

Consuming Web Services and Using Local Storage on iOS

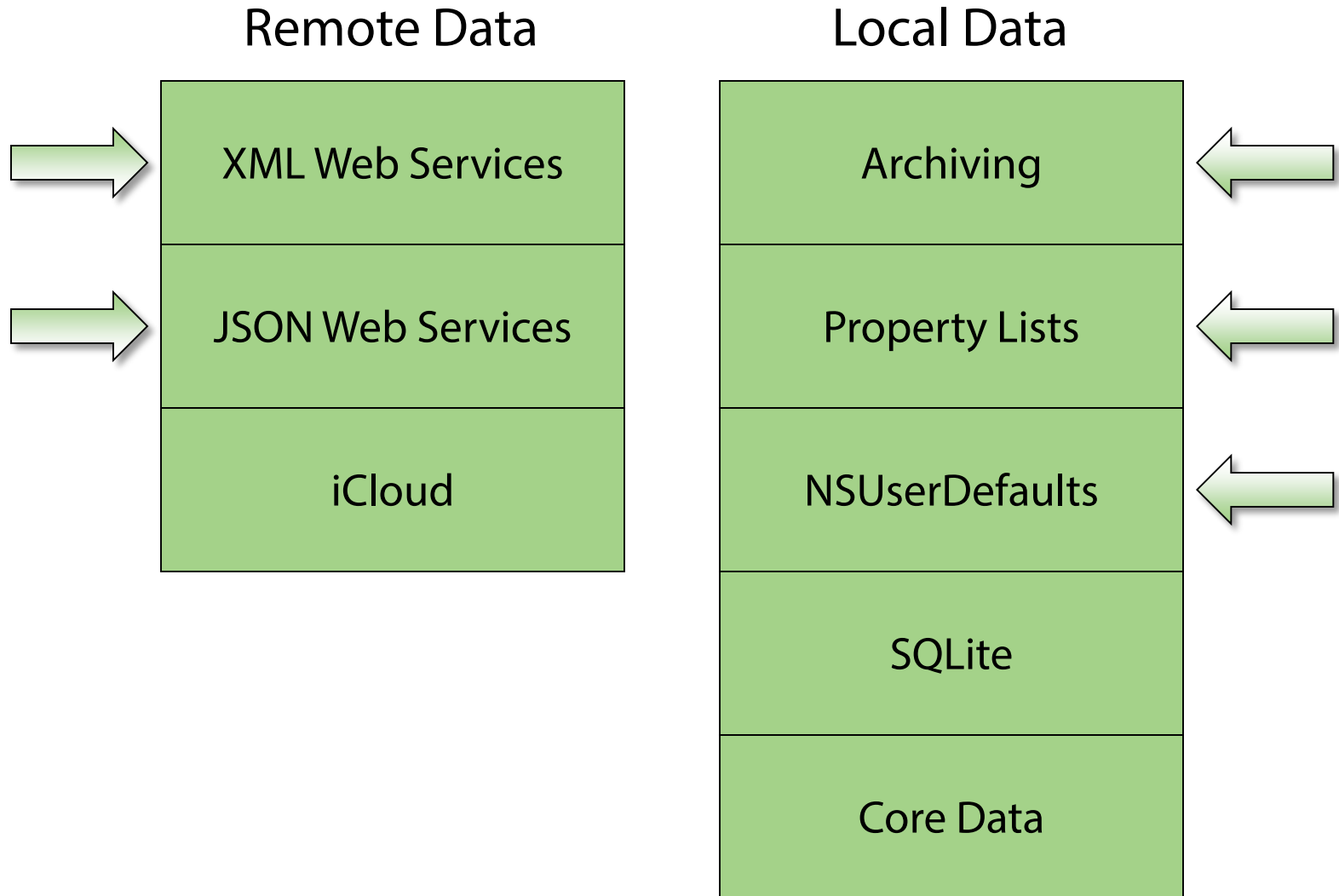
Downloading Data from XML Web Services

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Course Overview



Consuming XML Web Services

- **Review the raw XML to be downloaded**
- **Create a custom class to store the downloaded data**
- **Create a network request to download the data asynchronously**
- **Parse data using NSXMLParser**
- **Display the results in a UITableView**

Creating a Model Class

```
<content type="application/xml">
  <m:properties>
    <d:Title>Introduction to iOS - Part 1</d:Title>
    <d:Description>In this course you will learn how to
    <d:VideoLength>03:59:25</d:VideoLength>
    <d:Category>iOS</d:Category>
    <d:IsTutorial
    type="Edm.Boolean">false</d:IsTutorial>
    <d:Name>ios-intro</d:Name>
    <d:ShortDescription>Beginning iOS development from a
    .N
    <d:Subcategory></d:Subcategory>
  </m:properties>
```

```
</content>
```

```
@interface Course : NSObject
```

