

01/05/2017

**BLM3520**  
**Introduction to Mobile Programming**  
**Assignment -3**  
**(Due 16/05/2017)**

**!!!!DELIVER YOUR ASSIGNMENT IN THE LAB at 16:00**

Design a mobile application which records and displays the orientation of the smartphone based on the accelerometer data. Your app would obtain samples at 1Hz. Based on these values the app would print the orientation ON THE SCREEN such as PORTRAIT (UP or DOWN), LANDSCAPE (UP or DOWN) and FLAT (UP or DOWN) as shown Figure 1.a, Figure 1.b and Figure 1.c respectively. You should also save these orientations into a file and illustrate the values by using a graph library.



Figure 1.a PORTRAIT



Figure 1.b LANDSCAPE



Figure 1.c FLAT

To find the orientation of your phone, there are several solutions. You need to report your solution using IEEE format in a PDF file. Your report would also include the screenshots of your application.