1. **DisplayCalendar.java**

This activity is encapsulated by an overall class, ‘*public class DisplayCalendar extends ActionBarActivity*’. This activity displays a calendar to the user, using the predefined calendarwidget xml layout element. Upon selection of a day in this calendar using a single click, the user will be brought to the **ViewTimetable.java** activity, where they can see the events for that date. It consists of just 2 methods.

* + *public void onSelectedDayChange(CalendarView \_view, int year, int month, int dayOfMonth)*, which defines what should be done when a date in the calendar is clicked on.
  + *protected void onCreate(Bundle savedInstanceState)*, which is called upon opening the activity to initialise it (layout, variables, onClickListeners, etc).

The primary functional parts of the activity are described below.

1. **Sending a Date Intent**  
   In order to view the timetable for a given day, the application must create a file for that date/day if one does not already exist. If one does exist, the existing contents should display. This is the principle behind how the activity works.
   1. In the *onCreate()* method, a calendarwidget is created from the layout file activity\_display\_calendar.xml. An intent is created, which will go from this activity to the **ViewTimetable.java** activity.
   2. The *onSelectedDayChange()* method is called by the *onDateChangeListener*, which is set in the *onCreate()* method.
      1. In this method, a Calendar instance is created, and set to have date *dayOfMonth*, *month*, *year*. From this, the day of the week is extracted and stored in variable *dayOfWeek* as a string.
      2. A switch loop is used to indicate what should happen depending on the day number of the week, e.g. “2” = Monday. In this case, if *dayOfWeek* string = “2”, the *dayOfWeek* string is now set to “Monday”.
      3. As the calendarwidget goes from months 0-11 rather than 1-12, the month must be incremented to reflected the correct month number, e.g. if month = 10, corresponding to November, must change to month++ = 11 to be consistent with common convention. This complete, a string *finalExtra* is defined to be *dayOfMonth*”-*“month*”-“*year*”-END-“*dayOfWeek*”-END-viewingEvents”.
      4. This string is sent as part of an intent to the **ViewTimetable.java** activity.
   3. The **ViewTimetable.java** activity is started using the intent. The string which is sent as part of the intent will be used as the title of the file in which all of the timetable events will be stored for that day.