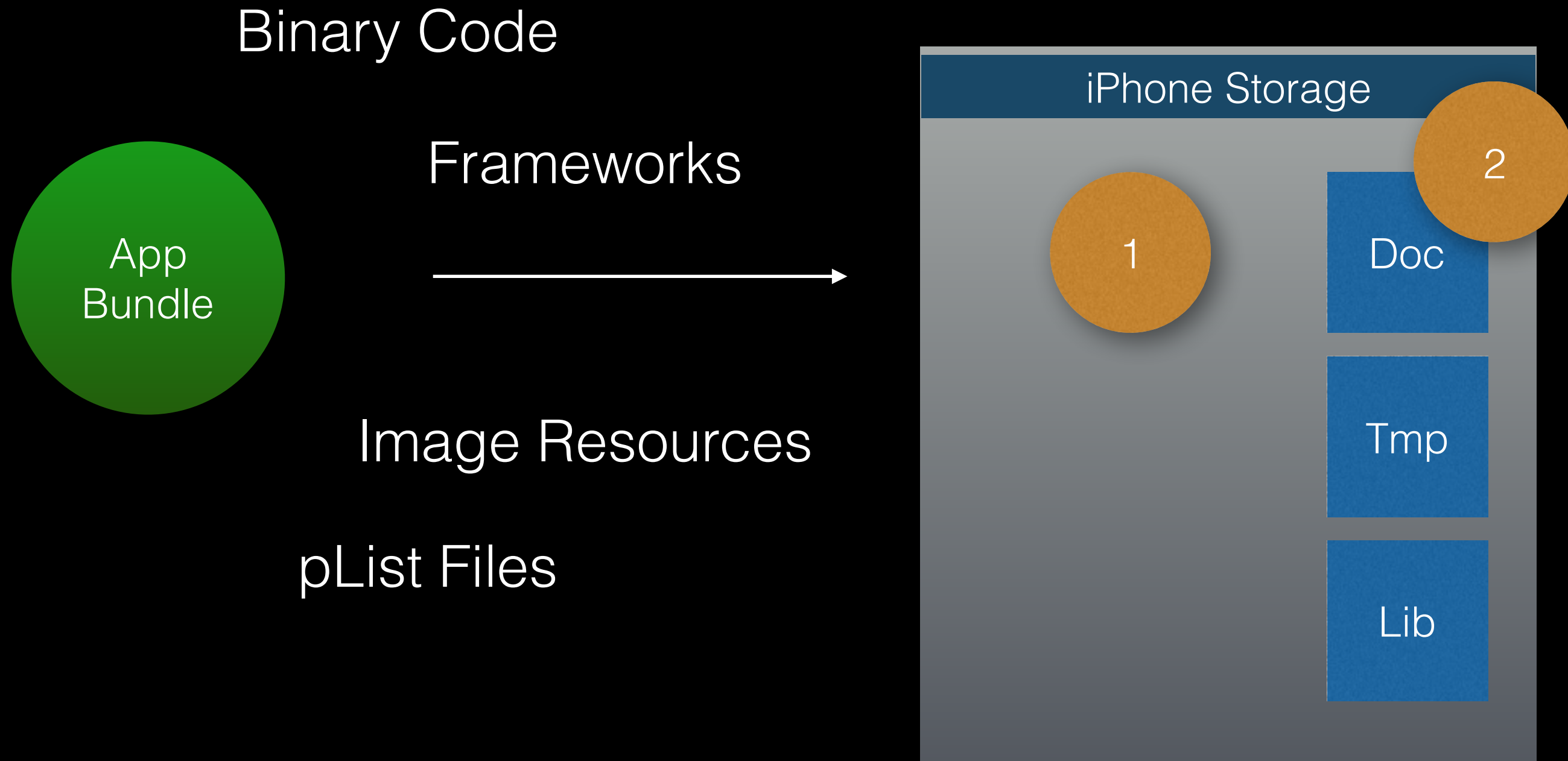
1

App Bundle

2

Device Local Storage

File Path



Getting File Path

1

App Bundle

Files are created in development time
App Bundle is read only location !

2

Device Local Storage

Files are created in run time
This area is read / write

Getting File Path



```
let filePath:String =  
NSBundle.mainBundle().pathForResource("Names", ofType:  
"plist")!
```

Getting File Path

2

Device Local Storage

```
let documentsPath : AnyObject =  
NSSearchPathForDirectoriesInDomains(.DocumentDirectory, .UserDomainMask, true)[0]
```

```
let destinationPath:NSString =  
documentsPath.stringByAppendingString(fileName)
```