

PG DEPARTMENT OF COMPUTER SCIENCE

OUTCOME BASED SYLLABUS

PCCSD20 - PRACTICAL I: JAVA PROGRAMMING LAB

Year: I Sem: I	Course Code: PCCSD20	Title of the Course: Practical I: Java Programming Lab	Course Type: Practical	Course Category: Core	H/W 5	Credits 3	Marks 100
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Course Objectives

1. Create a full set of UI widgets and other components, including windows, menus, buttons, Checkboxes, text fields, scrollbars and scrolling lists, using Abstract Windowing Toolkit (AWT) & Swings.
2. Apply event handling on AWT and Swing components.
3. Learn to access database through Java programs, using Java Data Base Connectivity (JDBC).
4. Learn to develop server side programming using servlets.
5. Create dynamic web pages, using JSP.

Course Outcomes (COs)

1. Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.
2. Update and retrieve the data from the databases using SQL.
3. Develop Applet based programming using IDE.
4. Develop server-side programs in the form of servlets.
5. Design and develop JSP based Web applications.

CO	PSO					
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	H	M	L	M	M	L
CO2	M	L	M	H	M	M
CO3	L	M	M	M	L	H
CO4	M	M	L	M	L	M

CO5	H	M	L	L	M	L
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CO	PO					
	1	2	3	4	5	6
CO1	M	M	L	H	M	L
CO2	H	M	L	M	H	M
CO3	M	M	L	M	H	M
CO4	L	M	L	M	M	L
CO5	L	M	H	M	L	M

(Low - L, Medium – M, High - H)

Course Syllabus

Exercises

1. Program using Basic User Interface Components and Layouts (K1, K2)
2. Create Payroll Processing form using swing (K1, K3)
3. Student Mark Sheet Processing using JDBC (K2, K4)
4. Bank Account Processing using JDBC (K4, K5)
5. Survey form using applets and JDBC (K2, K5)
6. Creating authentication form using servlets (K1, K3)
7. Creating survey form using servlets (K6)
8. Programs using JSP
 - JSP program that creates a table of power of 2 (K1, K3)
 - Factorial of a number (K1, K2)
9. Registration and Login form using JSP (K1, K3)
10. JSP program to process credit card information. (K5)

PCCSE20 - PRACTICAL II: .NET PROGRAMMING LAB

Year: I Sem: I	Course Code: PCCSE20	Title of the Course: Practical II: .Net Programming Lab	Course Type: Practical	Course Category: Core	H/W 5	Credits 3	Marks 100
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Course Objectives

1. This course presents the practical aspects of application development using .Net framework.
2. To learn the technologies of the .NET framework.
3. To cover all segments of programming in C# starting from the language basis, followed by the object oriented programming concepts.
4. To update and enhance skills in writing Windows applications, ADO.NET and ASP.NET.
5. Using XML in C#.NET specifically ADO.NET and SQL server.

Course Outcomes (COs)

1. Create user interactive web pages using ASP.NET.
2. Create simple data binding applications using ADO.NET connectivity.
3. Performing Database operations for Windows Form and Web Applications.
4. Create Mobile Application using .NET compact Framework
5. Work with the basic and advanced features of C# language.

CO	PSO					
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	H	M	L	M	M	L
CO2	M	L	M	H	M	M
CO3	L	M	M	M	L	H
CO4	M	M	L	M	L	M
CO5	H	M	L	L	M	L

CO	PO					
	1	2	3	4	5	6
CO1	L	M	M	M	H	L
CO2	H	L	H	M	L	L
CO3	H	L	L	L	M	M
CO4	M	M	L	H	M	L
CO5	L	L	M	L	M	M

(Low - L, Medium – M, High - H)

