

Name: _____
Grade: _____

MidTerm

Short Answer (2 points each)

- 1) Name 2 phones that are currently out that are able to run Android
_____ and _____
- 2) What is the newest Android platform released?

- 3) What is the command line program in the sdk/tools folder that let you install, un-install, push and pull files, and do several other import tasks regarding Android development?

- 4) You are trying to view a web page in your program. You copied the code from the example and the .java and .xml layout files are correct and you are sure you have Internet access on the emulator, however you can still not view webpage. What else could the problem be?

- 5) What is the proper function call to write your tag and message out to Logcat?

- 6) A shared preference can be compared to what other similar abstract data structure?

- 7) Besides a linear layout, name two other layout types.
_____ and _____
- 8) Besides a TextView, name 4 other widgets.
_____, _____, _____, _____
- 9) The XML tags can contain these things that specify addition information such as text size, gravity, padding, and several other properties. (Hint, it begins with the letter 'a')

- 10) Every app has its own Content Provider. This content provider internally stores its information in the what common structure?

True or False (2 points each)

- An activity always runs in the background. _____
- An explicit Intent only maps to 1 intent filter. _____
- A system resolved Intent only maps to 1 intent filter. _____
- A broadcast receiver can be displayed to the user. _____
- A service shares the same lifecycle as the Activity that may have started it. _____
- A shared preference is visible to other applications. _____
- Content Providers are the only way to shared data across apps. _____
- Application apks must be signed in order to run on a device. _____
- The manifest file will automatically be generated if deleted. _____
- XML files are the only way to specify a layout. _____

Multiple Choice (2 points each)

- Which is the correct way to create and display a Toast?
 - A) `Toast.makeText(this, "Hello", Toast.LENGTH_SHORT);`
 - B) `Toast t = new Toast("Hello");`
 - C) `Toast.makeText(this, "Hello", Toast.LENGTH_SHORT).show();`
 - D) `Toast.create(this, "Correct Answer", Toast.LENGTH_LONG).display();`

- How you get access to a TextView, named tView, in your XML file?
 - A) `TextView t = (TextView) getViewById(tView);`
 - B) `TextView t = (TextView) findViewById(R.id.tView);`
 - C) `TextView t = findViewById(R.id.tView);`
 - D) `TextView t = getViewById(tView);`

- Which is the correct function that will be called when your Receiver catches and Intent?
 - A) `onReceive(Context context, Intent intent)`
 - B) `onCreate(Bundle b)`
 - C) `onResume()`
 - D) `onStart(Context context, Intent intent)`

- The API are constantly being updated. Which once popular Service method is now deprecated?
 - A) `public int onStartCommand(Intent intent, int flags, int startId)`
 - B) `public void onCreate()`
 - C) `public void onStart(Intent intent, int startId)`
 - D) `public void onDestroy()`

- Which components can see an application's shared preferences?
 - A) An activity
 - B) An outside application, but it must call the preferences's database
 - C) A service
 - D) A and B
 - E) A and C

- Which called is used to get a handle on the GSP provider?
 - A) `Context.getSystemService(Context.LOCATION_SERVICE);`
 - B) `Context.getLocationService();`
 - C) `Context.getSystemService(GPS_PROVIDER);`
 - D) `Context.getGpsService();`

Given the following URI "content://cs.fsu.android/mobile3/13"

- What segment is the address?
 - A) content
 - B) cs.fsu.android
 - C) mobile3
 - D) 13
- What segment is the protocol?
 - A) content
 - B) cs.fsu.android
 - C) mobile3
 - D) 13
- What segment is the id?
 - A) content
 - B) cs.fsu.android
 - C) mobile3
 - D) 13
- What segment is used to determine the kind of data being requested?
 - A) content
 - B) cs.fsu.android
 - C) mobile3
 - D) 13

Free Response

- The Locale app was designed at MIT in an Android class much like this one. It stemmed from a team project and is now widely used. The idea is that you adjust the phone's ringer based, (i.e. silent, loud, and off) based on the current time and location. For example, if it is class time and you are in the Lov Building, your phone will be put on silent (even if it should be OFF!). Please give a description of how you build this app. I don't want code, but I want to know how the different pieces (Activities, Content Providers, Services, and Receivers) will work together.
(20 Points)

- Imagine that you are old and unable to use a cell phone the way we do. You have trouble making calls because you have difficulty reading the small fonts and hitting the correct buttons to dial a number. It would be great if the numbers were really big, let's say the size of the entire screen. We would run out of room putting all 0-9 numbers on the screen if they were that big. We can also assume that old people really can't go through a bunch of menus to what they want. Describe a way we can interact with the user to easily let them make a phone call. IE, you are creating a new dialer that isn't just a bunch of buttons in rows and cols. Be creative, you can use the phone's sensors and at most 3 big on-screen buttons. **(20 Points)**

