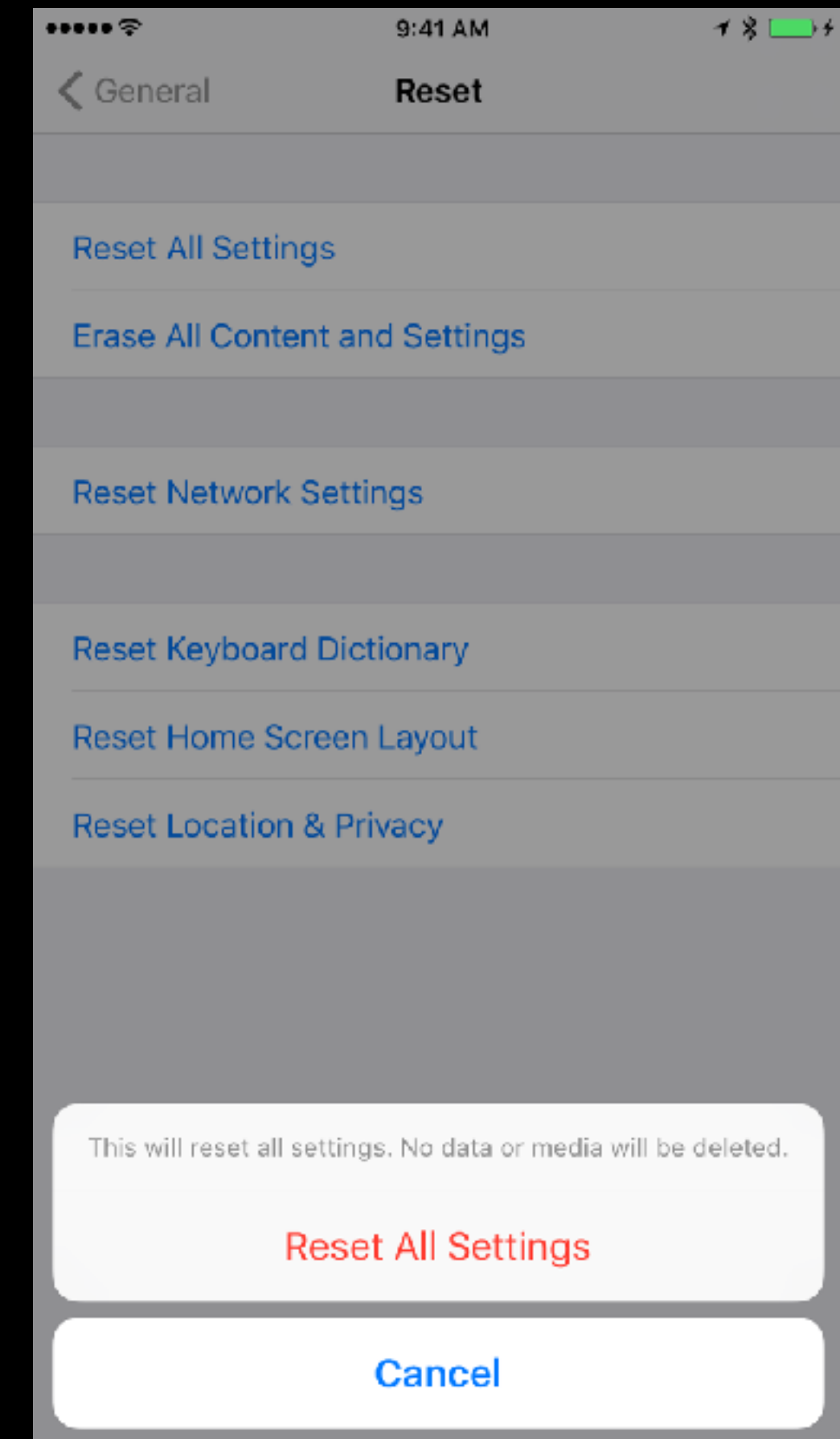
