



FBU Android 2020

...

Start time: 11:05am PT



The Instruction Team

Ernest Grzybowski
Instructor



Tejen Patel
TA



Jadal Williams
TA



Lovpreet Hansra
TA



Kara Swindler
TA



Anthony Tran
TA



Eric Mott
TA



Yonathan Zetune
TA



Varun Jit Singh
TA



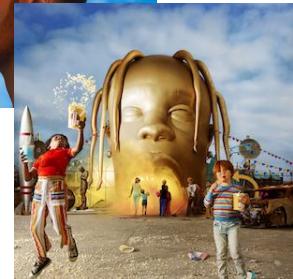
Team Intros



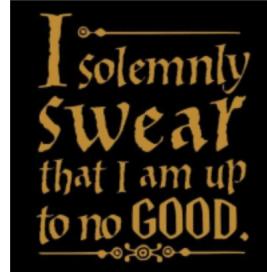
The “TJ” Starter Pack



“what bandwagon?”,



me: “Harry Potter is for kids”
also me:



imma cop these tmo
tomorrow: imma cop these tmo
the next day: imma cop these tmo
the next day: imma cop these tmo

The Jadal Starter Pack



Team Intros



The Lovpreet Starter Pack



The Kara Starter Pack



Team Intros



The "Tony" Starter Pack

so ironically hipster that it's now unfortunately unironic



"I'm from Seattle," Says Liar from Shoreline



[HUFFPOST](#)
NEWS CORONAVIRUS POLITICS 2020 ELECTIONS ENTERTAINMENT LIFE PERSONAL VIDEO SPOTLIGHT Log In

Sunglasses Are Not Headbands



self-proclaimed foodie



The Eric Mott Starter Pack

Humboldt Born and Raised



HUMBOLDT
STATE UNIVERSITY

Watches Avatar too much
AVATAR
THE LAST AIRBENDER

Lover of Video Games



Day One LeBron Fan



Team Intros



The Yonathan Starter Pack

Spends way too much time on...



Whataburger afficianado



Best shows...



Class of '22



Texas Born and Raised



The Varun Starter Pack

HCI 2019

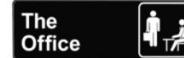
UC San Diego

OMSCS



wut is iso

jim look



reddi



Crab Emoji = Hype = Positivity



FBU 2020



Breakout Rooms

• • •

Why Android?

...



FBU Group Check!



FBU for Engineers: Class of 2020

<https://fb.workplace.com/groups/3084843481582379/>

Android Technical Q&A Forum FBU Eng

<https://fb.workplace.com/groups/2706589069665429/>

Download & Install Android Studio



- * 1. Start download
<https://d.android.com/studio>
- * 2. Github account?
- * 3. courses.codepath.org access?



NOTE: Downloading and installation can take **60+ mins** on slow connections

This week's schedule

W1	Tu 6/23 - D1	W 6/24 - D2	Th 6/25 - D3	F 6/26 - D4
8:00 - 8:30				
Morning 8:30 - 11:00	Course Orientation	Assignment 1 Flix	Lab 1 Debugging	Assignment 1 Flix
11:00 - 12:00		Break		
12:00 - 12:30		Afternoon All Hands		
Afternoon 12:30 - 4:00	Intro Project To Do App	Assignment 1 Flix	Assignment 1 Flix	Assignment 1 Submit Flix by 8pm PST

Course Orientation



- * About CodePath
- * Course Structure & Content
- * Course Portal
- * Live and Online Support
- * Assignment 1: Setup and Complete First Assignment
- * Questions?

About CodePath



Professional Engineers

- * On-site training at Facebook, Uber, Airbnb and many more
- * 1,500+ Engineers trained

CodePath University

- * Non-profit CodePath.org
- * 24 University Campuses in the US, Haiti and Taiwan

Facebook University

- * On-site at Facebook MPK and Seattle
- * Full time 3 week iOS & Android training

Course Structure



* **Topic Overviews** - New Concepts

- Lecture & Live-coding
- Weekly assignment demo

* **Labs** - Practice Isolated Skills

- 2-3 labs per week, 1-2 hours duration
- Collaborate using a Pair Programming approach

* **Assignments** - Fully Functional Apps from Scratch

- One App Assignment per week, 10-20 hours to complete
- Friday evening submission deadlines

* **FBU Original App Design** - Ideate, wireframes, schema, sprint plan

* **FBU Original App Develop** - Build your app in weeks 4-7, prototype forum

Steps to success



- * Required features
- * Comprehension
- * Code style
- * Git commit history
- * Communication & teamwork
- * Mentor feedback

Course Goals

Provide a **real-world look at Android development** and software engineering.

