CMSC 436 Quiz #3

Feb. 21, 2013

Name: _____   **Directory ID**: _____

Problem 1

What is a bound service and in what situations would you want to use one?
Solution:
A bound service is one that allows application components to bind to it by calling bindService() in order to create a long-standing connection.
You should create a bound service when you want to interact with the service from activities and other components in your application or to expose some of your application's functionality to other applications, through interprocess communication (IPC).

Problem 2

What is the difference in stopping behavior between a started service and a bound service?
Solution:
A started service remains running until it stops itself with stopSelf() or another component stops it by calling stopService(). A bound service runs only as long as the component is bound to it. Once the service is unbound from all clients, the system destroys it.

Problem 3

How could you reduce the risk of Application Not Responding(ANR) errors when a service is going to do CPU intensive work?
Solution:
If a service is going to do any CPU intensive work or blocking operations, you should create a new thread within the service to do that work. By using a separate thread, you will reduce the risk of Application Not Responding (ANR) errors and the application's main thread can remain dedicated to user interaction with your activities.

Problem 4

Determine the correctness of following statements about services.

✓	✗	Description
☐	■	A service cannot both be started and allow binding.
■	☐	You must declare all services in your application's manifest file.
■	☐	A service can be declared as private and block access from other applications.