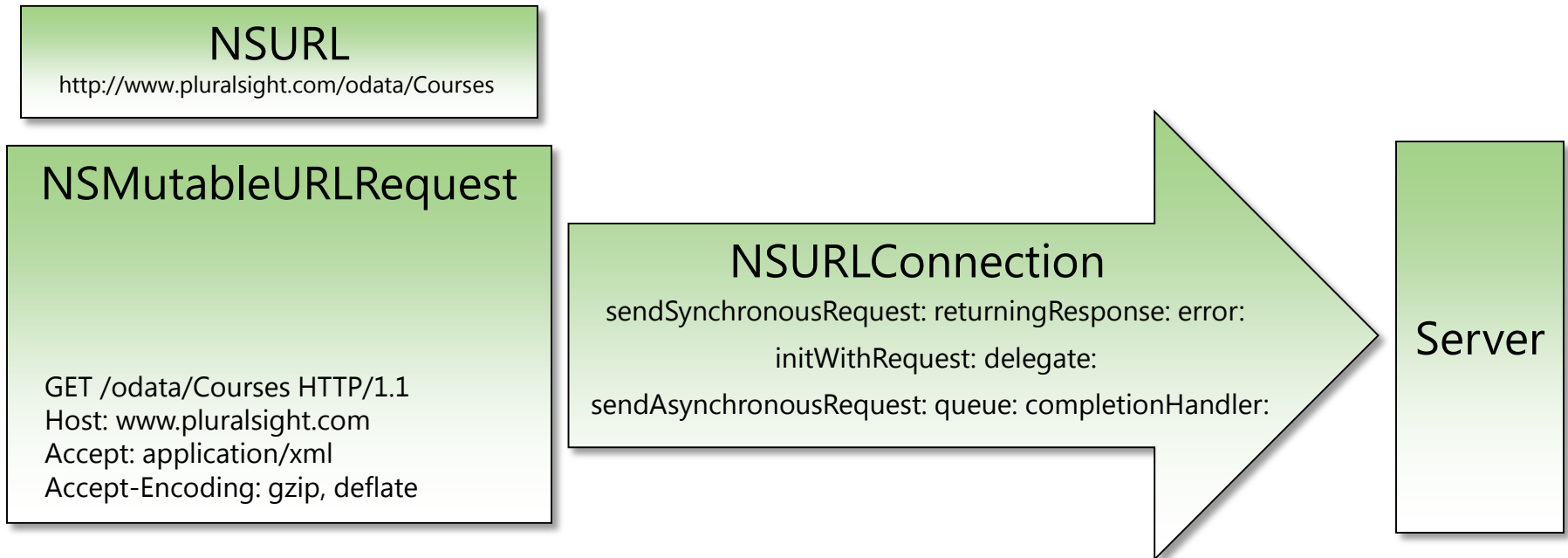
```
@property (nonatomic, strong) NSString *title;
```

```
@property (nonatomic, strong) NSString *category;
```

```
@property (nonatomic, strong) NSString *shortDesc;
```

```
@end
```

