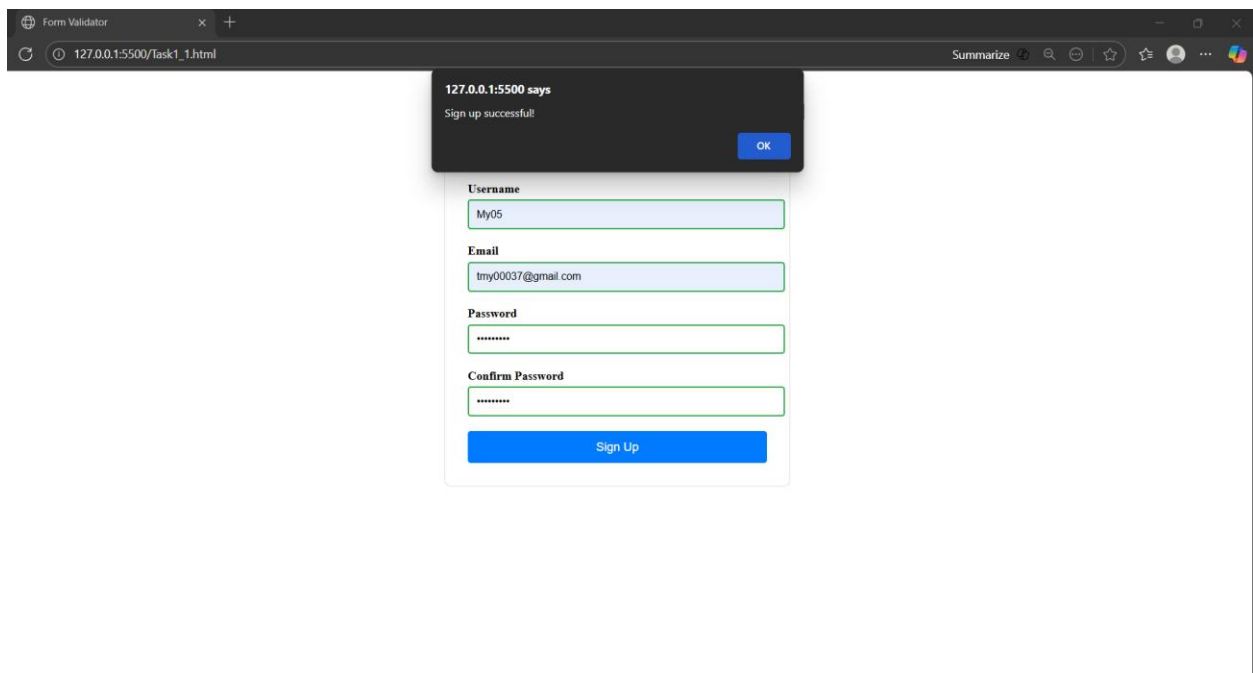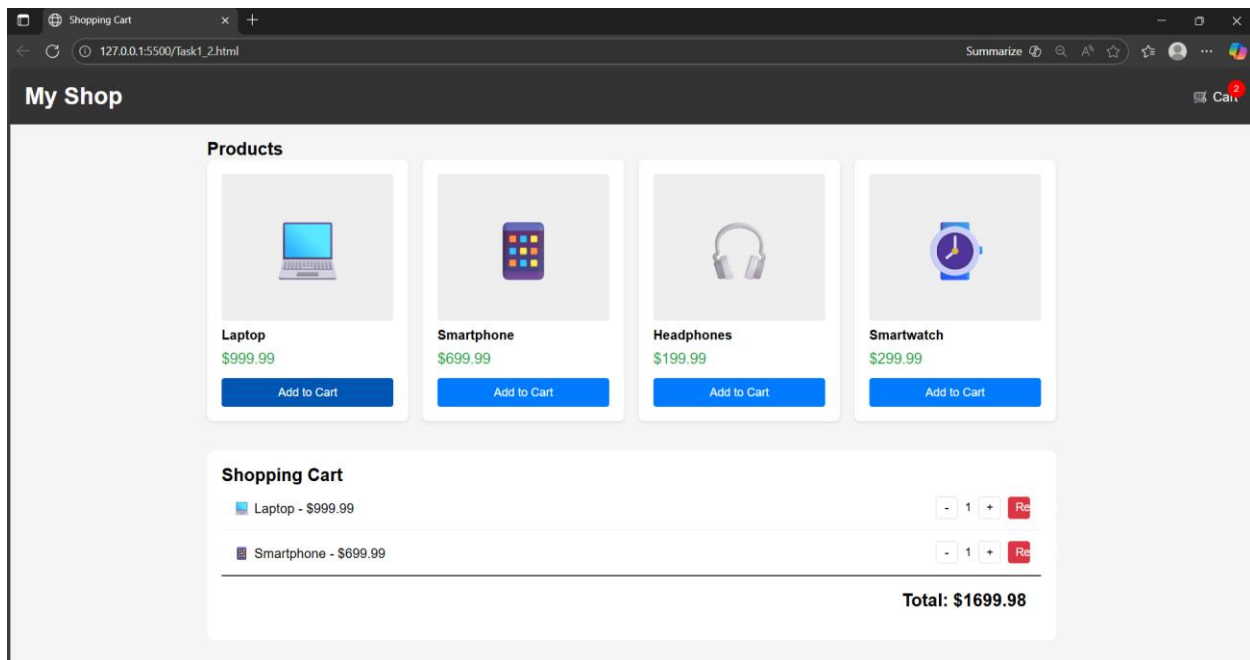Lab 3