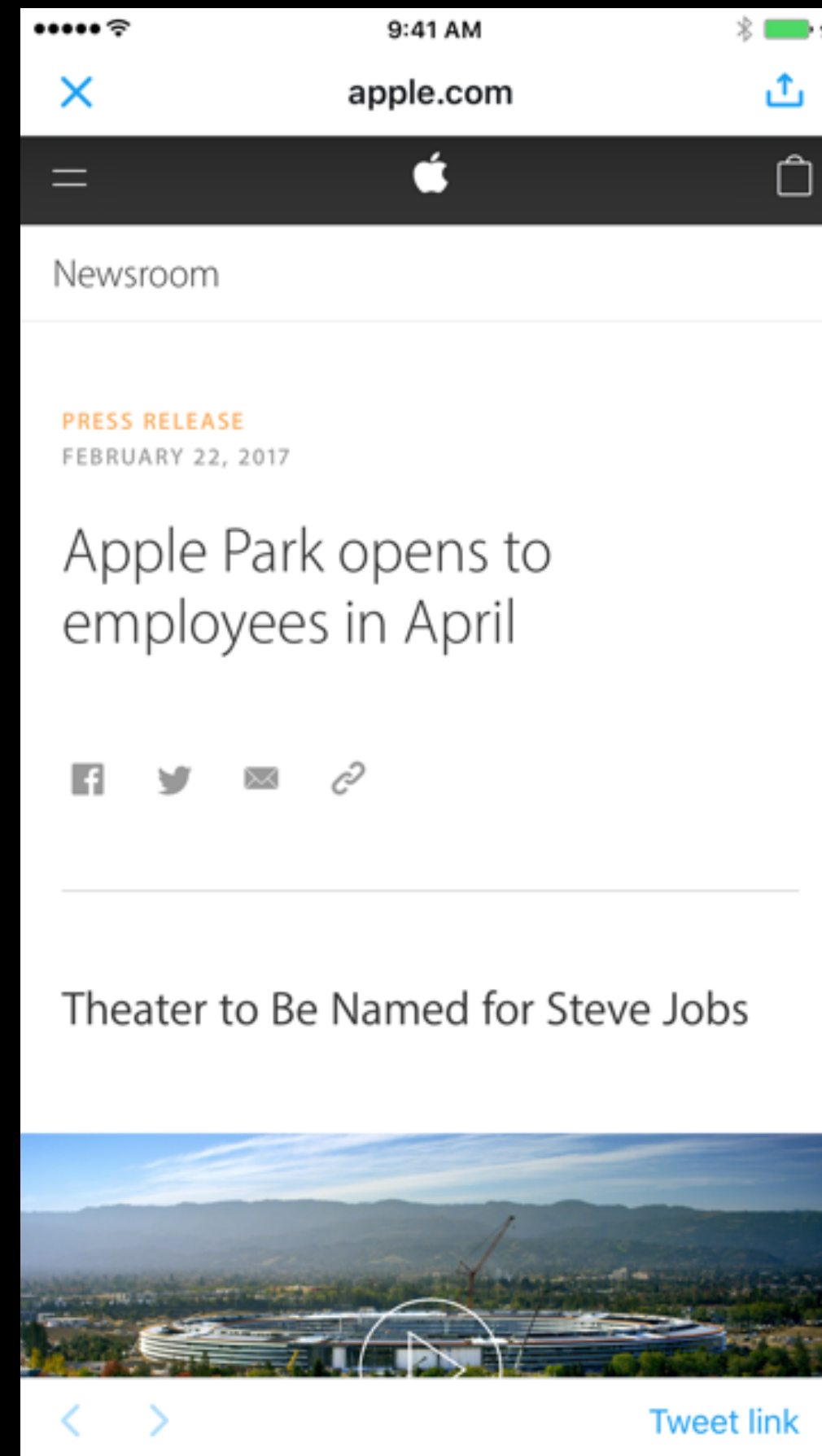


