

# ACM Android Application

Upperclassmen Workshop Overview

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### Overview

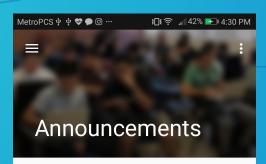
**Objective:** To create an Android Application based off ACM's website.

Learning outcomes: To familiarize students with app development for android.

Time and Place: Tuesdays 4:30 pm - 5:50 pm (1 hr 20 minutes) E&T 254

Requirements: Basic Java knowledge, familiarity with XML.

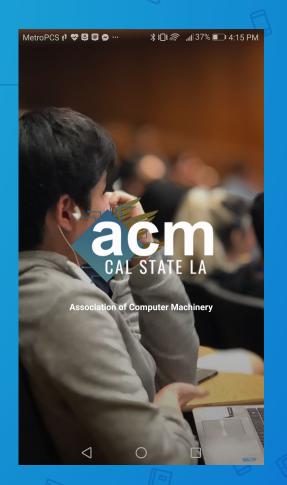
Workshop Structure: 7-13 minutes lecture, rest goes to actual coding.





#### Chipotle Fundraiser

Come support ACM's second fundraiser at Chipotle (Alhambra, CA). If you're interested in purchasing a voucher make sure to get in contact with an ACM Cabinet member ASAP! All funding goes to the club to help support club growth, projects, and scholarships.



# Workshop Structure (Elaboration)

#### Students will work by themselves

Competition amongst each other:

- First Place: \$50 + certificate
- Second Place: \$30 + certificate
- Third Place: \$20 + certificate
- Most Creative Certificate
- Best UI Design Certificate
- Best Coding Practices Certificate
- Honorable mentions certificates (3 additional people)
- Certificate of Completion (Everyone)

They will be working with Git/Github and Android Studio.

### How it Works

- Create an app based off the website
  - Additional requirements will be added
  - Each requirement are worth points which will determine who wins
- Requirements must be fully functional
  - Requirements don't need to be robust
- Each workshop will show how to implement a specific requirement

#### How it Works

- Create an app based off the website
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# Requirements (Required)

Splash Screen with Logo

#### Navbar

- Navigation Drawer
- Announcements
  - All Announcements from Database
- Resources
  - Hackathons & Internships
- Ahnu
- Contact
- Links to Instagram & Facebook

#### Home Page

- ACM Objective
- Latest Announcements (Top 3 from Database)

# Requirements (Optional)

Users

- Students
  - i. Check into meeting (Google Maps Geolocation) Similar to iclicker
  - ii. Loyalty Card (?)
  - iii. Chatbox (? Optional) \*Admins
- Admin
  - iv. Ability to create events/meetings



# Work Management

We are only going to check the work of students who want extra credit.

### Splitting up Work

We are expecting 35 students and 40 students at max. We will split those student's equally amongst each other and check the progress on github - the group of students we check will be the same students throughout the semester.

# Keeping up with Work

We will have a "Progress Report" google sheet which we keep track of each student's work. We don't expect everyone's work to compile - but we will look over the repository's activity to make sure the student is attempting work.

#### Office Hours

We will also stay an hour after 4:20 PM to answer additional questions. We will also give a survey to students after each workshop to see how we are doing. This survey isn't required.

# Tardies & Absence Policy

Only students that want extra credit will be held strictly for attendance/tardiness.

We will keep a google doc of students who are participants of the workshop. Attendance will be kept track the same way as last semester.

Students who are more than 15 minutes late without an excuse will be marked and will be ineligible for a stamp for that day.

Students may not leave early during the workshop if they need extra credit.

Students who want extra credit can't miss any workshop.

# Keeping Motivation Throughout the Semester

- Consistently remind students the perks of being involved.
  - This includes the extra credit and portfolio/resume material.
- Include incentives to students to have them participate throughout the entire semester.
  - Prizes + many certificates since we're covering a wide array of students and not all students can win 1rst/2nd/3rd place, we will be giving certificates to help motivate students to make quality projects.
- Interact with each student (and try to remember all their names).
- Make sure students are offered help throughout the workshops we'll confiscate for the lost time by staying after regular workshop hours to provide extra help.



# **Expectations Prior to Workshop**

Students must have Android Studio and Git/Github installed. Those who have it installed will be given priority to workshops. Information for program installation will be emailed to students week prior to workshop. Students will have to email the workshop email back with proof of installation (screenshot of android studio and git installed + link to github).

We will make a separate ACM Upperclassmen Workshop email shared amongst us to email students updates. This email will be specifically for the workshop and will help us keep organized.

### Workshop 1

Introduction (10 minutes) & Basic Overview (10 minutes)

Hello World Exercise (20 minutes)

Push Exercise onto Git/Github (20 minutes)

Google form of everyone's github

Gather survey of workshop's speed so far (This will be emailed to students)

### Workshop 2

Building the basic Structure & navigating between fragments (15-20 mins)

Workshop Time (Rest of the time)

Gather survey of workshop's speed so far (This will be emailed to students)

# Workshop 3

Designing home, about us, and contact us fragment (7 minutes) & webview - linking to other pages (7 minutes)

Workshop Time (rest of the time)

Gather survey of workshop's speed so far (This will be emailed to students)

### Workshop 4

Getting information from API (Retrofit)

Workshop Time (Rest of the time)

Gather survey of workshop's speed so far (This will be emailed to students)

## Workshop 5

Recycler view & creating an item (15 minutes)

Workshop Time (rest of the time)

Gather survey of workshop's speed so far (This will be emailed to students)

# Workshop 6

Firebase (Creating an Announcement) (10 minutes)

Workshop Time (Rest of the time)

Gather survey of workshop's speed so far (This will be emailed to students)

\*\*Hello! Welcome to ACM's Android Development Workshop for Upperclassmen\*\*

First and foremost, thank you all for your interested in the club and this project.

This project will be a semester long and will cover the fundamentals of android development. If you've ever wanted to create an app but didn't know where to start then you're in the right hands. In this semester long workshop you will learn about Android Studio and the basics of Git/Github. You will explore the basics by building \*your\* own android app. Throughout this semester, we will be converting the ACM website to a fully functional app with additional features. This project is great for those who want to apply the skills they have learnt in class.

Our workshop will be held on \*Tuesday: E&T 254 from 4:30 PM to 5:50 PM (1 hr 20 minutes)\*.