Hello everyone myself Ashweta Anand Fondekar from Parvati by Chowgule College of Arts and Science autonomous Margao Goa. In Unit 2, that is activities and user interface you will study, Module Name event handling, that is on click, on long click, on focus change, on key, on touch, on create context menu, on create option menu. So this is the outline of the presentation. After learning this module students will be able to explain even handlers an event listeners in Android, will able to explain the process of event handling and also will able to implement event handling in Android. Now let us see what is mean by events. Events are useful way to collect data about user interaction with interactive component of applications. Like button presses or screen touch etc. So when you touch on user interface or when you touch or press any use a button on user interface that is nothing but called event. The Android framework maintains an event queue as first in first out bases. You can capture this event in your program and take appropriate action as per requirement. There are following three concepts related to Android event management. First is event listener. So when event occurs, first concept is event listener that contains, A single callback method. So when event occurs, it is going to capture it by Event listener, it is an interface in view class. Then even handler. Event handler is the method that handles the event, so once event occurs, it is captured by event listener and then in turn event listener is going to call event handler to handle the event. The event listener calls the event handler that is what written here.

Then event listener registration. It is a process where even handler gets registered with an event listener. Event handler is called when the event listener fires the event. Now let us see event handler an event listener in detail. There is a event handler called onclick and event listener, onclick listener. So these both are called when the user either click on or touches any images like button, images, text etc. So here example is given where there is a button. This button variable, we find this button using it's ID and to this button we have use onclick listener and when we click on button this event is captured by onclick listener and then in turn it is going to call onclick handler. And based on the code written inside this onclick function, it is going to perform the task. The next event handler is on long click, an then event listener is on long click listener. These both are called when the user either clicks or touches any widgets like button, text, images etc for more than one second. This is same as previous handler but only the difference is, Here button is click for more than one SEC. So here example is given, there is a button and again to this button we use on long click listener an then event handler call on long click event handler. Then next event Handler is on focus change an event listener is on focus change list know this both are called when the widget loses its focus. That means the user goes away from the viewpoint, so your example is taken of edit text where when a user loses focus from edit text and when user try to go or move away from edit text to some other widgets that time this listener is being called that is on focus change listener and then this is in turn going to call onfocus handler. Then another event handler that is on key, an event listener that is on key listener. These both are called when the user is focused on the item and presses or releases a key on the device. So here again, example is taken of edit text, then ed is a variable of edit text and then again we are finding it by using its ID. Then do this edit text we use onclick listener. So when user hover or just focus on edittext and click any key on keyboard or releases key that time it is going to call this on click listner and then in turn onkey handler then Next event handler is on touch. An event listener is on touch listener. These both are called when a user perform actions like pressing the key, releasing the key or any moment gesture on the screen. So here is the example where image is taken and this is the variable then we're finding this image using ID that is touch is the ID used for imageview. Then based on the action perform it is going to select one case among these. That is

action down action,move action of action, cancel, and so on. The next event handler that is on create context menu. Then event listener is on create context menu listener. These both are called when the context menu is being built. Next event handler is on menu item click. An even listener is on menu item click listener. These both are called when the user select of menu items. So we have seen when on phone or device when users select any or one menu among many menus, So that time this listener that is on menu item on click listener will be called 1st and then On menu item click handler. So now let us summarize this lecture. In this lecture we have learned what is mean by event. So event are useful way to collect data about user interaction with interactive component of applications. Then we learn three concepts related to Android event management that is, event listener, event handler, an event listener registration process. Then also we have seen in detail what is meant by event handler and there are different types of event handler those are on click, on long click , then on focus change, on key, on touch, on create, context menu and then on create option menu. Then also we have seen different types of Event listeners that is on click listener, on long click listener, on focus change listener, on key listener, on touch listener, on create context menu item listener and on menu item click listener. So these are the references which all can refer.

Thank you.