



Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

WEEKLY LESSON PLAN

Department: Information Technology

Year / Semester: 2025-26 / Winter

Course Code / Course Name: 10213IT224 / Full Stack Application Development

Unit I: Database Management and Web Development basics Course Outcome: • Understand and use database queries and web technologies to build interactive applications.				
Week	Session	Topics to be Covered	Problems to Practice (Hands-On)	Resources
Week 1	Session 1	Git	<ol style="list-style-type: none">1. Practice basic Git Commands2. Upload single document to github using bash.3. Upload and update a folder in github.4. Create branch and push/commit one folder in Eclipse.5. Create branch and push/commit one folder in VS Code.	https://youtu.be/vA5TTz6BXhY
	Session 2	SQL	<p>Install SQL tool, MySQL and VS Code.</p> <ol style="list-style-type: none">1. Create a database.2. Create at least two tables: * Student (VTU Number, Name, Email, Phone, Department) * Course (Course Code, Course Name, Faculty Id, Student ID, Faculty Email)	https://www.programiz.com/sql/online-compiler https://www.w3schools.com

		3. Insert minimum 5 records into each table. 4. Select records using different CLAUSE.	
Session 3	SQL	1. Write SELECT queries to display all records. 2. Write queries using aggregate functions. 3. Sort data and display based in ascending/descending order of the VTU number. 4. Display student records belonging to a particular department. 5. Map VTU no. with course name and faculty using joins.	https://www.w3schools.com/
Session 4	SQL	1. Select set of students based on course and count the number of students. 2. Select set of courses a faculty is handling and insert into the new table. 3. Select top 5 students from same department and update their phone no. with country code.	https://youtu.be/EQbhKjBmW88
Session 5	SQL	1. Initiate and commit a transaction. 2. Set a savepoint, perform transactions and rollback to the save point. 3. Create a user-defined function to perform simple mathematical calculations. 4. Create a user-defined function to execute a select query to return a value.	https://www.w3schools.com/mysql/default.asp