

# **15CSE376**

## **Net Centric Programming**

**Project Based Elective:3-0-0-3**

**2021\_2022(ODD)**

A close-up, black and white photograph of elephant skin, showing deep, vertical wrinkles and a rough, textured surface. The lighting creates strong shadows in the creases, emphasizing the depth of the wrinkles.

# About the course

# Objective

- Client Server Architecture
- Web Development – Full Stack Development
- Java Technologies

# Syllabus

## Unit 1:

Introduction to Internet: The domain name system – Client / Server model – Internet Services of the Internet – Ports – IP addresses – Web architecture – Parsing in Browsers – Web site design standards. Client Side Technologies: Introduction to Markup languages (SGML, HTML, DHTML) – Introduction to scripting languages (Javascript, VBScript, PHP). XML: Comparison with HTML - DTD - XML Elements -Content Creation - Attributes - Entities - XSL - XLINK - XPATH - XPOINTER - Namespaces - Applications - Integrating XML with other applications.



# Syllabus

## Unit II:

J2EE: Architecture - Servlets, Java Server Pages – Java Beans – Building EJB applications.

## Unit III:

User Interface Design: MVC.

- **TEXT BOOKS:**
- *Bates C, "Web Programming - Building Internet Application", Second Edition, Wiley-Dreamtech India Pvt. Ltd., 2002.*
- *Pitter K, Amato S and Callahan J et al, "Every students guide to the Internet", Tata McGraw Hill, 2005.*
- *Aaron W E, "J2EE a Professional Guide", Tata McGraw Hill, 2003.*

# Evaluation Pattern (PBC – 70+30)

Internal		
Component	Marks	Weightage
Mid-term online exam	40	10
Mid-term viva	10	10
Review 1 ( 3 weeks)	10	10
Review 2 (After mid-term)	15	15
Review 3 ( After end semester )	15	15
Quizzes	3 Quizzes	10
External		
End Semester	40	10
End semester (Viva)	20	20

# Exam Pattern – Continuous Assessment - 70%



- **Continuous Assessment Evaluation: (50 marks→ (Lab based)**
  - Quizzes – 10 marks
- **Project Assessment: (40 marks)**
  - Review – Term 1 - 10 marks
  - Review – Term 2 - 15 marks
  - Review – Term 3 - 15 marks

# Exam Pattern – End semester - 30%

- **End Sem exam (30 marks)**
  - Online exam – 10 marks
  - Viva (Theory concepts) – 20 marks



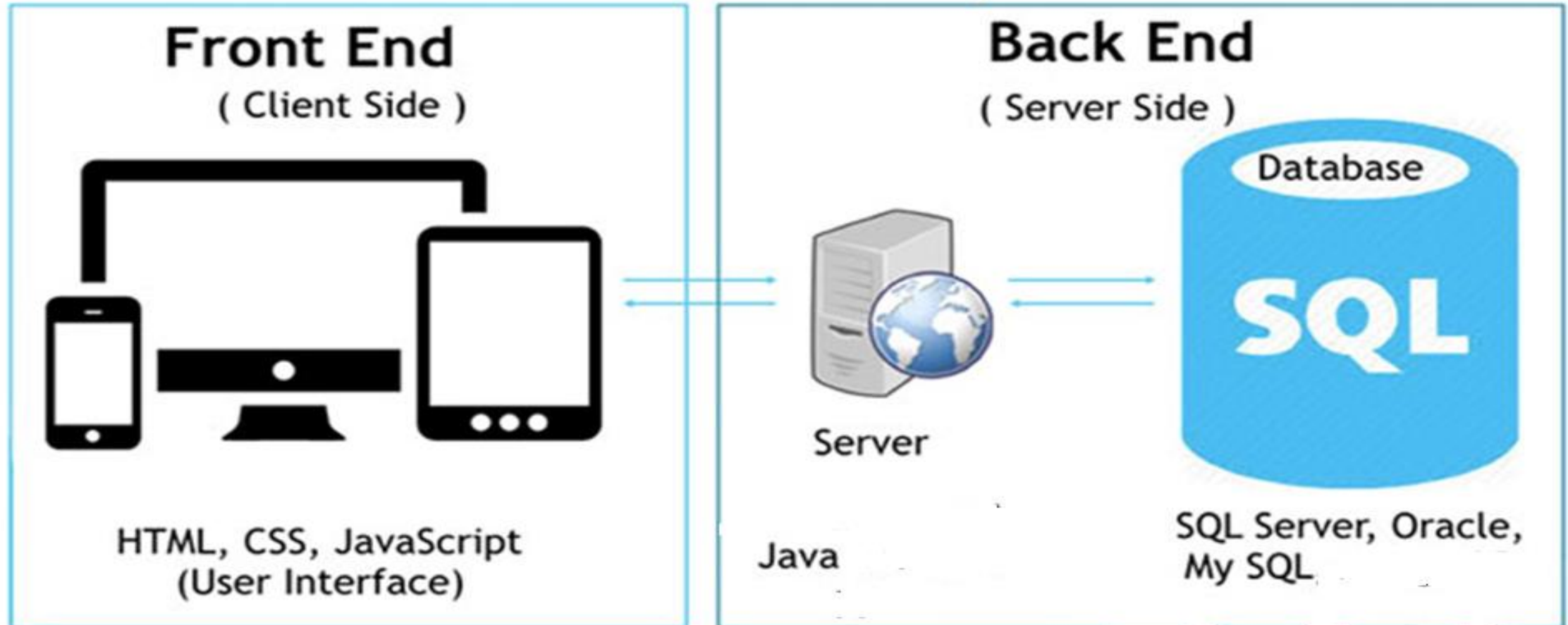
# Project

- Form a team of FIVE
  - Team formation rules to be followed
- Identify the application for which you would like to design a website
  - Term 1 – Front-end design completion
  - Term 2 – Back-end connectivity
  - Term 3 – Integration and deployment
- Students should use only J2EE based technologies for project design, development and implementation

# Project – Technologies to be used

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## Full Stack Web Development



# Project - Team formation rules

- 5 member per team
- Team average CGPA: 8 – 8.5

# Project evaluation – Rubrics and report format



- Review – Term 1(after 3 weeks)
- Review – Term 2 (after Mid Term exam)
- Review – Term 3 (After end sem)
- Report format

# Tools for programming and project(Not an exhaustive list)



Tools	Purpose
Chrome/Firefox/Any Compatible	Web browser
Notepad ++ with XML support/ XMLSpy	Text editor
Java with Eclipse/Netbeans/Visual studio	IDE
SQL/Oracle	Back end support/Database connectivity
Apache/Glassfish/Live	Web server

# Textbooks and Web references



*Bates C, "Web Programming - Building Internet Application", Second Edition, Wiley-Dreamtech India Pvt. Ltd., 2002*

*Aaron W E, "J2EE a Professional Guide", Tata McGraw Hill, 2003*

[www.w3schools.com](http://www.w3schools.com)

[www.tutorialspoint.com](http://www.tutorialspoint.com)

<https://www.oracle.com/technetwork/java/javase/documentation/index.html>

