# An Android Homepage Widget

 $SEM2220\ Assignment\ 3$ 

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#### 1 Introduction

This report details the process undertaken to produce an Android widget based on the existing code to load sessions from a SQLite database. This widget had several requirements, including the ability to select different days from the database as well as provide notifications read from a remote URL.

#### 2 Design

The widget was designed in accordance with the Android App Widget Design Guidelines[1], which define guides for design constraints like the minimum and maximum size of the widget, layouts and backgrounds, etc.

To help conform to these guidelines, the template design pack[2] provided by the Android Open Source Project under the Apache 2 License was used to design the widget.

A mock version of the widget was created to view how it would appear on a device. From this is became obvious that the widget would need to be four cells wide (the maximum) by at least two cells tall.

This size would allow a view with the following information on it:

- A title for the Widget
- Two buttons, one to move backwards through days and one to move forward through days
- A list of the sessions available for the specified day.
- The notification loaded from a remote site.

To keep the buttons accessible, they were made such that their minimum size was a single cell each and surrounded the list of sessions to make the flow of data natural. To conform to the iconography standards[?], another resource was used from the Android Open Source Project; the Action Bar Icon Pack

The notification display was kept small so that it would not obstruct the view of the data, but so that it would be easy to see at a glance. Finally, the title was given colour, based on the recommended colours[3], a purely aesthetic element.

## 3 Development

## 4 Testing

#### 5 Evaluation

Breaking down the mark scheme the author has predicted the grade which should be given for each part, this is shown in table 1.

Therefore, the author feels a mark of 82% should be awarded. The values chosen were based on the following reasons:

#### **Documentation**

#### **Implementation**

#### Flair

## Testing

Part	Worth	Predicted Grade
Documentation	30%	25%
Implementation	50%	45%
Flair	10%	5%
Testing	10%	7%
Total	100%	82%

Table 1: Break Down of Marks

### References

- [1] App Widget Design Guidelines. Android Open Source Project. Accessed 10/12/2013. [Online]. Available: http://developer.android.com/guide/practices/ui\_guidelines/widget\_design.html
- [2] App Widget Templates Pack. Android Open Source Project. Downloaded 7/12/2013, Apache 2 Licensed. [Online]. Available: http://developer.android.com/guide/practices/ui\_guidelines/widget\_design.html#templates
- [3] Colour. Android Open Source Project. Accessed 10/12/2013. [Online]. Available: http://developer.android.com/design/style/color.html