Course Syllabus

Exercises

1. Write a Program to accept a String and Convert the Case of the Characters. (K1, K5)
2. Write a Program to implement a Calculator with Memory and Recall operations. (K1, K4)
3. Develop a menu based .Net application to implement a text editor with Cut- Copy- Paste- Save and Close operations using Master pages. (K2, K6)
4. “How is the book ASP.NET with C# by DreamTech?” Give the user three choices: i) Good ii) Satisfactory iii) Bad. Provide a VOTE button. After user votes- present the result in percentage using labels next to the choices. (K3, K6)
5. Develop an application to perform timer based quiz of 10 questions. (K1, K6)
6. Develop a database application to store the details of students using ADO.NET (K1, K6)
 - a. Develop a database application using ADO.NET to insert- modify- update and delete operations.
 - b. Develop a .Net application using Datagrid to display records.
 - c. Develop a .Net application using Datagrid to add- edit and modify records. (K1, K4)
7. Develop Windows form to
 - a. Display Product details (Product Id, Name, Category and other details) in DataGridView using Dataset and Data Adapter.
 - b. Fill Combobox for listing all the categories from the database using SqlDataReader and DataTable.
 - c. When user select particular category only that category’s products must be displayed in the Grid.
 - d. Generate xml file from above generated dataset.(K4, K6)
8. Create an application for Accessing a SQL Database by Using ADO.NET by connecting to the SQL Server database and call a stored procedure. You then display the data in a Repeater control. (K2, K5)

9. Develop a web application to read the details of a selected country stored in XML database and display back to the user using Web controls. (K1, K4)

10. Write a Program to implement View State and Session State. (K4, K5)

PCCSJ20 - PRACTICAL III: MACHINE LEARNING

Year: I Sem: II	Course Code: PCCSJ20	Title of the Course: Practical III: Machine Learning	Course Type: Practical	Course Category: Core	H/W 5	Credits 3	Marks 100
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Course Objectives

1. To work on important concepts of Machine Learning.
2. Practical implementation of algorithms with sample data.
3. To develop skills of using machine learning algorithms for solving problems.
4. Developing skills in predictive analytics using ML algorithms.
5. To gain experience of doing independent research.

Course Outcomes (COs)

1. Be capable of confidently applying common Machine Learning algorithms in practice and Implementing their own.
2. Be capable of performing distributed computations.
3. To be capable of performing experiments in Machine Learning using sample data.
4. Understand a wide variety of learning algorithms.
5. Understand how to evaluate models generated from data

CO	PSO					
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	H	M	L	M	M	L
CO2	M	L	M	H	M	M
CO3	L	M	M	M	L	H
CO4	M	M	L	M	L	M
CO5	H	M	L	L	M	L

CO	PO					
	1	2	3	4	5	6
CO1	M	H	L	M	M	L
CO2	H	M	L	L	M	M
CO3	M	H	M	L	L	M
CO4	H	M	M	M	H	L
CO5	L	M	H	L	L	M

(Low - L, Medium – M, High - H)

Course Syllabus

Exercises

1. Linear Regression (K1, K2)
2. Logistic Regression without CSV file (K1, K3)
3. Logistic Regression with CSV file (K2, K4)
4. Classification using SVM (K4, K5)
5. k-means algorithm (K2, K5)
6. Decision Tree Algorithm (K1, K3)
7. Random Forest Algorithm (K6)
8. Naive Bayes Algorithm to find Accuracy. (K1, K3)
9. JSP program to process credit card information(K5)

SEMESTER II

PCCSK20 - PRACTICAL IV- OPEN SOURCE PROGRAMMING LAB

Year: I	Course Code:	Title of the Course:	Course Type:	Course Category:	H/W	Credits	Marks
Sem: II	PCCSK20	Practical IV: Open Source Programming Lab	Practical	Core	3	2	100

Course Objectives

1. Demonstrate different open source technology like Linux, PHP & MySQL with different packages.
2. To understand the importance of the web as an effective medium of communication
3. Explore programs of PHP with MySQL connection.
4. Use PHP to access a MySQL database.
5. Illustrate Linux commands for programming.

Course Outcomes (COs)

1. Explore different open source technology like Linux, PHP & MySQL with different packages.
2. Implement static, dynamic and interactive web pages and web applications.
3. Develop basic skills in analyzing the usability of a web site.
4. Execute programs of PHP with MySQL connection.
5. Execute Linux commands for programming.

