Overview
CMSC 436
Course Structure

*In person* model

- Take the quiz each week by Monday noon.
- Come to class, watch the demos
- Do the projects
- Start thinking about the Group Project early
  - 1-3 people
  - uses something we haven’t in this course
  - originality, polish, 20
Logistics

- Information flow (https://sedna.cs.umd.edu/436)
- Not ELMS
- Not ELMS
- Okay a bit of ELMS
  - grades
- Piazza
- Office Hours
Communication

- Piazza
  - faster response (we try to respond in an hour)
  - students can help students
  - one correct response (from other students or TAs) can help many people

- Never post code except in private communication to TAs/prof!

- Office Hours

- Mail to prof with ’424’ in subject
Overview Stuff

What you’ll learn

What makes mobile different

Some architecture stuff

MVC vs. MVVM/MVB models
What You’ll Learn

Application design

Interaction with visual elements

Using mobile-specific features

Visual design

Swift 5 and SwiftUI
What Makes Mobile Different

Always battery

Network-hopping

Low memory and storage

Limited CPU

Small (touch) screen

Orientation changes

Lots of radios and other built-in peripherals
Some Architecture Stuff

OSX kernel (XNU) combines
  ▶ Mach 3.0 microkernel
  ▶ BSD

Sockets

Security

Power management

Keychain access

Certificates

File system

Bonjour (network service discovery)
**MVC Model**

**Model** — the data and logic

**View** — what the user sees
- UIKit builds this visually
- SwiftUI builds this programmatically

**Controller** — how these interact
- View is updated from Model
- Events from View reflected into Model (callbacks, etc.)

This is the model that UIKit uses
Next Steps

We will begin with an overview of Swift

We’ll look at some Xcode basics

The app part will come a little later
Action Items

- Log into https://gitlab.cs.umd.edu

- Make sure you have access to a Mac. You can **not** complete this course by sharing with a friend.

- Start looking at the first quiz material. You can look at the material at the same time while taking the quizzes, *quizzes are not timed*.

- Start looking at the first project as soon as it becomes available this weekend.