Prepare you to **design and build an original Android app** of your choice.



FBU Schedule

• • •

What's the schedule for FBU?

Week 1 Schedule - This week!

W1	Tu 6/23 - D1	W 6/24 - D2	Th 6/25 - D3	F 6/26 - D4
8:00 - 8:30				
Morning				
8:30 -11:00	Course Orientation	Assignment 1 Flix	Lab 1 Debugging	Assignment 1 Flix
11:00 - 12:00			Break	
12:00 - 12:30			Afternoon All Hands	
Afternoon				
12:30 - 4:00	Intro Project To Do App	Assignment 1 Flix	Assignment 1 Flix	Assignment 1 Submit Flix by 8pm PST

Week 2 Schedule

W2	M 6/29 - D5	Tu 6/30 - D6	W 7/1 - D7	Th 7/2 - D8	F 7/3
8:00 - 8:30					Morning All Hands
Morning 8:30 - 11:00	Lab 2 Book Search	App Design Benchmark & Brainstorm	Lab 3 Material Design	App Design Product Spec	
11:00 - 12:00					Break
12:00 - 12:30					Afternoon All Hands
Afternoon 12:30 - 4:00	Assignment 2 Twitter	Assignment 2 Twitter	Assignment 2 Twitter	Assignment 2 <i>Submit Twitter by 8pm</i>	 No Class Independence Day Observance

Week 3 Schedule

W3	M 7/6 - D9	Tu 7/7 - D10	W 7/8 - D11	Th 7/9 - D12	F 7/10 - D13
8:00 - 8:30					Morning All Hands
Morning 8:30 - 11:00	Lab 4 Map Tracker	App Design Wireframes	Lab 5 Parse Chat	App Design Schema	App Design Sprint Plan
11:00 - 12:00					
12:00 - 12:30				Afternoon All Hands	
Afternoon 12:30 - 4:00	Assignment 3 Instagram	Assignment 3 Instagram	Assignment 3 Instagram	Assignment 3 Instagram	Assignment 3 Submit Instagram by 8pm

Where are you starting?

• • •

Where will you get to?

• • •

Where do we come in?

• • •

Weeks 4-7 Schedule

W4-7	Monday	Tuesday	Wednesday	Thursday	Friday	
	Morning 8:00 - 10:00	Interactive session Sprint Plan	Independent work	Interactive session Sprint Plan	Independent work	Independent work
Break 10:00-11:00						
Afternoon 11:00 - 4:00	Independent work	Independent work	Independent work	Independent work	Independent work	Send project update

Assignments



Apply your skills across each week building Apps from Scratch

Assignment Day 1

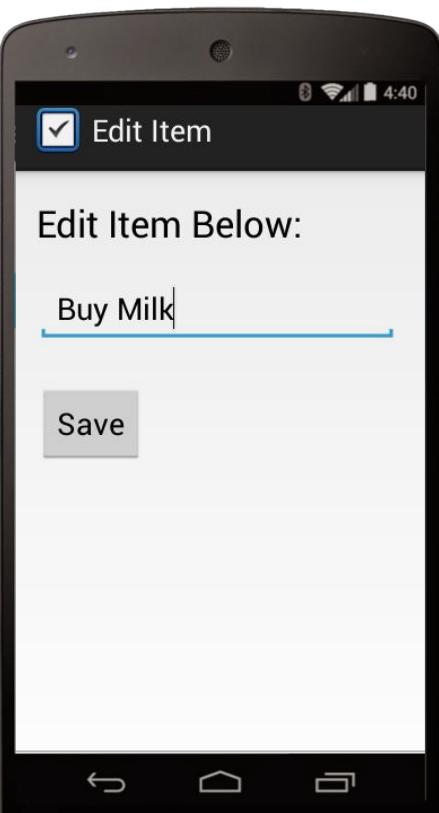
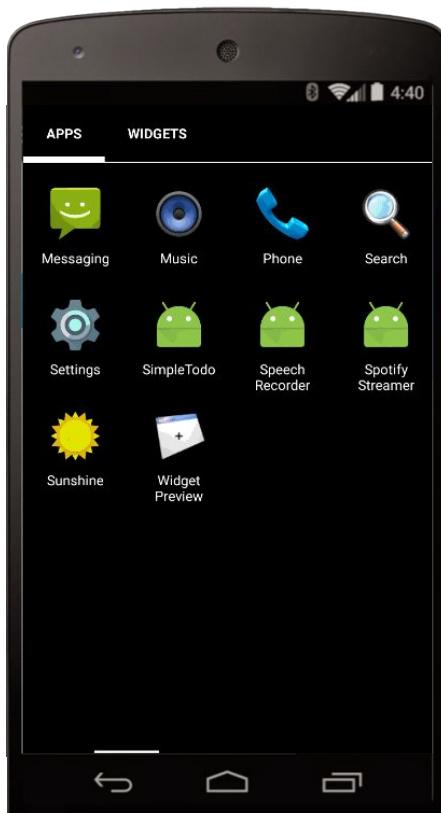
Tasks