Unit 4—Lesson 8:

System View Controllers

Apple system view controllers



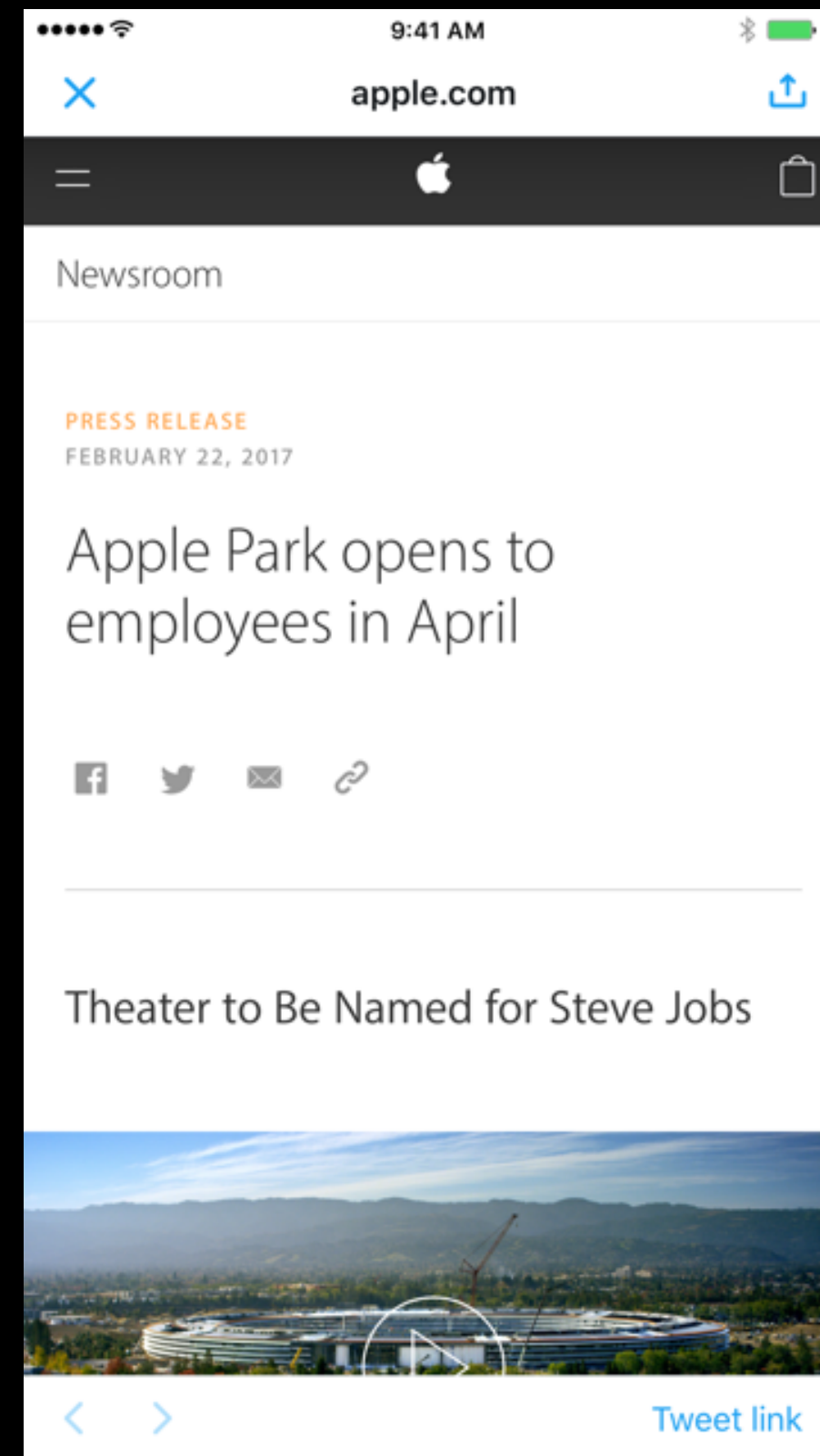
Activity view controller



Activity view controller

```
guard let image = imageView.image else { return }  
let activityController = UIActivityViewController(activityItems: [image],  
    applicationActivities: nil)  
present(activityController, animated: true, completion: nil)
```

