Saros Questions

These questions cover some of the essential basics for coding on Saros. Ensure that you answer as many as possible in the first week.

1. (a) Explain the purpose of the Logger object that appears in most classes?

   (b) How can you see the Logger's output?

   (c) What are the different levels types of message the Logger gives in its output?

2. (a) When looking at a function and you want to discover from where the function is called (i.e. what in the project has a reference to this function), what's the easiest way to do that using Eclipse?

   (b) What keystroke allows brings up the "Open Resource" dialog, which you can use to quickly locate a Java file?

3. (a) What is a Java annotation?

   (b) What is the PicoContainer? (Hint: we didn't invent it - it is a project in its own right.)

   (c) Notice that some objects are annotated with "@Inject". How does this annotation affect the object? (Specifically, concentrate on how the object can be used without apparently being instantiated.)

4. (a) By default, where is source code external to Saros kept?

   (b) In which package are balloon messages implemented?

5. (a) What is Eclipse SWT?

   (b) Give 5 example classes of SWT resources (i.e. classes that extend the Resouce class).

   (c) What is the method that must be called when you have finished using an SWT resource?

6. (a) In your own words, explain what a java.lang.Runnable is.

   (b) Operations on the GUI are often done using the run* methods in Util.java. For each of them, state: their blocking behaviour, and in which thread they should be run:

      i. Util.runSafeASync

    ii. Util.runSafeSync

   iii. Util.runSafeSWTASync

   iv. Util.runSafeSWTSync

7. (a) For each scenario, decide which of four methods above you would choose and explain why:

    i. Connecting to the roster

   ii. Displaying a pop-up window asking the user where to save an incoming file

   iii. Giving a user a driver role