Create a Personal Todo List

- * Android Studio and Java
- * Activities and Lists
- * Running Apps In Emulator

Required

Optional

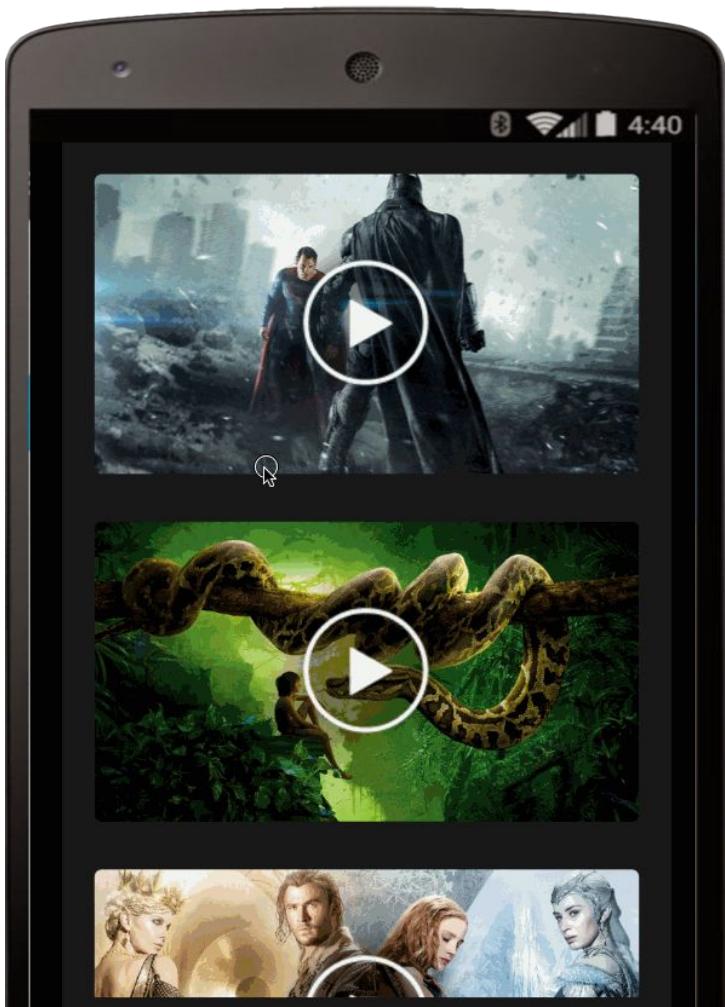


Week 1: Assignment

Flixster

Browse Movies and Trailers

- * Lists and Adapters
- * Building Layouts and Views
- * Networking

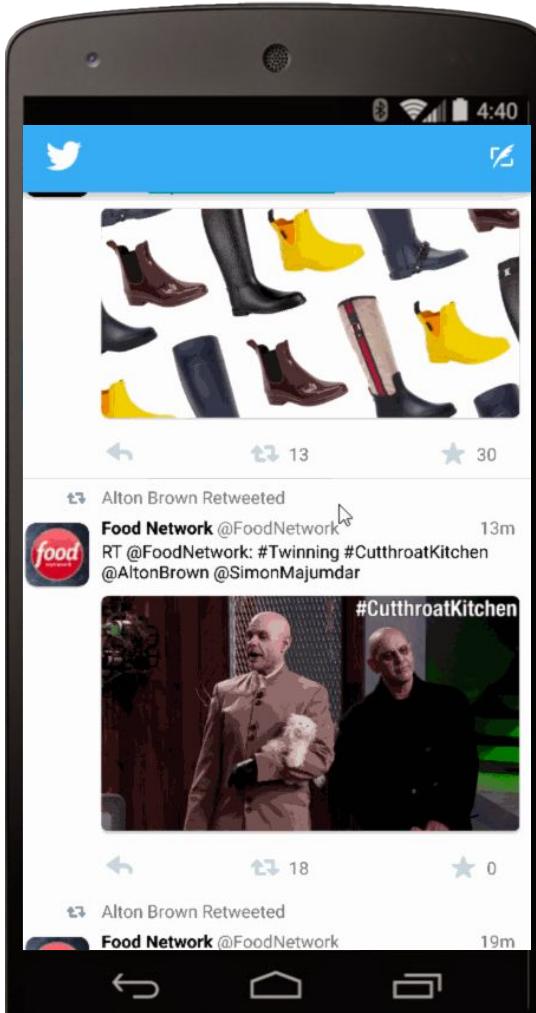


Week 2: Assignment

Twitter

Browse and Post Tweets

- * Authentication & Networking
- * Complex Layouts
- * Data Passing

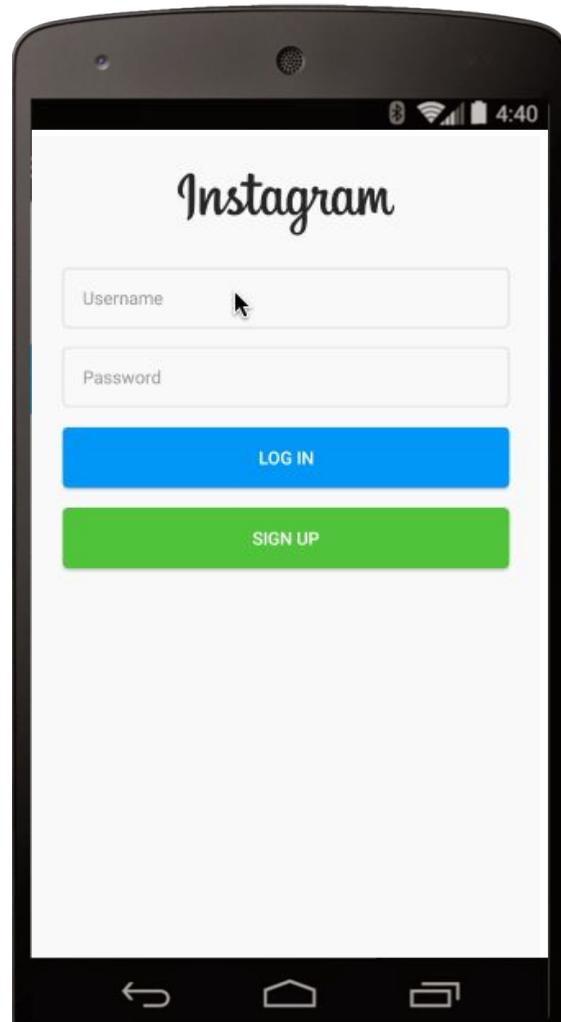


Week 3: Assignment

Parstagram

Browse and Post Photos

- * Fragments
- * Material Design
- * Styling and Animations



Course Portal

Everything you need for the next three weeks is on the [courses system](#)!

- * Slides
- * Guides
- * Videos
- * Assignments
- * Labs

The screenshot shows a laptop displaying the Facebook Android University course page on the CodePath Courses platform. The top navigation bar includes links for Courses, Cohorts, Locations, Roles, Quick Links, and Organizer Links. A banner at the top right says "Need help? Post on our FBU Technical Forum or email us at support@codepath.com". The main content area is titled "Facebook Android University" and "Day 1 - App Fundamentals". It features a sidebar with "Submission Steps" numbered Day 1 through Day 13. The main content includes sections for "Slides" (with a link to "Slides (Introduction).pdf") and "Java Videos" (with links to various video resources like "Simple Android App Video", "Debugging Android Applications Video", and "Understanding Callbacks and Async Programming"). A note at the bottom states: "These videos are external to the course and provide overviews of various elements of the Java programming language".

Asking for help



- * Define the problem
- * Describe preconditions
- * Explain what did you try to resolve the issue

 **Venkat Subramaniam**
@venkat_s Follow

“It does not work.”—the most infamous words every programmer hears.

It would be enlightening to know:

- what is “it” ?
- what steps did you take to arrive there?
- what result you got or errors you saw?
- anything else that will help the person receiving the message?

2:36 PM - 6 Jun 2019

103 Retweets 294 Likes



Live Support

We are here to help, so [add your name to the live support queue](#) available every day.

- * Post on here anytime
- * Add your name and issue

Instructor and TAs will be coming over to you to help as soon as your name comes up.



