Homework 4

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**Chapter3**

14. This code creates a GridLayout within the current context and sets its number of rows to four and its number of columns to two.

// Your code goes here

GridLayout gl = new GridLayout(this);

gl.setColumnCount(2);

gl.setRowCount(4);

15. This code creates a button within the current context.

// Your code goes here

Button button = new Button(this);

16. This code creates a 5 × 2 two-dimensional array of buttons within the current context.

// Your code goes here

Button[][] buttons = new Button[5][2];

for (int i = 0; i < 5; i++) {

for (int j = 0; j < 2; j++) {

buttons[i][j] = new Button(this);

}

}

17. This code adds a Button object named b, specifying its width and height as 200 pixels each, to an already created GridLayout object named gl.

// Your code goes here

b.setWidth(200);

b.setHeight(200);

gl.addView(b);

21. This code checks if the button that was clicked is a button named b. If it is, it outputs to Logcat YES, otherwise, it outputs to Logcat NO.

private class ButtonHandler implements View.OnClickListener {

public void onClick( View v ) {

// Your code goes here

If (v == b) {

Log.i (“message”, “YES”);

} else {d

Log.i(“message”, “NO”);

}

}

}

1. The TableLayout class can be used to organize various GUI components

As a table of rows and columns

2. The direct superclass of LinearLayout and RelativeLayout is

ViewGroup

3. TableLayout and TableRow are direct subclasses of

LinearLayout

4. The RelativeLayout class is a good choice to organize various GUI components

So that we position components relative to other components

5. In what package is the Intent class?

android.content

6. After you have created an Intent for a new activity, what method of the Activity class do you call with that Intent parameter in order to start a new activity?

startActivity()

7. What method of the Activity class is automatically called when an activity is about to restart?

onRestart()

8. What methods of the Activity class (and in what order) are automatically called when an activity is first created?

onCreate, onStart, and onResume (in that order)

9. What method of the Activity class is automatically called when an activity becomes invisible to the user?

onStop()

10. Two activities can share the same data

Yes, for example by each accessing a public static instance variable from another class

Chapter7

1. What method do we use to register a View.OnTouchListener on a component?

setOnTouchListenerU

2. What method of the MotionEvent class do we use to retrieve the type of action that just happened?

getAction

3. What method do we use to bring a View to the top of the stacking order?

bringToFront

4. What class can be used to capture gestures and tap events?

GestureDetector

5. OnGestureListener and OnDoubleTapListener are

Private static inner interfaces of GestureDetector

6. In order to identify a touch event action, the MotionEvent class has

Private methods

7. What method of the GestureDetector class acts as a dispatcher to the various methods of OnGestureListener and OnDoubleTapListener?

onTouchEvent

18. We are coding inside the onCreate method of an Activity class. Write the code so that the current Activity will handle the gestures

and tap events.

protected void onCreate( Bundle savedInstanceState ){

super.onCreate( savedInstanceState );

// Your code goes here

GestureDetector GD = new GestureDetector(getApplicationContext(), (GestureDetector.OnGestureListener) this);

GD.setOnDoubleTapListener((GestureDetector.OnDoubleTapListener) this);

}

19. We are coding inside the onTouchEvent method of an Activity class. Write the code so that if there is a gesture event, it gets dispatched to the appropriate method of GestureDetector.OnGestureListener.

public boolean onTouchEvent( MotionEvent event ){

// Your code goes here

this.GD.onTouchEvent(event);

return super.onTouchEvent(event);

}