

I used PHP and html to create the website. Website shows all the required tables rows on the website and can perform update and delete operations.

<https://csc471f21-rhodes-suqoya.azurewebsites.net/VaccineProject/index.php>

There is also the ability to create new rows in the tables of the database and added client side and server-side validations.

```
ALTER TABLE [dbo].[takes] WITH CHECK ADD FOREIGN KEY([patient_id])  
REFERENCES [dbo].[patient] ([id]) ON DELETE CASCADE  
GO
```

```
ALTER TABLE [dbo].[takes] WITH CHECK ADD FOREIGN KEY([scient_name])  
REFERENCES [dbo].[vaccine] ([scient_name]) ON DELETE CASCADE  
GO
```

```
ALTER TABLE [dbo].[takes] WITH CHECK ADD FOREIGN KEY([site_name])  
REFERENCES [dbo].[vaccinationSite] ([name]) ON DELETE CASCADE  
GO
```

### **Client Side vs Server Side validations:**

Client-side validation is providing a better user experience by making it so that the user doesn't have to submit and reload a page simply because a value in a form isn't valid – therefore making things more dynamic. Client-side validations are handled at the browser end and its better for a user to see validations at the front end immediately instead of having to reload the website.

Client-side validations were added using HTML5 pattern attributes with custom errors by specifying in the input element. Validations were added on the Middle Initial and restricted it based on length. Front end validations related to alphanumeric, alphabet and only numeric values on different fields in the form were added as well. There was also client-side validation on the field names: allergy description and zip code.

Server-side validations on the website on different fields to validate the values entered by the user. When a user submits the form validations are then handled in PHP in server side. Also validations on these properties: firstname, lastname, weight, addrcity, addrstate, and site name.

Server-side validations are more secure than front end validations. For Banking sector or related other type of IT related big sectors. We use server side validation. Because front end validations can be passed by the hackers. Normally, for user experience front end validation are good. But we should also add server-side validations to make secure website.