Keyboard Navigation

## Background

This module demonstrates the use of an external keyboard or D-Pad to navigate around an app.

A working version of this app is available at: https://github.com/milk-modules/Apps/tree/master/accessible/DemoApp04

## Prerequisite

1. Android studio is installed on the development workstation
2. A working Android emulator is available for testing
3. The emulator has been configured to use a D-Pad

## Activity Instructions

This activity will utilize a pre-created version of this project and only applies associating focus properties to the UI controls. Download the code for DemoApp04 from: <https://github.com/milk-modules/Apps/tree/master/non-accessible>

The project contains only one screen (activity). The primary user interface (UI) elements of this screen are:

1. A form containing text boxes, buttons and a list.

[Note: there is no functionality associated with the button clicks]

Follow the below steps to associate the focus attributes to the UI controls. All updates below are to be done on the file: activity\_main.xml

Steps

1. Add the code highlighted in yellow to the ‘**editTextName** ’property listing:

<**EditText  
 android:id="@+id/editTextName"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="0.71"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:nextFocusDown="@+id/listViewOrigin"  
 android:nextFocusLeft="@+id/buttonSave"  
 android:nextFocusRight="@+id/listViewOrigin"** />

1. Add the code highlighted in yellow to the ‘**listViewOrigin** ’ property listing:

<**ListView  
 android:id="@+id/listViewOrigin"  
 android:layout\_width="241dp"  
 android:layout\_height="match\_parent"  
 android:entries="@array/country\_origin"  
 android:nextFocusLeft="@+id/editTextName"  
 android:nextFocusRight="@+id/editTextQuantity"**/>

1. Add the code highlighted in yellow to the ‘**editTextQuantity** ’ property listing:

<**EditText  
 android:id="@+id/editTextQuantity"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="0.61"  
 android:ems="10"  
 android:inputType="number"  
 android:nextFocusRight="@+id/buttonCancel"  
 android:nextFocusLeft="@+id/listViewOrigin"  
 android:nextFocusUp="@+id/listViewOrigin"  
 android:nextFocusDown="@+id/buttonCancel"**/>

1. Add the code highlighted in yellow to the ‘**buttonCancel**’ property listing:

<**Button  
 android:id="@+id/buttonCancel"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:text="Cancel"  
 android:nextFocusRight="@+id/buttonSave"  
 android:nextFocusUp="@+id/editTextQuantity"  
 android:nextFocusLeft="@+id/editTextQuantity"  
 android:nextFocusDown="@+id/buttonSave"**/>

1. Add the code highlighted in yellow to the ‘**buttonSave**’ property listing:

<**Button  
 android:id="@+id/buttonSave"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:text="Save"  
 android:nextFocusRight="@+id/editTextName"  
 android:nextFocusUp="@+id/buttonCancel"  
 android:nextFocusLeft="@+id/buttonCancel"  
 android:nextFocusDown="@+id/editTextName"**/>

Deploy the app into the emulator and use the arrow keys associated with the D-Pad to access the UI elements in the screen instead of touching the controls or using a mouse pointer.