SFSafariViewController

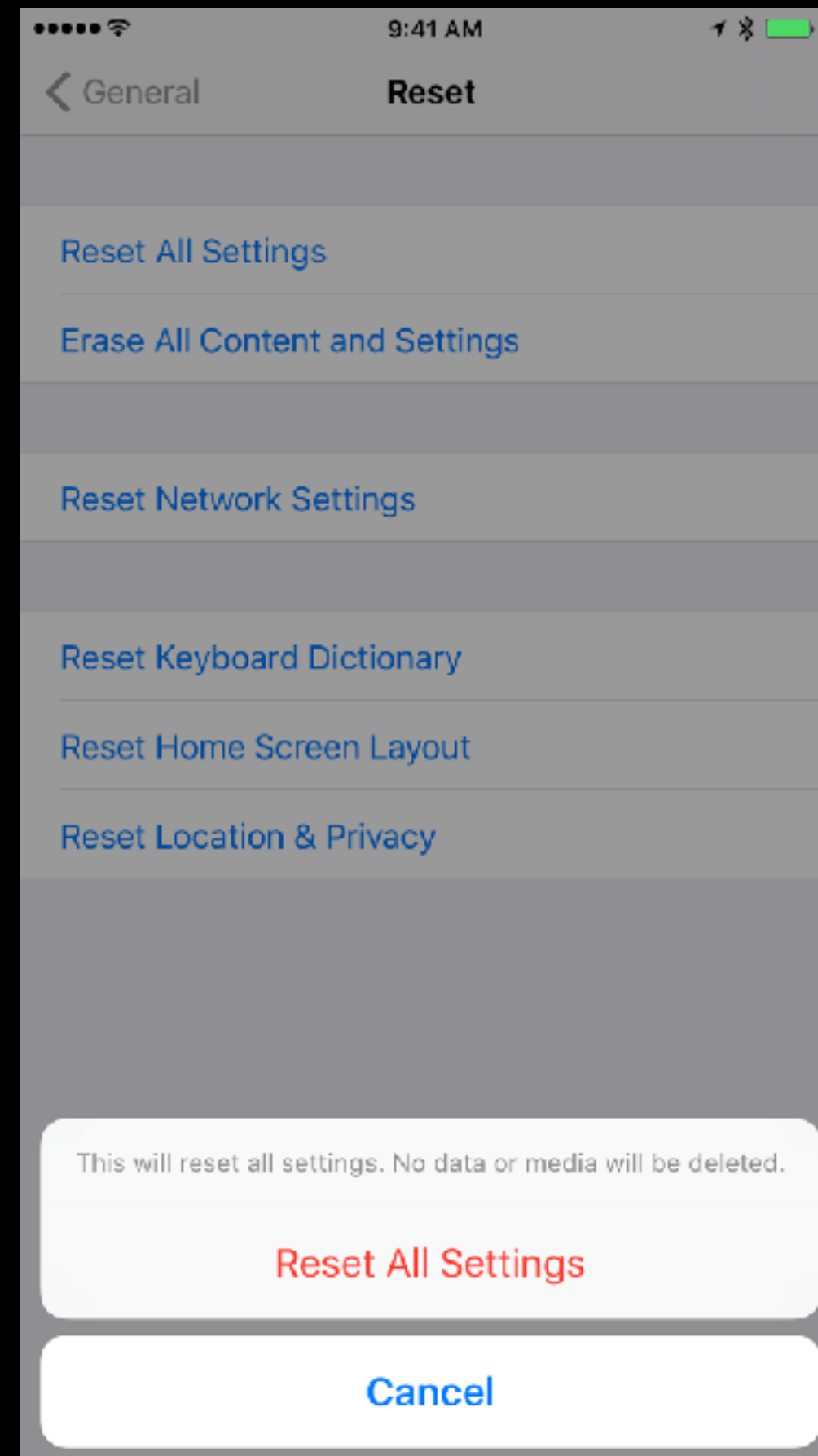


SFSafariViewController

```
import SafariServices
```

```
guard let url = URL(string: "http://www.apple.com") else { return }  
let safariViewController = SFSafariViewController(url: url)  
present(safariViewController, animated: true, completion: nil)
```