Task 1.1: Form Validator
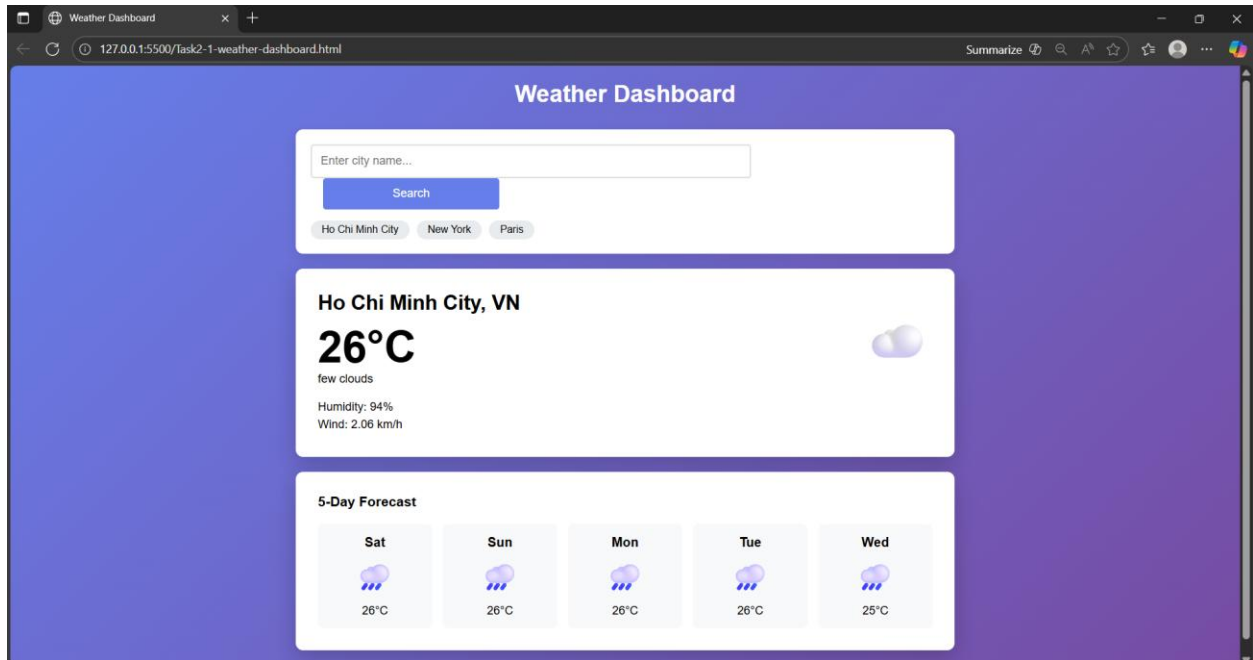

- validateUsername(username): This function checks if the username follows two specific rules. They are length (4-20) and characters by /^[a-zA-Z0-9]+$/.
- validateEmail(email): This function checks if an email address looks like a real email address. Based on regex pattern /^[^\s@]+@[^\s@]+\.[^\s@]+$/, if the email passes the Regex test, the function returns that it is valid.
- validatePassword(password): to check if a password is strong enough by following three rules, one after another.
  + The password is less than 8 characters long, then returns fail.
  + Does not contain at least one uppercase letter [A-Z] and number [0-9], then returns fail.

- validatePasswordMatch(pass1, pass2): to check if the "confirm password" (pass2) correctly matches the original password (pass1). If pass2 is not equal to pass 1 or empty, it returns fail.
- showError(fieldId, message): This function makes an error visible to the user. It's called when an input (like "username") is invalid. It turns the input box red and displays the error message underneath it.
- clearError(fieldId): This function does the exact opposite of showError(). It's called when an input (like "username") becomes valid. It turns the input box green and hides the error message.
- ValidateForm(): To decide whether to enable or disable the "Sign Up" button.

Task 1.2: Shopping Cart

Task 2.1: Weather Dashboard

Task 2.2: Github Finder