



**MODERN EDUCATION SOCIETY'S**

**NOWROSJEE WADIA COLLEGE**

**(An Autonomous College under Savitribai Phule Pune University)**

**Laboratory Course on  
Emerging Technologies (Full Stack)**

**National Education Policy (NEP) Syllabus  
To be implemented from Academic Year 2023-2024**

**M.Sc.(Computer Science)-Part II**

**Semester III**

**2024-25**

## **Co-Ordinator**

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## **Prepared by**

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**Roll No :**

**Name :**

**EMERGING TECHNOLOGIES (FULL STACK)  
ASSIGNMENT COMPLETION SHEET**

<b>Sr. No.</b>	<b>Assignment Name</b>	<b>Marks</b>
<b>1</b>	<b>Bootstrap</b>	
<b>2</b>	<b>AngularJS-I</b>	
<b>3</b>	<b>AngularJS-II</b>	
<b>4</b>	<b>Flask-I</b>	
<b>5</b>	<b>Flask-II</b>	
<b>Total out of 25</b>		
<b>Total out of 10</b>		

**Signature of Batch In-charge:**

**Internal Examiner :**

**External Examiner :**

**Date:**

## Assignment 1: Bootstrap

### Pre-Reading

- Concept of HTML and CSS
- Knowledge of JavaScript

### Lab Assignments

1. Write a program using Bootstrap framework to create a Carousel with random images.
2. Design your own website blog using Bootstrap framework.
3. Write a program which displays some alert message using bootstrap background color classes for each message. Display at least 5 alert messages.

### Extra Practice Question:

1. Write a program using appropriate Bootstrap image classes that displays image in following different shapes :
  - a. Circle
  - b. Thumbnail
  - c. Responsive Image

Signature of the instructor

Date

### Assignment Evaluation

0: Not done

2: Late Complete

4: Complete

1: Incomplete

3: Needs Improvement

5: Well Done

## Assignment 2: AngularJS-I

### Pre-Reading

- Knowledge of HTML and CSS
- JavaScript basics and MongoDB

### Lab Assignments

1. Design angular JS application to display the message “Welcome to School of Computer Science, NWC”.
2. Design angular JS application by using ng-click Directive to display an alert message on button click.
3. Write an AngularJS script for addition of two numbers using ng-init, ng-model and ng-bind. And also demonstrate ng-show, ng-disabled, ng-click directives on button component.

### Extra Practice Question:

1. Design login application with proper validations by using angularJS, on successful login display “Welcome” message.

Signature of the instructor

Date

### Assignment Evaluation

0: Not done

2: Late Complete

4: Complete

1: Incomplete

3: Needs  
Improvement

5: Well Done

## Assignment 3: AngularJS-II

### Pre-Reading

- Concepts of AngularJS Directives
- Concepts of MVC Architecture

### Lab Assignments

1. Design AngularJS application to display the details of 10 students stored in an array and show all details in table format using ng-for directive.
2. Create a notepad application using AngularJS and show the current date and time of the system when a new note will be created.  
( Use Interval Service)

### Extra Practice Question:

1. Using AngularJS, create a single page application to display the student details who live in pune in tabular format.(Use appropriate angular directives.)

Signature of the instructor

Date

### Assignment Evaluation

0: Not done

2: Late Complete

4: Complete

1: Incomplete

3: Needs  
Improvement

5: Well Done

## Assignment 4: Flask-I

### Pre-Reading

- Basic knowledge of Python
- Concepts of Node.js

### Lab Assignments

1. Design simple web application using Flask to display the message “Welcome to Nowrosjee Wadia College Pune”.
2. Create a Node.js Express Google Search Autocomplete API application to fetch data & download it in CSV file.
3. Implement error status code to the abort() function for a bad request, so it raises a Bad Request Error and forbidden error using flask.

### Extra Practice Question:

1. Design flask application which display “Hello,Welcome to School of Computer science at NWC” message using template.
2. Design flask application to print the table of a number specified in the URL.if url is <http://localhost:5000/table/10> then it will print the table of 10 on the browser's window.

Signature of the instructor

Date

### Assignment Evaluation

0: Not done

2: Late Complete

4: Complete

1: Incomplete

3: Needs Improvement

5: Well Done

## Assignment 5: Flask-II

### Pre-Reading

- File Handling
- URL Building and App routing in flask
- Cookies and Session

### Lab Assignments

1. Create an application using flask to upload a file from the local file system to the server and also display a success message to the user with the name of the uploaded file.
2. Write a program to implement app routing in flask by accepting input through an URL.
3. Design a form that accepts customer details (CustName,email,MobNo,address ,pincode),on submit retrieve customer details in template which shows on web page in the table format by using flask request object and template.

### Extra Practice Question:

1. Write a program for abort() function in flask with the error code for unauthorized access in case of any random password entered by the user.
2. Create a Login application in Flask using cookies.

Signature of the instructor

Date

### Assignment Evaluation

0: Not done

2: Late Complete

4: Complete

1: Incomplete

3: Needs  
Improvement

5: Well Done