CO	PSO					
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	H	M	L	M	M	L
CO2	M	L	M	H	M	M
CO3	L	M	M	M	L	H
CO4	M	M	L	M	L	M
CO5	H	M	L	L	M	L

CO	PO					
	1	2	3	4	5	6
CO1	M	H	L	M	L	L
CO2	L	M	M	L	L	M
CO3	M	L	M	L	H	M
CO4	L	M	L	M	M	L
CO5	L	M	H	M	L	M

(Low - L, Medium – M, High - H)

Course Syllabus

Exercises

1. Write a server side PHP program that displays marks- total- grade of a student in tabular format by accepting user inputs for name- number and marks from a HTML form. (K1, K6)
2. Write a PHP program implement Simple Calculator Operations. (K6)
3. Write a PHP program interface to create a database and to insert a table into it.
 - a. Use classes to create a table. (K2)
 - b. Create a directory- and to read contents from the directory. (K3)
4. a. Write a PHP program to display a digital clock which displays the current time of the server.(K6)
 b. Write a Program and check message passing mechanism between pages. (K2, K4)
5. Create a MYSQL table and execute queries to read – add- remove and modify a record from that table. (K6)
6. a. Write a shell script to stimulate the file commands. (K1, K2)
 b. Write a shell script program to find out the maximum and minimum number of the given series. (K6)
7. a. Write a shell script to show the system configuration. (K1, K2)
 b. Write a shell script program to check whether the given string is palindrome or not. (K6)
8. a. Write a shell script to implement the following: pipes-Redirection and tee commands.(K1,K2)
 b. Write a Shell Script program to develop a calculator application. (K6)

9. a. Write a shell script to implement the filter commands. (K1, K2)
 b. Write a shell script to print the multiplication table of the given argument using for loop. (K6)
10. a. Write a shell script to swap two numbers. (K6)
 b. Write a shell script to find greatest of given three numbers. (K6)

PCCSO20 – PRACTICAL V: WEB SERVICES LAB

Year: II	Course Code: PCCSO20	Title of the Course: Practical V: Web Services Lab	Course Type: Practical	Course Category: Core	H/W 3	Credits 2	Marks 100
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Course Objectives

1. Understand the basic concepts of web services.
2. Understand how the client-server model of programming works.
3. Develop interactive, client-side, executable web applications.
4. Use WSDL Service to implement a variety of presentation effects to the web application.
5. Migrate the web applications to the other platforms like .Net

Course Outcomes (COs)

1. Understand, analyze and evaluate a system using web services.
2. Identify and formulate and solve web related problems.
3. Use techniques and skills to design web based applications.
4. Understand and describe Java-enabled XML technology.
5. Be able to create, deploy, and call Web services using Java, .NET

CO	PSO					
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	H	M	L	M	M	L
CO2	M	L	M	H	M	M
CO3	L	M	M	M	L	H

CO4	M	M	L	M	L	M
CO5	H	M	L	L	M	L

CO	PO					
	1	2	3	4	5	6
CO1	L	M	L	M	H	L
CO2	M	M	H	M	L	M
CO3	M	L	M	L	H	M
CO4	H	M	M	L	M	L
CO5	L	M	L	M	L	H

(Low - L, Medium – M, High - H)

Course Syllabus

Exercises

1. Write a program to implement WSDL Service. (K2)
2. To create a simple Web application using Web services in Java.(K5)
3. To write a factorial application program using Web services in java. (K2)
4. To implement calculator (+ -* /) web application. (K2)
5. Web Service creation using .NET. (K4)
6. Develop a J2EE client to access a .NET Web Service. (K5)
7. Write a program the service provider can be implement a single getprice(), staticbind() and getproduct() operation. (K2)
8. Write a program to implement the operation can receive request and will return a Response in two ways.
 - a) One-Way operation
 - b) Request – Response (K2, K3)

