

PRACTICAL 14

Aim: Develop ASP.NET Core MVC application to demonstrate model validation with implicit validation and explicit validation.

Code:

HomeController.cs : (Controllers / HomeController.cs)

```
using Microsoft.AspNetCore.Mvc;
using PRACTICAL14.Models;
namespace ValidationDemoApp.Controllers {
    public class HomeController : Controller {
        [HttpGet]
        public IActionResult Index() {
            return View(new Person());
        }
        [HttpPost]
        public IActionResult Index(Person person) {
            if (ModelState.IsValid) {
                return RedirectToAction("Result", person);
            }
            return View(person);
        }
        public IActionResult Result(Person person) {
            return View(person);
        }
    }
}
```

Person.cs : (Models / Person.cs)

```
using System.ComponentModel.DataAnnotations;
namespace PRACTICAL14.Models {
    public class Person {
        [Required(ErrorMessage = "Name is Required.")]
        [RegularExpression(@"^[a-zA-Z\s]{1,26}$", ErrorMessage = "Name Must be up to 26 Alphabets and Spaces Only.")]
        public string Name { get; set; } = string.Empty;
        [Required(ErrorMessage = "Email is required.")]
        [EmailAddress(ErrorMessage = "Invalid Email Format.")]
        [RegularExpression(@"^[^@\s]+@(\icloud|gmail|yahoo|rediffmail)\.com$", ErrorMessage = "Email must be from icloud, gmail, yahoo, or rediffmail.")]
        public string Email { get; set; } = string.Empty;
        [Required(ErrorMessage = "Age is required.")]
        [Range(18, 100, ErrorMessage = "Age Must be Between 18 & 100.")]
    }
}
```

```
        public int Age { get; set; }
        [Required(ErrorMessage = "Phone Number is Required.")]
        [RegularExpression(@"^\+?[1-9]\d{1,14}$", ErrorMessage = "Invalid Phone Number
Format.")]
        public string Phone { get; set; } = string.Empty;
    }
}
```

Index.cshtml : (Views / Home / Index.cshtml)

@model PRACTICAL14.Models.Person

@{

ViewData["Title"] = "Model Validation";

}

<style>

.form-control-custom {

width: 200px;

}

</style>

<h2>Model Validation Form</h2>

<form method="post" asp-action="Index">

<div class="form-group">

<label for="Name">Name:</label>

<input type="text" id="Name" name="Name" class="form-control form-control-sm form-control-custom" value="@Model.Name" />

</div>

<div class="form-group">

<label for="Email">Email:</label>

<input type="email" id="Email" name="Email" class="form-control form-control-sm form-control-custom" value="@Model.Email" />

</div>

<div class="form-group">

<label for="Age">Age:</label>

<input type="number" id="Age" name="Age" class="form-control form-control-sm form-control-custom" value="@Model.Age" />

</div>

<div class="form-group">

<label for="Phone">Phone Number:</label>

<input type="tel" id="Phone" name="Phone" class="form-control form-control-sm form-control-custom" value="@Model.Phone" />

</div>


```
<button type="submit" class="btn btn-primary">Submit</button>
</form>
@if (!ViewData.ModelState.IsValid) {
    <div class="text-danger">
        <h3>Validation Errors:</h3>
        <ul>
            @foreach (var error in ViewData.ModelState.Values.SelectMany(v => v.Errors)) {
                <li>@error.ErrorMessage</li>
            }
        </ul>
    </div>
}
```

Result.cshtml : (Views / Home / Result.cshtml)

```
@model PRACTICAL14.Models.Person
@{
    ViewData["Title"] = "Submission Result";
}
<h1>Submission Result</h1>
<p>Name: @Model.Name</p>
<p>Email: @Model.Email</p>
<p>Age: @Model.Age</p>
<p>Phone: @Model.Phone</p>
<a asp-controller="Home" asp-action="Index">Back</a>
```

Output:

