

## School of Computer Science Engineering and Information Systems

### Full Stack Web Development –Lab CAT -1

Slot:L3+L4      CourseId PMCA601P      Prof. Sumangali K      Max.Marks:15

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DATE GIVEN: 03/02/2025

Q1.Design a web page using **HTML**, **CSS**, and **JavaScript** that validates credit card numbers based on the following requirements. The validation should use **regular expressions** to ensure the credit card numbers adhere to the specific formats of major credit card types.

- i) The page should include a dropdown menu to select the credit card type (e.g., Diners Club, Visa, MasterCard, American Express).
- ii) Provide a text input field to allow the user to enter the credit card number.
- iii) Include a "Validate" button that, when clicked, checks whether the entered credit card number is valid.
- iv) Display a message below the button indicating whether the credit card number is valid or invalid.

#### Sample Output:

### Validate Credit Cards

Credit card:  

Number:

Major credit card numbers must be in the following formats and display the possible validation error messages if required.

American Express—Numbers start with 34 or 37 and consist of 15 digits.

Diners Club—Numbers begin with 300 through 305, or 36 and 38 and consists

of 14 digits

Discover—Numbers begin with 6011 or 65 and consist of 16 digits.

JCB—Numbers beginning with 2131 or 1800 consist of 15 digits, while numbers beginning with 35 consist of 16 digits.

MasterCard—Numbers start with the numbers 51 through 55 and consist of 16 digits.

Q2. Write a HTML code to design a form which collects the input string for an array, few buttons like 'Add', 'Delete' and 'Print'. Create a Javascript functions for the following:

- Add button should insert the given string into the array if it is not null
- Delete button should remove the value if it is existing in the array. Also, inform the user about the process whether deleted or the input is not available.
- Print button should display the entire content of the array in the HTML page.

Sample Output:

Enter a String:

ADD



DELETE

PRINT

## Array Contents

Apple Banana Kiwi Chikku

Q3. Design a responsive webpage using HTML and CSS styling for a weekly planner page as given below. The header should display Headings info with a sticky vertical navigation bar. The section of the page should display images and text information on both the columns and the footer should the copy right information.

Header		
Nav1		
Nav2		
Nav3		
	----text----	----text----- <hr/>
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Footer		

Q4.a. You are tasked with creating a responsive grid layout where the number of columns should adjust based on the screen width. On small screens, it should display 1 column, on medium screens 2 columns, and on large screens 3 columns. Each grid item should have a 10px margin.

b. Develop a Java Script application that takes multiple lines of input from the user and display the unique sentences entered by the user.

For example, if the input text describes a shopping list like: *"Buy apples and bananas. Apples are fresh."*

The unique sentences are: *"Buy apples and bananas."* and *"apples are fresh."*

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