Full Stack Web Development Workshop

This timeline outlines the structure of the Full Stack Web Development Workshop for 3rd-semester students, who are required to build a fully functioning website as part of their coursework. The workshop will introduce students to MERN (MongoDB, Express.js, React, Node.js) concepts, emphasizing hands-on teaching experiences.

Students will actively build projects during the end sessions, culminating in a cloning marathon led by an industry professional.

Week 1: Introduction to Web Development Basics
- HTML - **TK** (14th October - 7 PM)
- CSS - **Pragna** (14th October - 7 PM)
- JavaScript basics - **Navneeth KS** (15th October)
- Introduction to web development tools (VS Code, Git, etc.) - **TK** (17th October)
- Hands-on: Building a basic webpage from scratch using HTML and CSS - **Pragn**a (17th October)
- How websites work (client-server model, requests, and responses) - **Monish** (19th October)
- Interactive session: Simple JavaScript exercises (DOM manipulation, basic events) - **Navneeth** (19th October)

Week 2: Introduction to MERN Stack (Hands-on Session)
- Overview of the MERN stack
- Introduction to MongoDB and database basics
- Hands-on: Creating a simple MongoDB database and performing CRUD operations
- Node.js and Express.js for backend development
- Building a simple API using Express.js with live coding demonstration

Week 3: React.js and Frontend Development (Hands-on Session)
- Introduction to React.js
- React components, props, and state
- Hands-on: Building a basic React app
- Interactive session: Connecting React frontend to the backend API built in Week 2
- Students will complete a mini-project: Creating a simple interactive React page

Week 4: Cloning Marathon (Project Session) (By Industry Professional)
- Industry expert session on building a website clone (e.g., cloning a popular website like Netflix, Amazon)

- Hands-on project: Students will work in teams to build a full-stack clone using the MERN stack
- Real-time feedback and guidance from the expert during the session
- Final project submission and evaluation