

Setup

- Start a new xcode project. The name should be HW3_studentid. Mine would look like HW3_mjnash. We want everyone's app to be completely discrete.
- · Select document-based app
- Choose your file extension. It's best to have everyones be unique, so let's go with *studentid*profile. Mine would be 'mjnashprofile'

Model Object

Minimally, this object needs these properties:

- name (string)
- address (string)
- image (image)
- notes (string)

Override the -init | method and set defaults for the properties. | NSImage | may be nil. | NSString | should be | @""

These properties should be strong or copy. A weak property will cause the object to go away.

It should conform to the NSCoding protocol. This is just a protocol, not a delegate, so all you have to do is implement some methods. Check the documentation and videos for the two methods you have to implement.

Interface

Add an NSImageView to hold the person's image. This should have a default image. You can set it in IB. It should support dragging and dropping an image. In other words, it has to be editable. You can do that in code or in IB.

Add a text field to hold the name.

Add a text field to hold the address. Addresses generally have multiple lines. Hitting return in an NSTextField doesn't break a line by default. You can override this somehow. For the meantime let's just use option + return.

Add two buttons that open urls to a map of the address. One for Google and one for Bing. You'll need to format a url based on the entered address. Then open that url. Look to NSURL and NSWorkspace for this functionality. NSString has some methods you'll use to massage your url into something that Bing Maps and Google Maps understand.

Add a text view to hold general notes about a person.

Feel free to layout the interface in a way that suits your style. There is no need to do an exact copy of the example.

NSDocument subclass

Have a property holding one instance of your data model.

Implement these features:

- saving. Turn your app's data model into an NSData
- reading. Turn some NSData into your app's data model

Make sure to update your interface when the window becomes visible. You can do this via a delegate callback with NSWindowDelegate or by some other means.

Explore (optional)

If you do these, make sure to inform us when you submit. We don't want to miss your awesome work.

- Have the return button in the address text field perform a line break.
- Add more attributes to the data model and provide UI to update them.
- Add an email field and open a mailto link.

