

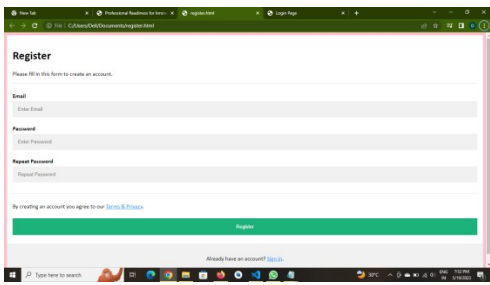



Project Development Phase Performance Test

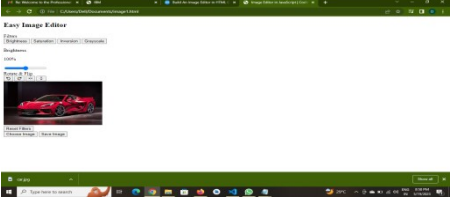

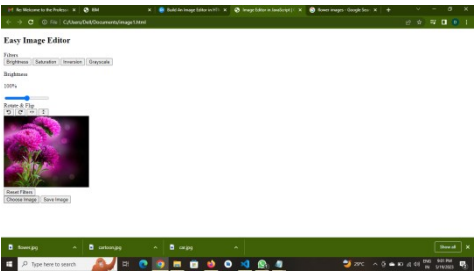

Date	13 May 2023
Team ID	NM2023TMID19973
Project Name	Pixel Perfection: Transforming your photos with our cutting-edge image editing platform

Performance Testing:

Project team shall fill the following information in the performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Form Validation	Login form, registration form and all other forms validation	   

2.	Project Flow	Redirections	<pre>graph TD START([START]) --> ImageLoading[Image loading] ImageLoading --> GoodImage{Good image} GoodImage -- No --> Adjust[Image rotation and brightness and contrast adjustment] Adjust --> GoodImage GoodImage -- Yes --> Grayscale[Conversion to Grayscale] Grayscale --> Crop[Image cropping] Crop --> Complement[Image complementary] Complement --> Subtraction[Background subtraction] Subtraction --> Filtering[Image Filtering] Filtering --> A((A)) A --> ClearInterface{Clear interface} ClearInterface -- No --> BinaryConversion[Conversion to binary: interface to white colour, air and water to black colour] BinaryConversion --> BinaryInversion[Binary inversion] BinaryInversion --> Imclearborder[Imclearborder, imfill and finding largest blob function] Imclearborder --> BestBinary[Best binary image] BestBinary --> Perimeter[Conversion to perimeter image] Perimeter --> DataAnalysis[Data analysis: Bubble velocity, Bubble length, and Slug frequency] DataAnalysis --> STOP([STOP]) ClearInterface -- Yes --> BinaryConversion2[Conversion to binary: water to black colour, air to white colour] BinaryConversion2 --> Grayscale</pre> <p>The flowchart illustrates the project flow for image processing. It begins with 'START', followed by 'Image loading'. A decision point 'Good image' checks if the image is suitable. If 'No', it proceeds to 'Image rotation and brightness and contrast adjustment' and loops back to 'Good image'. If 'Yes', it goes to 'Conversion to Grayscale', then 'Image cropping', 'Image complementary', 'Background subtraction', and 'Image Filtering', leading to connector 'A'. From 'A', the flow goes to 'Clear interface'. If 'No', it performs 'Conversion to binary: interface to white colour, air and water to black colour', followed by 'Binary inversion', 'Imclearborder, imfill and finding largest blob function', 'Best binary image', 'Conversion to perimeter image', 'Data analysis: Bubble velocity, Bubble length, and Slug frequency', and finally 'STOP'. If 'Yes', it performs 'Conversion to binary: water to black colour, air to white colour' and loops back to 'Conversion to Grayscale'.</p>
3.	API Testing/Validation	Testing API	<p>The screenshot shows the 'Key Image Editor' application. The interface includes a menu bar with 'Edit', 'Display', 'Window', and 'Help'. Below the menu is a toolbar with various icons. The main workspace displays a grayscale image of a bubble. The status bar at the bottom shows '100%' zoom and other image properties. The Windows taskbar is visible at the bottom of the screen.</p>

4.	Database Schema Validation	Validating inputs as per schema	   
5.	Application performance testing using online tool (GTmetrix)		