Alert controllers



Alert controllers

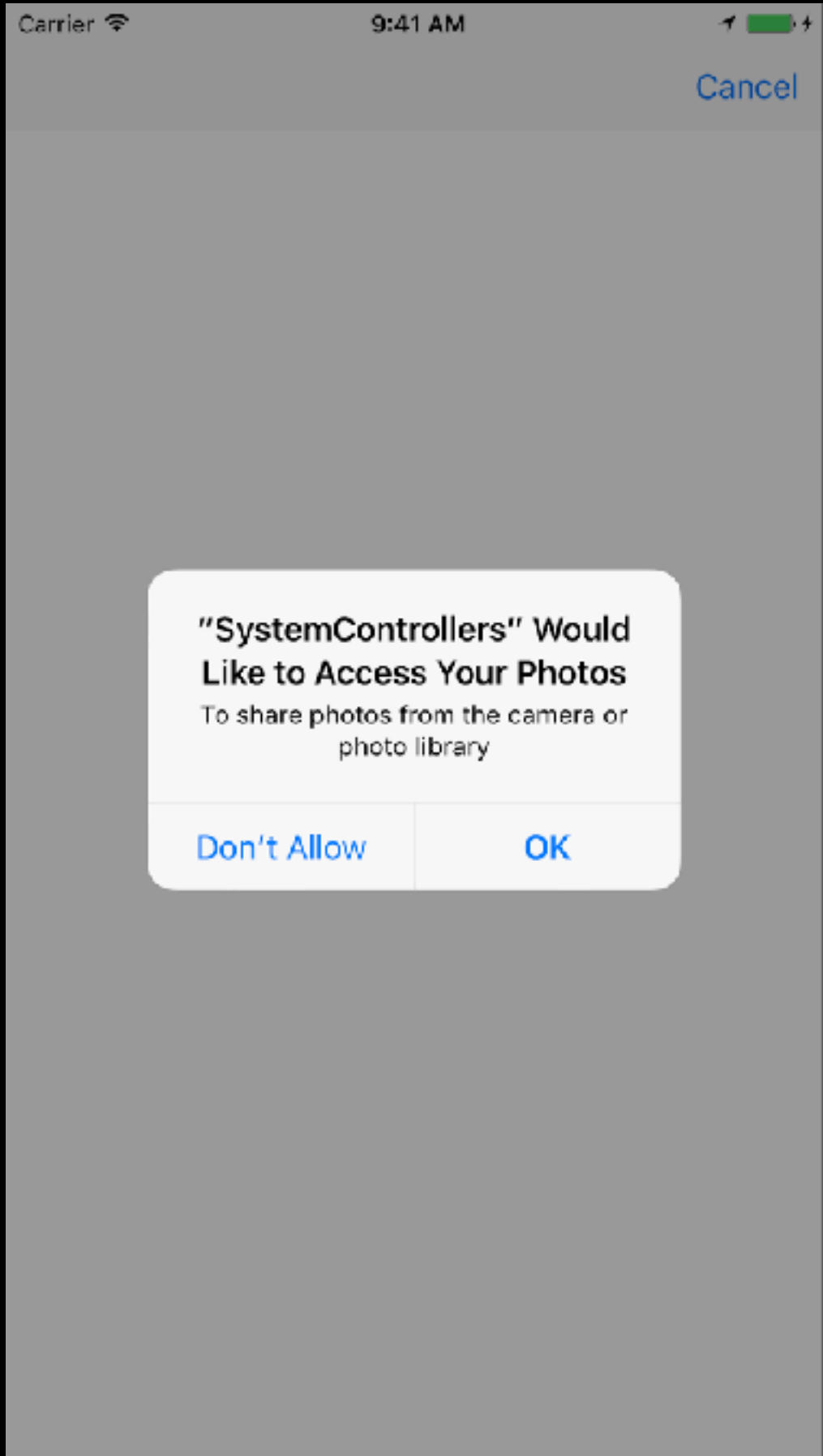
```
let alertController = UIAlertController(title: "Alert Title",  
                                     message: "Alert Message",  
                                     preferredStyle: .actionSheet)  
  
let cancelAction = UIAlertAction(title: "Cancel", style: .cancel) { (alertAction) in  
  
}  
  
alertController.addAction(cancelAction)  
  
present(alertController, animated: true, completion: nil)
```


