



## GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

### FULL STACK WEB DEVELOPMENT LAB

**Course code:** GR24A2080

**L/T/P/C:** 0/0/3/1.5

#### **II Year II Semester**

##### **Course Outcomes:**

1. Design a website using the basic core concepts of Front-End technologies.
2. Develop robust and scalable websites using client and server side validations.
3. Apply the concepts of Servlets and JSP to develop the web applications.
4. Demonstrate the creation of full stack applications using Angular JS, React JS and MongoDB.
5. Implement simple full stack application development using Express and optimize server side rendering.

**Task - 1:** Design an HTML webpage to design Curriculum Vitae.

**Task - 2:** Write a JavaScript program to design a shopping list, where user can add or remove items as shown below.

My Shopping List

- Milk X
- Bread X
- Cheese X

Add

**Task - 3:** Develop a web page using jQuery to display five star rating application.

**Task - 4:** Write a Program on Bootstrap templates and Navbar.

**Task - 5:** Develop AngularJS application that displays details of students and their CGPA. Allow users to input the student details.

**Task - 6:** Write a Servlet Program that accepts the Mobile phone details from user and displays the details on the next page. Create a table and perform insert operation as shown in the Figure 1 below. Connect using JDBC to display each record at a time on the webpage using servlet request and response.

## **Mobile Details**

Model Id	Price(Rs.)	Company	Color
J2	12000	Samsung	Silver
6600	20000	Nokia	Black
Note 3	12000	Red Mi	Grey
Zenfone 2	20000	Asus	Grey

**Figure 1: Table Details**

**Task - 7:** Create a JSP application for performing basic arithmetic operations using Java Beans.

Ex: Use jsp:use Bean action tag

**Task - 8:** Create a food delivery website where users can order food from a particular restaurant listed in the website for handling http requests and responses using NodeJS.

**Task - 9:** Implement CRUD operations on the given dataset using MongoDB.

**Task - 10:** Develop a web application to manage student information using Express and Angular JS.

**Task - 11:** Write a program to create a voting application using React JS.

**Task - 12:** Develop a leave management system for an organization where users can apply different types of leaves such as casual leave and medical leave. They also can view the available number of days using react application.

### **TEXT BOOKS**

1. Web Programming, building internet applications, Chris Bates 2nd edition, WILEY Dreamtech
2. Chris Northwood, ‘The Full Stack Developer: Your Essential Guide to the Everyday Skills Expected of a Modern Full Stack Web Developer’, Apress; 1st edition, 2018.

### **REFERENCE BOOKS**

1. Brad Dayley, Brendan Dayley, Caleb Dayley, ‘Node.js, MongoDB and Angular Web Development’, Addison-Wesley, Second Edition, 2018.
2. Vasan Subramanian, ‘Pro MERN Stack, Full Stack Web App Development with Mongo, Express, React, and Node’, Second Edition, Apress, 2019.
3. Chris Northwood, ‘The Full Stack Developer: Your Essential Guide to the Everyday Skills Expected of a Modern Full Stack Web Developer’, Apress; 1st edition, 2018.