

FACULTY OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
ANDROID WORKSHOP

Date: 10th and 11th November, 2017.

Time: 9 am to 4 pm on both days

Venue: Room No. 224, Kengeri Campus, Christ University, Bengaluru

Speaker/s:

Name: Gulzar Ahmed, Vinayak Bagaria, Viren Luke Radhakrishnan, Amritanshu Singh, and Priyanshi Shukla

Organization and Place: Faculty of Engineering, Christ University, Bengaluru 74. (Internal).

Target Audience (Students): Students of 4th semester.

OBJECTIVE:

To create an awareness of Android Application Development and encourage students to build application using the framework.

POSSIBLE LEARNING OUTCOMES:

1. To understand the technological trends in Android.
2. To build applications using Android framework.
3. To apply Android Development and build information systems.

SUMMARY:

On the 10th and 11th of November 2017, an Android workshop was conducted in room 225, II Block, Kengeri Campus, Faculty of Engineering, Christ University for the students who had registered either through the Eventer app or the physical form, for. The two day workshop covered the fundamentals of Android development for mobile devices and by the end of the workshop the students had developed two functional applications for their mobile devices. The workshop was conducted by Gulzar Ahmed, Vinayak Bagaria, Viren Luke Radhakrishnan, Amritanshu Singh, and Priyanshi Shukla students of 8BTCS. The workshop was divided into three sessions – 2 sessions (9.00 am to 1.00pm and 2.00 pm to 4.00 pm) on 10th November 2017 and 3rd session on 11th November 2017 (9.00 am to 1.00 pm).

Session 1 (9:00am to 1:00pm, 10th November):

The session began with Gulzar, who introduced the students to the fundamentals of Android. The initial plan was to build a replica/lookalike of the popular dating application - Tinder. However, most of the students had come unprepared for the workshop; most of the participants did not have Android Studio and the Android SDK set up. Hence, the session was used to help the attendees set up their build environment, and compile a basic application. During this time, Gulzar took the time to show the students various applications that he had built in the past, talk about the future of computing, Introduce the students to Google's Artificial Intelligence Platform, and guide the students on career opportunities in Android app development. The session ended at 1:00pm, with all the students having set up their systems correctly.

Session 2 (2:00pm to 4:00pm, 10th November):

The second session was conducted by Viren. The students were taught the fundamentals of Android Development, and built their first app, "Hot or Not?" This was a simple application that demonstrated the following concepts:

1. Creating and setting up an application in Android studio.
2. Creating application layouts in XML.
3. Using buttons in an application.
4. Using images in an application.
5. Connecting the XML frontend of the code to the Java backend.
6. Registering button clicks with the XML property, "Android:onClick".
7. Displaying a Toast message on the screen.

By the end of the session, the students had compiled, and were enjoying their first Android application.

Session 3 (9:00am to 1:00pm, 11th November):

The last session was conducted by Viren. The students built the Die Roller app, one which randomly showed one of the six faces of a die when the button was clicked. This was a simple application that demonstrated the following concepts:

1. Creating and setting up an application in Android studio.
2. Project hierarchy.
3. Creating application layouts in XML.

4. Using buttons in an application.
5. Using images in an application, and storing them at different resolutions in the Drawable folder.
6. Connecting the XML frontend of the code to the Java backend.
7. Registering button clicks with a click-listener.
8. Creating an integer array of resource IDs.
9. Using the `Math.random()` function to select a resource image.
10. Changing the image in the image view, based on the randomly selected resource ID, on clicking the button.

At 11:00am, the students had compiled programs and were enjoying their second Android application. The students were then given three tasks:

1. To change the application icon based on the resource files provided.
2. To add in a second die, and have both dice roll randomly when the button was clicked.
3. To remove the button entirely, and instead, use the accelerometer to initiate the dice roll.

Students has to compulsorily complete tasks 1 and 2 so as to be eligible for the workshop certificate, while task 3 was a bonus, that would be rewarded with a Cadbury Silk chocolate.

After two long hours of intense coding, the new-born developers impatiently called the volunteers to demonstrate their masterpieces. At the end of the session, an exit interview was conducted for the students who had successfully implemented the required features, and all of the students left the workshop with a smile on their face, having learnt about what it truly means to be an Android developer.



CU_CSE_2017_FOobar_ANDROID_WORKSHIP_NOV_2017_v1



CONSOLIDATED FEEDBACK ANALYSIS:

Sl No	Faculty Name	Signature / Remarks
1.	Mr. Naveen J	
2.	Mrs. GokulaPriya	
3.	Mr. Gerard Deepak	

Head of the Department