Summer Study Guide form CMPS 342 (Database Systems) for Class Offered in Fall or Winter

I: HTML related subjects

HTML5, Dynamic HTML, XML, CSS (Cascaded Style Sheet)
Resource: "W3Schools" – online free courses.

II: Client-side Scripting language

JavaScript Language
Resource: "W3Schools" – online free courses.

III: Web-Development Tools

AJAX, JSON, Web-Socket, JQuery,
Resource: "W3Schools" – online free courses.

Bootstrap : Resource: Internet search for resource

Report Generator – I don’t have resource for this, but a student in my other class, used Google report tool.

IV: Server-Side Scripting Language

Java, C# or PHP

Resource: Digital books on CSUB library
Java – Java : How to Program by Deitel, published by Pearson
C# - Any book that has database connectivity.

Notice that
• I prefer Java or C# since it is hard to connect from PHP to Oracle database.
• When learning Java/C#, study the following advanced topics
  o Multi-threading and synchronization (monitor)
  o Network programming (Sockets) and Remote Method Invocation (RMI).
  o Database connectivity

V: Other Requirements

1. Get familiar with a company which belongs your relatives, friends or which you have worked for.
2. Form a team of two members for one project.
3. Integrated Development Environment (IDE):
   a. NetBeans is good tool for building applications for traditional and web-based applications and apps for devices in Java, C/C++, PHP, coming in with Appache HTTP server.
b. Microsoft Visual Studio.NET is also a good and popular tool to develop application. Combined with IIS (Internet Information Server), you can learn and develop web-based application.

Dr. Wang, May 19, 2015 updated.