Srithan-SDC-Files

🚀 Skill Development Course (CS409PC)

Welcome to the **Skill Development Course (CS409PC)** repository! This course is part of the undergraduate curriculum designed to equip students with hands-on technical skills in modern software development using frontend and backend technologies.

📚 Course Description

The Skill Development course is aimed at providing real-time project experience and a platform for building full-stack applications using widely-used technologies. The experiments cover everything from basic HTML to React.js and server-side programming with Node.js and Java.

🔍 List of Experiments

No.	Experiment Title	Tech Stack
1	Static Shopping Cart Website	HTML, CSS, JS
2	Responsive Shopping Cart with Bootstrap	HTML, Bootstrap
3	Client-Side Form Validation	HTML, JS
4	Weather App using ES6 & Chart.js	HTML, CSS, JS (ES6), API, Chart.js
5	Java Console-Based CRUD with DB	Java, JDBC, MySQL/Oracle
6	Servlet Controller for Shopping App	Java Servlets, HTML, JDBC
7	HTTP Session and Cookie Tracking	Java Servlets
8	Node.js Basic Server	Node.js (Core Modules)
9	Express.js CRUD API for Student Data	Node.js, Express
10	Node.js with JWT Authentication	Node.js, Express, JWT
11	Student Management System using React.js	React.js
12	Weather Dashboard with Charts in React.js	React.js, Chart.js, Weather API

💡 Learning Outcomes

By the end of this course, you will:

- Understand and apply frontend design principles
- Build dynamic web interfaces using JavaScript and React
- Create server-side APIs using Node.js, Express, and Java
- Integrate databases using JDBC and RESTful endpoints

- Implement authentication using JSON Web Tokens
- Gain experience in full-stack development lifecycle

🛠️ Tools & Technologies

- **Frontend**: HTML5, CSS3, Bootstrap, JavaScript, React.js
- **Backend**: Node.js, Express.js, Java (Servlets, JDBC)
- **Database**: MySQL / Oracle
- **Libraries**: Chart.js, JWT, Fetch API
- **Tools**: Postman, VS Code, Git, Tomcat

▶️ How to Run Experiments

Each experiment folder contains:

- Source code (`.html`, `.js`, `.java`, etc.)
- A `README.md` file explaining the setup
- Instructions to run in a browser, terminal, or localhost

🗀 To execute a project:

1. Navigate to the respective folder.
2. Follow instructions in its `README.md`.
3. For Node/Java-based projects, ensure dependencies are installed.
4. Run the code using a terminal, IDE, or browser.