

Homework 0: Campus Events Board

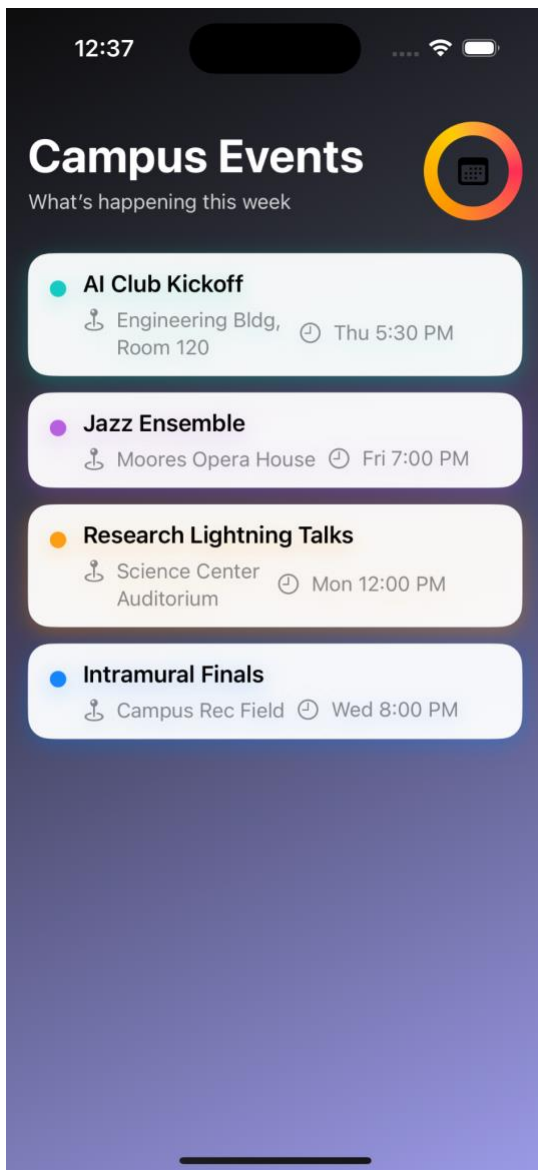
Due: Tuesday, September 2, 2025, 7:00 PM

Submit via the class TEAMS site.

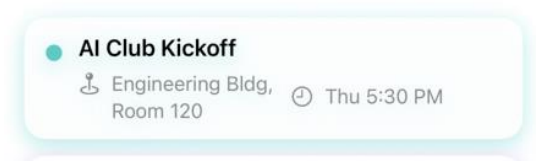
Grading: 30 points total + up to 3 points Extra Credit.

Note: This is a sample homework and will not count towards the course grade.

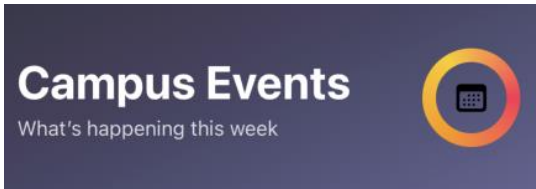
Main Screen



Event Card



Animated Header (Badge)



Goal

In this assignment, you will build a small SwiftUI app called Campus Events Board. The app displays a list of upcoming campus events, styled as colorful cards, with an animated header.

You will practice:

- Composing views (ContentView, TitleView, EventsView, EventCardView, BackgroundView).
- Creating a simple data model conforming to Identifiable.
- Rendering views with ForEach.
- Using @State and animations.
- Styling with gradients, rounded rectangles, and shadows.
- Writing Previews to test each view.

Tasks (30 Points Total)

Part A. Project Setup

Create a new iOS App (SwiftUI) project in Xcode. Name it CampusEvents. Set the deployment target to iOS 17.0 or later.

Points: 2

Part B. Background (3 pts)

Implement BackgroundView with a gradient fill that covers the screen.

Points: 3

Part C. Title (5 pts)

Implement TitleView with:

- A title and subtitle ('Campus Events', 'What's happening this week').
- A badge (circle + gradient stroke) that rotates when tapped. Use @State and .rotationEffect with animation.

Points: 5

Part D. Event Model (3 pts)

Define EventItemModel: Identifiable with properties:

id, title, location, time, accent, fill, shadow.

Points: 3

Part E. Event Card (5 pts)

Implement EventCardView that displays:

- A small accent dot (colored circle).
- Event title, location, and time.
- Rounded rectangle background + shadow.

Points: 5

Part F. List of Events (5 pts)

Implement EventsView:

- Create an array of EventItemModel (at least 4).
- Use ForEach to render a vertical stack of EventCardView.

Points: 5

Part G. Composition (4 pts)

Implement ContentView:

- Place BackgroundView at the back.
- Stack TitleView and EventsView vertically with spacing.

Points: 4

Code Previews & Style (3 pts)

Each view should include a #Preview for testing in Xcode. Use consistent styling and layout.

Points: 3

Deliverables

- A working Xcode project that compiles and runs on the iOS simulator.

Extra Credit (Optional)

Add a tap gesture on an event card that toggles a “saved” star.

Points: 3

Grading Rubric

Task	Points
Part A. Project Setup	2
Part B. Background	3
Part C. Title	5
Part D. Event Model	3
Part E. Event Card	5
Part F. List of Events	5
Part G. Composition	4
Code Previews & Style	3
Extra Credit: Tap-to-Save Star	3
Total	30 + 3 Extra Credit