CS 329E - Elements of Mobile Computing

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# Camera



#### Camera

Starting with the iOS 8 SDK, you can get access to the camera device, camera roll and photo library through the UIImagePickerController class.

This allows photos and videos to be taken from within an application and for existing photos and videos to be presented to the user for selection.

The UIImagePickerController is a view controller that gets presented modally (meaning as a popover). When we select or cancel the picker, it runs the delegate, where we handle the case and dismiss the modal.

#### UIImagePickerController

The ultimate purpose of the UIImagePickerController class is to provide applications with either a photo or video. It achieves this by providing the user with access to the camera, camera roll or photo library on the device.

In the case of the camera, the user is able to either take a photo or record a video depending on the capabilities of the device and the application's configuration of the UIImagePickerController object.

# Attributes of an UIImagePickerController

- sourceType : UIImagePickerControllerSourceTypeOne of
  - .camera
  - .photoLibrary
  - .savedPhotosAlbum
- mediaTypes: array of strings kUTTypeImage (image) kUTTypeMovie (video)
- allowsEditing: Boolean
   allow changes before the image is passed back to the application

## Creating and configuring a UIImagePickerController

- Optionally, check to make sure you have access to the camera / camera roll / photo library using the isSourceTypeAvailable(:) class method
- Optionally, check to make sure the media type you want to use is available by using the availableMediaTypes(for:) class method
- Create an instance of UIImagePickerController and set up its parameters.
- Identify a UIImagePickerControllerDelegate.
- Present the image picker using present().

## Example code for UIImagePickerController

```
// create instance
let imagePicker = UIImagePickerController()
// identify delegate
imagePicker.delegate = self
// set up properties
imagePicker.sourceType =
    UIImagePickerControllerSourceType.photoLibrary
imagePicker.allowsEditing = false
// present the instance
present (imagePicker, animated:true, completion: nil)
```

#### UIImagePickerController delegate methods

As part of the UIImagePickerController delegate, you need to implement these protocol methods: