User Interface and Embedded SQL

REFLECTION:

In This Task, I designed a user interface to facilitate record insertion into a specific database table from my mini project, utilizing XAMPP as the web server package, PHP as the scripting language, and MySQL for database management. I also created a webpage in this task using HTML and used CSS to beautify the webpage. A key aspect of the task involved implementing robust data validation to ensure the integrity of the database. This validation process involved checking for mandatory fields, verifying data types, and confirming adherence to predefined constraints within the database table schema. Notably, error messages were intelligently displayed to users in the event of unsuccessful insertion attempts, providing clear guidance on rectifying input errors. Through a comprehensive video presentation, I showcased the form's functionality by demonstrating both unsuccessful and successful insertion scenarios. The video emphasized the chosen technology stack, the initial state of the database table, and the consequences of insertion attempts. This task provided valuable practical experience in web development, data validation, and SQL integration, underscoring the critical role of error handling and user feedback in maintaining data accuracy and usability within software applications.

The code for the given task is given below: **Index.html**

Style.css

```
body {
          font-family: Arial,
sans-serif;
               background-color:
#df6c1f;
           margin: 0;
padding: 20px; text-align:
center;
h1 { background-color:
#333;
        color: #9aed82;
padding: 20px; margin:
0;
form {
   max-width: 400px;
margin: 20px auto;
padding: 20px;
   background-color: #e1f9f6; border-radius:
        box-shadow: 0 0 10px rgba(153, 241, 147,
5px;
0.1);
```

```
label {
         display:
block;
        text-align:
left;
        font-weight:
bold;
       margin-
bottom: 5px;
} input[type="text"],
input[type="email"], textarea
    width: 100%;
padding: 10px;
                margin-
bottom: 10px; border: 1px
solid #ede61a;
               border-
radius: 3px; font-size:
16px;
} input[type="submit"]
     background-color:
#0cf8f0; color:
#e76712ef;
           border: none;
padding: 10px 20px; font-
size: 18px; cursor:
pointer; border-radius:
3px;
input[type="submit"]:hover {      background-
color: #e8d425;
```

user.php

```
// Check if the form was submitted
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $name = $_POST["name"];
    $email = $_POST["email"];
    $purpose = $_POST["purpose"];

$mysqli = new mysqli("localhost", "root", "", "hospital");
    if ($mysqli->connect_error)
{
```

```
die("Connection failed: " .
$mysqli->connect_error);  }

// Insert data into the database
    $sql = "INSERT INTO user (name, email, purpose)
    VALUES ('$email', '$name', '$purpose')";
    if ($mysqli->query($sql) === TRUE)
    {        echo "Data inserted
    successfully.";
    } else {        echo "Error: " . $sql . "<br>    }
}

$mysqli->close();
}>
```

YouTube link:

https://youtu.be/nzVEd2mKnRU