Making the HTTP Request



NSXMLParser

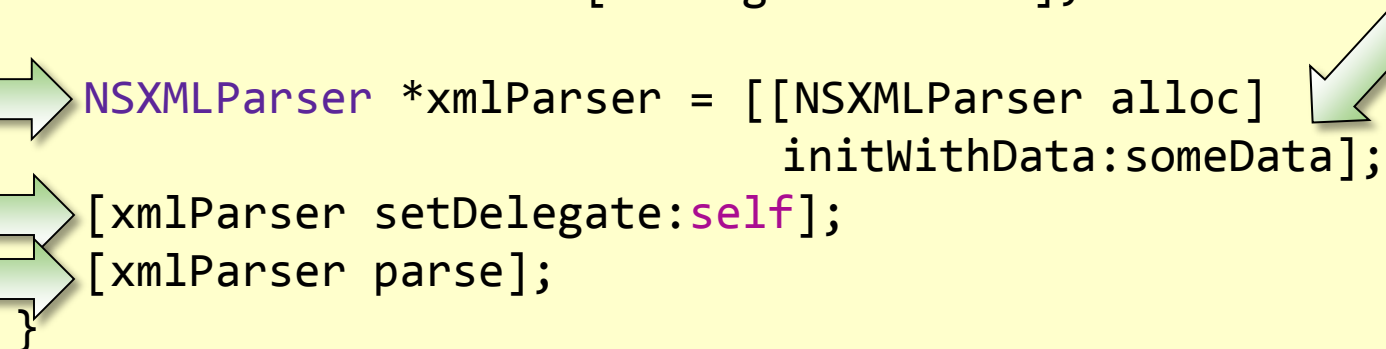
- **Event-based parser**
- **Uses the delegation pattern**
 - Delegate adopts the NSXMLParserDelegate protocol
 - Delegate will handle parsing events raised by the parser
 - Delegate is often the same view controller that contains the parser

```
- (void)viewDidLoad
{
    [super viewDidLoad];

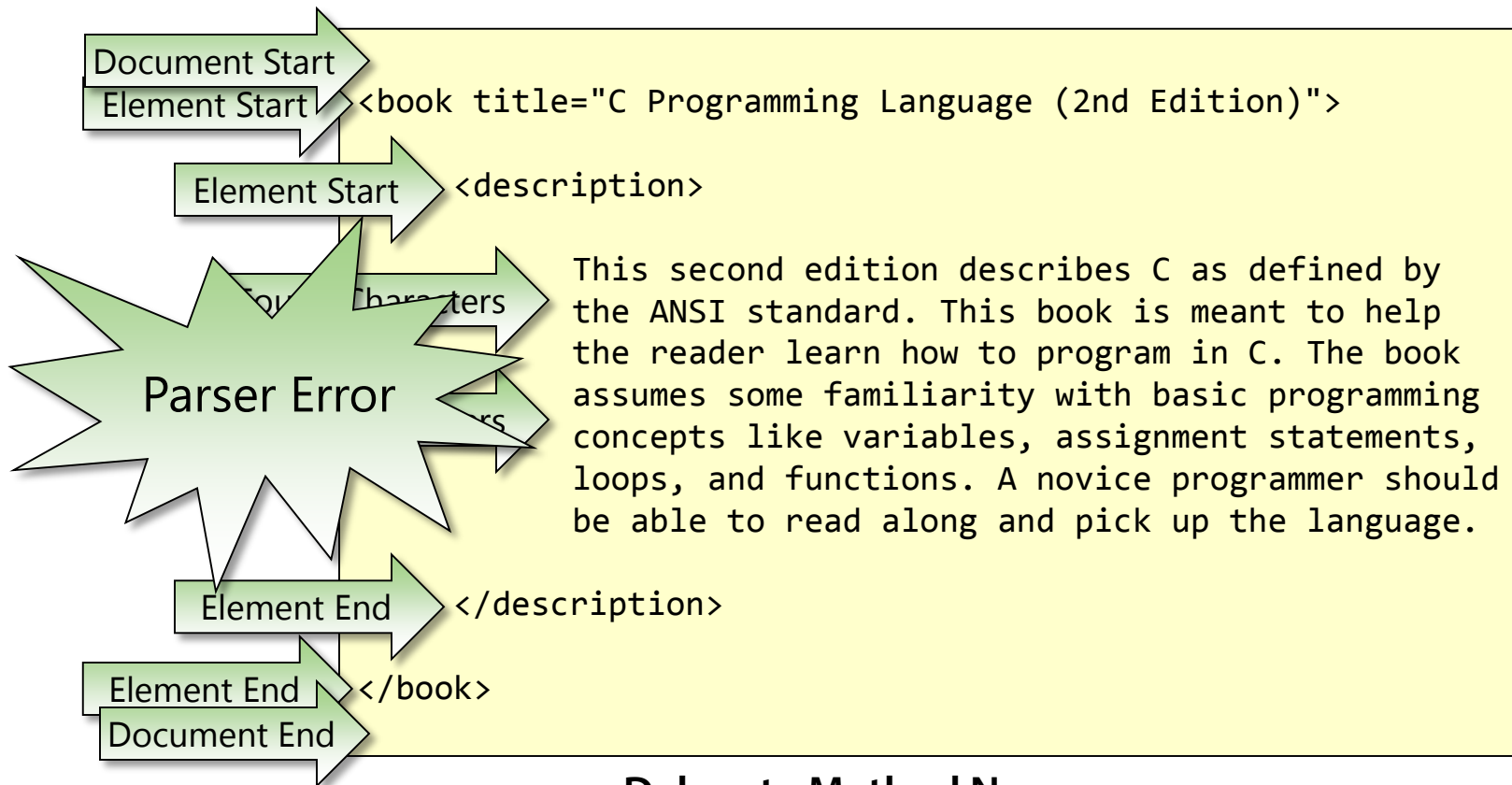
    NSData *someData = [self getSomeData];

    NSXMLParser *xmlParser = [[NSXMLParser alloc]
                               initWithData:someData];

    [xmlParser setDelegate:self];
    [xmlParser parse];
}
```



NSXMLParserDelegate

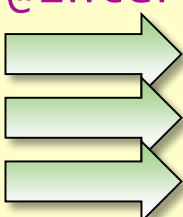


Delegate Method Name

	parser:didStartElement:namespaceURI:qualifiedName:attributes:parserErrorOccurred:	parser:parseErrorOccurred:delegateName:	:	
--	---	---	---	--

Manage Parsed Data

```
#import "MasterViewController.h"
#import "DetailViewController.h"
#import "Course.h"

@interface MasterViewController () {
 NSMutableArray *_objects;
    Course *currentCourse;
    NSMutableString *currentValue;
}
@end
```


Summary

- Reviewed raw XML
- Created custom model class to hold downloaded entities
- Used NSURL, NSMutableURLRequest and NSURLConnection to download XML data from the service
- Implemented the methods on NSXMLParserDelegate necessary to parse the XML we expected
- Displayed the results in a UITableView