Access the camera

UIImagePickerController

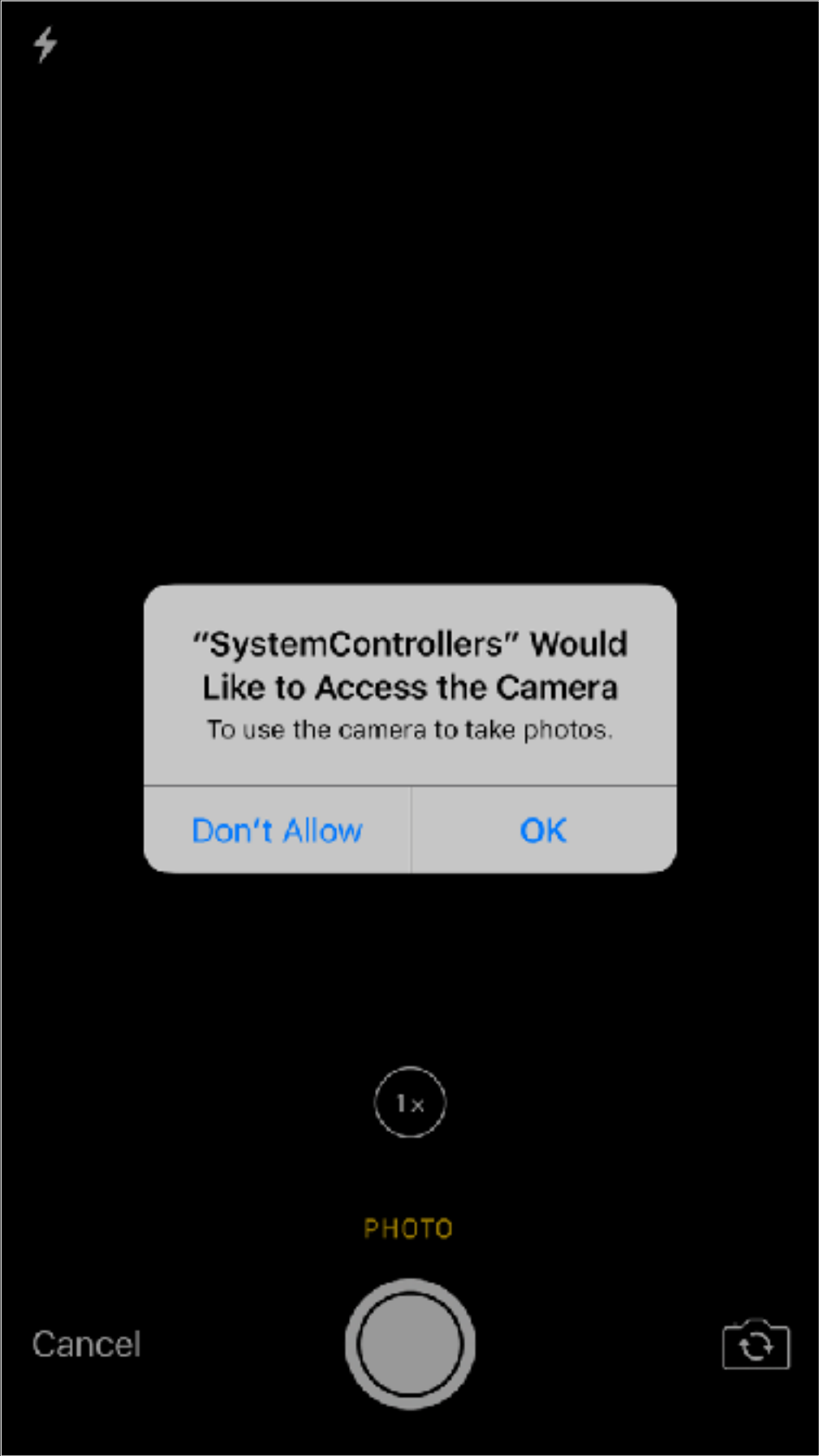


Access the camera Permission



Key	Type	Value
▼ Information Property List	Dictionary	(16 items)
Privacy - Photo Library Usage Description	String	To share photos from the camera or photo library
Privacy - Camera Usage Description	String	To use the camera to take photos.
Localization native development region	String	en
Executable file	String	\$(EXECUTABLE_NAME)
Bundle identifier	String	\$(PRODUCT_BUNDLE_IDENTIFIER)
InfoDictionary version	String	6.0
Bundle name	String	\$(PRODUCT_NAME)
Bundle OS Type code	String	APPL
Bundle versions string, short	String	1.0
Bundle version	String	1
Application requires iPhone environment	Boolean	YES
Launch screen interface file base name	String	LaunchScreen
Main storyboard file base name	String	Main
► Required device capabilities	Array	(1 item)
► Supported interface orientations	Array	(3 items)
► Supported interface orientations (iPad)	Array	(4 items)

Access the camera Permission



Key		Type	Value
▼ Information Property List		Dictionary	(16 items)
Privacy - Photo Library Usage Description	⌵	String	To share photos from the camera or photo library
Privacy - Camera Usage Description	⌵ + -	String	⌵ To use the camera to take photos.
Localization native development region	⌵	String	en
Executable file	⌵	String	\$(EXECUTABLE_NAME)
Bundle identifier	⌵	String	\$(PRODUCT_BUNDLE_IDENTIFIER)
InfoDictionary version	⌵	String	6.0
Bundle name	⌵	String	\$(PRODUCT_NAME)
Bundle OS Type code	⌵	String	APPL
Bundle versions string, short	⌵	String	1.0
Bundle version	⌵	String	1
Application requires iPhone environment	⌵	Boolean	YES
Launch screen interface file base name	⌵	String	LaunchScreen
Main storyboard file base name	⌵	String	Main
► Required device capabilities	⌵	Array	(1 item)
► Supported interface orientations	⌵	Array	(3 items)
► Supported interface orientations (iPad)	⌵	Array	(4 items)

Access the camera

Adopt the UIImagePickerControllerDelegate protocol

```
class ViewController: UIViewController, UIImagePickerControllerDelegate {...}
```