The screenshot shows a computer monitor displaying a HackMD note titled "# Android FBU Support Queue (MPK)". The note contains instructions for posting issues and examples of how to do it. The text is as follows:

```
1 # Android FBU Support Queue (MPK)
2
3 Please post your name to the bottom of this list if you need help from an instructor or TA including a little bit about your issue:
4
5 Example:
6
7 - NAME HERE - Short description of the issue
8 - Ex: Zahra - Styling question
9
10 -----
11
12 - Hannah - Weird crash and error when I run
13 - Sarah - Issue loading the video to play
14
15
16
17
18
19
20
21
22
23
24
25
26
27
```

Q&A Support

Our [online Q&A system](#) also makes posting questions and finding answers easy!

- * Search the Q&A system for existing solutions
- * Post your issue to the Q&A system anytime
- * Instructors, TAs and other students can post help answers.



A screenshot of the CodePath Discussions Q&A system. The interface shows a list of questions under the heading "Questions" for the "Android for University Fast Track" course. The first question is titled "android emulator keeps freezing" and discusses a user's issue with their emulator crashing. The second question is titled "Getting the error 'SomeFragment cannot be cast to android.app.Fragment'" and discusses a crash related to fragment casting. The third question is titled "App loading images crashes with 'java.lang.OutOfMemoryError: Failed to allocate'" and discusses memory issues. The sidebar on the right provides information about the current view (FBU-Android-June2017), admin summary, and a list of frequently asked questions.

In Pods We Trust, #podgoals



- * Start together, finish together
- * Learn by teaching



Pod Standups



- * Most engineering teams have “standups”, which are quick status meetings
- * Pods will chat every day after lunch about their status on the current week's assignment, pain points, and areas for improvement



Any questions so far?

Assignment Day 1

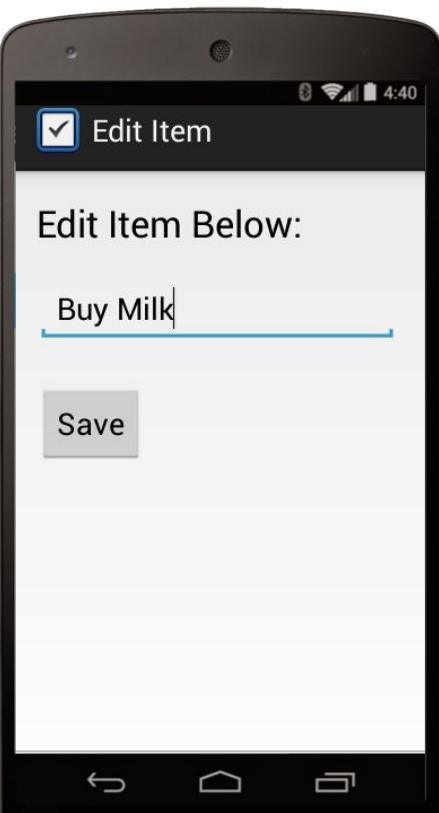
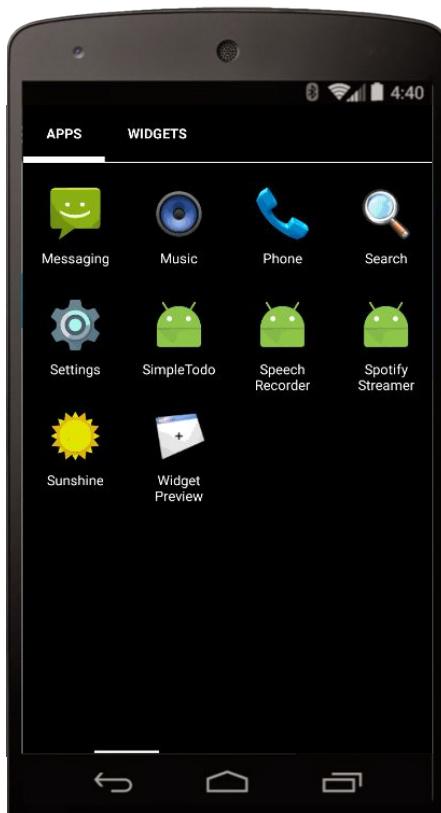
Tasks

Create a Personal Todo List

- * Android Studio and Java
- * Activities and Lists
- * Running Apps In Emulator

Required

Optional



Android Studio Demo

• • •

Git Demo

• • •

Git Demo



Repeated at 1pm and 3pm PT

Get Started!



- * Go to courses.codepath.com
- * Click the "**Assignment**" tab in Day 1
- * Complete the first assignment
- * Push the assignment to GitHub
- * Submit the assignment to us via assignment tab