**Competency Quiz**

**Java (Eclipse)**

* How do you create a project?

File > New > New Project and follow the Wizard

* How do you create a new Java class?

By using the public class CLASSNAME {} keywords

* How do you run a Java program?

From eclipse, you click the run button, otherwise compile and run the Jar as java –jar “applicationname.jar”

* How do you debug a Java program?

Click the Debug button

**Apache Tomcat**

* What is Apache Tomcat used for?
  + Hosting web services
* How do you create a Tomcat server?

Install tomcat onto a machine

* How do you add a Tomcat server in eclipse?

By using the embedded tomcat library, then added appropriate components to the War/POM if using maven

**Spring Web MVC**

* What is Spring Web MVC used for?

Setting application context for web services and assist in the build of a Model View Controller set-up

* How do you create a Spring MVC project in eclipse?

By adding the key word @SpringBootApplication And importing the appropriate modules which are to be used by the system, and adding the Spring libraries as dependencies.

**Hibernate**

* What is Hibernate used for?

Mapping objects and relational models (used to assist in accessing databases) as well as providing basic persistence

* How do you use Hibernate in eclipse?

Import appropriate module from the Hibernate repositories from the internet, importing them into your Java file, and using them in the classes which need to access databases.

**JavaScript/HTML/CSS**

* How do you include JavaScript in a HTML form?

Add the <Script> tag

* How do you declare a JavaScript function?

Bu using the function keyword before declaring what is to be done within brackets

* How do you end a HTML tag? (very basic)

</endtag>

* What are style sheets?

Used for designing websites and laying out basic styles

* How do you include a CSS file in a HTML form?

3 ways, by using in-line style attribute, by using a <style> tag, by using external css file (a stylesheet)

MySQL

* What is MySQL used for?

MySQL is a database tool used for managing databases and accessing databases.

* How do you create a database in MySQL?

By using the “Create Database dbname” command through the command line, on an existing db server instance.

* How do you create a table in MySQL?

Create Table <TableName> ( Field values go here e.g. name Datatype, etc)

* How do you connect MySQL server to java application?

By using a JDBC/ODBC connector for MySQL