Access the camera

Create a UIImagePickerController

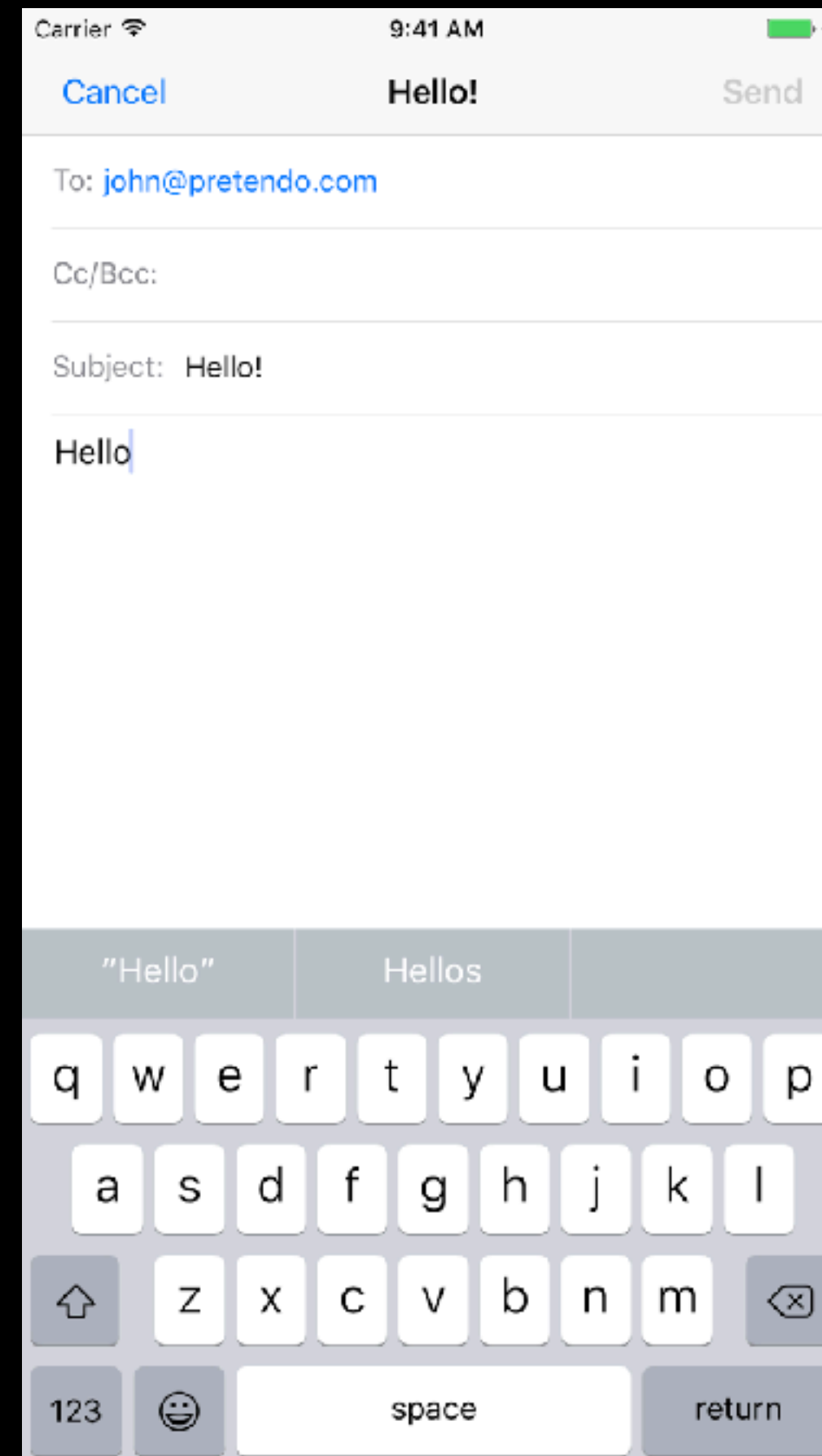
```
let imagePicker = UIImagePickerController()  
imagePicker.delegate = self  
imagePicker.sourceType = .camera //Or other sources  
present(imagePicker, animated: true, completion: nil)
```

Access the camera

imagePickerController(_:didFinishPickingMediaWithInfo:).

```
func imagePickerController(_ picker: UIImagePickerController,
    didFinishPickingMediaWithInfo info: [String : Any]) {
    guard let selectedImage = info[UIImagePickerControllerOriginalImage] as? UIImage
    else { return }
    imageView.image = selectedImage
```

Send email



Send email

Verify if mail can be sent

```
import MessageUI
```

```
guard MFMailComposeViewController.canSendMail() else {  
    print("Can not send mail")  
}
```


Send email

MFMailComposeViewController

```
class ViewController: UIViewController, UIImagePickerControllerDelegate,  
UINavigationControllerDelegate, MFMailComposeViewControllerDelegate {...}
```

```
let mailComposer = MFMailComposeViewController()  
mailComposer.mailComposeDelegate = self  
mailComposer.setToRecipients(["example@example.com"])  
mailComposer.setSubject("Important topic to discuss")  
mailComposer.setMessageBody("Hello there!", isHTML: false)  
  
present(mailComposer, animated: true, completion: nil)
```

Send email

mailComposeController(didFinishWith:)

```
func mailComposeController(_ controller: MFMailComposeViewController,  
    didFinishWith result: MFMailComposeResult, error: Error?) {  
  
    dismiss(animated: true, completion: nil)  
}
```

Unit 4—Lesson 8

System View Controllers



Learn how to incorporate these system view controllers for displaying alerts, sharing content, sending messages, and accessing the camera and photo library on an iOS device.

Unit 4—Lesson 8

Lab: Home Furniture Sharing



1. Add a `UIAlertController`
2. Add an image picker
3. Share furniture with the `UIActivityViewController`

