Course Title	Applications Development Laboratory
Course Code (Credit)	CS33002 (L-T-P-Cr: 0-0-4-2)

Course Objectives:
- To be familiar with Web page design using HTML/XML and style sheets
- To learn to write Client Server applications
- To be familiar with the PHP programming
- To be exposed to creating applications with AJAX
- Know the components and structure of mobile application development frameworks for Android and windows OS based mobiles
- Learn the basic and important design concepts and issues of development of mobile applications

List of Experiments:

A. **Web Applications**

1. Create a web page for user registration using HTML, CSS and validate the details using Javascript.

2. Write programs in Java using Servlets: (i) To invoke servlets from HTML forms; (ii) Session tracking using hidden form fields and Session tracking for a hit count.

3. Create three-tier applications using JSP for conducting on-line examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.

4. Create a database with user information and books information and create a webpage in which books catalogue should be dynamically loaded from the database using AJAX.

5. Create and save an XML document at the server, which contains 10 users Information. Write a Program, which takes user Id as an input and returns the User details by taking the user information from the XML document.

6. Develop email verification application using PHP.

B. **Mobile Applications:**
   1. Design restaurant data entry form using Table Layout and show different events using activity class.
   2. Write a program to capture image using built in camera and store it in database.
   3. Develop a banking application that registers the user by verifying OTP.
   4. Develop a native application that uses GPS location information and convert into speech.
   5. Write a program to call a number.

Course Outcomes:

Upon completion of this course, the students will be able to:

CO1: Construct Web pages using HTML/XML and style sheets
CO2: Build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms
CO3: Develop Web application which makes use of PHP programming
CO4: Construct web applications using AJAX
CO5: Design and Implement various mobile applications using emulators
CO6: Deploy applications to hand-held devices

Reference Books:
   1. Reto Meier, "Professional Android 4 Application Development", Wiley, 2012
   2. Matthew Gifford, "PhoneGap Mobile Application Development Cookbook", Packt, 2012.
   3. Adrian Kosmaczewski, "Mobile JavaScript Application Development", O'Reilly, 2012.