Web and Mobile Application Testing and Deployment Lab	L	P	C
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Discipline(s) / EAE / OAE	Semester	Group	Sub-group	Paper Code
EAE	7	FSD-EAE	FSD-EAE-5	FSD-43P

Marking Scheme:
1. Teachers Continuous Evaluation: 40 marks
2. Term end Theory Examinations: 60 marks

Instructions:
1. The course objectives and course outcomes are identical to that of (Web and Mobile Application Testing and Deployment) as this is the practical component of the corresponding theory paper.
2. The practical list shall be notified by the teacher in the first week of the class commencement under intimation to the office of the Head of Department / Institution in which the paper is being offered from the list of practicals below. Atleast 10 experiments must be performed by the students, they may be asked to do more. Atleast 5 experiments must be from the given list.

1: **Introduction to Web Technologies**

Objective: Familiarize students with basic web technologies, HTML, CSS, and JavaScript.

Activities: Create a simple web page using HTML, style it with CSS, and add interactivity using JavaScript.

2: **Web Application Testing**

Objective: Introduce students to various testing techniques and tools for web applications.

Activities: Test a web application for functional and non-functional requirements; perform unit testing, integration testing, and regression testing.

3: **Mobile Application Development**

Objective: Enable students to develop mobile applications using a cross-platform framework.

Activities: Build a simple mobile application using a framework like React Native or Flutter.

4: **Mobile Application Testing**

Objective: Introduce students to the challenges and techniques of testing mobile applications.

Activities: Test a mobile application for usability, performance, compatibility, and security.

5: **Web Application Deployment**

Objective: Teach students the process of deploying a web application to a hosting environment.

Activities: Deploy a web application on a cloud hosting platform like Amazon Web Services (AWS) or Heroku.

6: **Continuous Integration and Deployment**

Objective: Introduce students to the concepts of continuous integration and deployment for web and mobile applications.

Activities: Set up a CI/CD pipeline using tools like Jenkins, Travis CI, or GitLab CI/CD.

7: **Performance Testing for Web Applications**

Objective: Teach students how to analyze and improve the performance of web applications.

Activities: Perform load testing, stress testing, and optimize the performance of a web application.

8: **Security Testing for Web and Mobile Applications**

Objective: Introduce students to the fundamentals of security testing for web and mobile applications.

Activities: Conduct vulnerability assessments, penetration testing, and analyze security issues in a web or mobile application.