

# **Introduction to Mobile Device Programming**

## **M3G621212**

### **Lab Session 3**

In this set of exercises it is assumed that you have Eclipse up and running.

This lab session is intended to provide you with practice at using layout managers and to provide practice at producing appropriate portrait and landscape interfaces for your applications

For each version of the application that you implement each version should have a portrait and landscape version of the layout. You should test this in the emulator and demonstrate to the lab supervisor that each application displays a landscape and a portrait version of the application. You will be required to demonstrate this by the end of week 4 by the very latest. Your lab supervisor will record that you have completed this task.

#### **Task 1**

In lab session 2 you created an application to calculate the area of a rectangle. You will now revisit this example and construct the interface with a specific layout using your knowledge of Layout managers. The aim is to create a working example not just a pretty interface. If you did not create a class to perform the area calculation in the previous lab session create a Java class called AreaCalculation. (See Lab Session 2 question 5)

The specific layout is shown below. You will need to decide which graphical components that you should use. Do not worry about trying to create the exact layout shown below but concentrate on the relative positions of the widgets

Rectangle Area Calculation

Length in cms

Breadth in cms

Calculate Area

Area in cm<sup>2</sup>

Clear Entries

You should produce at least 2 versions of your application. Each version should employ a different approach to using layout managers. One strategy for example that you may adopt employs linear layouts in vertical and horizontal mode. When you employ this strategy you will need to make use of a horizontal layout within a vertical layout to create the rows. Another strategy that may be worth while is to make use of a table layout. You will need to investigate the idea of “column span” for a couple of the rows. There may also be scope for making use of a relative layout as well to position each component relative to another one.

## Task 2

Make a short Video of your application running using Screencast-o-matic.

(<http://www.screencast-o-matic.com/>)

This exercise is to give you practice in using this tool to produce a video of each part of your assignment.