

Introduction to Template Inheritance

Template inheritance is an approach to managing templates that resembles object-oriented programming techniques. Instead of the traditional use of {include ...} tags to manage parts of templates, you can inherit the contents of one template to another (like extending a class) and change blocks of content therein (like overriding methods of a class.) This keeps template management minimal and efficient, since each template only contains the differences from the template it extends. Template inheritance allows us to build a base “skeleton” template that contains all the common elements of your site and defines blocks that child templates can override.

Introduction to Controller

MVC controllers are responsible for responding to requests made against an ASP.NET core MVC website. Each browser request is mapped to a particular controller. For example, imagine that you enter the following URL into the address bar of your browser: <http://localhost/Product/Index/3> In this case, a controller named ProductController is invoked. The ProductController is responsible for generating the response to the browser request. For example, the controller might return a particular view back to the browser or the controller might redirect the user to another controller.

Listing1 - Controllers\ProductController.cs

```
Using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;
using System.Web.Mvc.Ajax;
namespace MvcApplication1.Controllers
{ public class ProductController : Controller
{ // GET: /Products/
public ActionResult Index()
{ // Add action logic here return View();
}
}
}
```

As we can see from Listing 1, a controller is just a class (a Visual Basic .NET or C# class). A controller is a class that derives from the base System.Web.Mvc.Controller class. Because a controller inherits from this base class, a controller inherits several useful methods for free.

Razor Pages:

Login.cshtml

```
@{
    ViewData["Title"] = "Login";
}

<section class="mt-lg-5">
<div class="container-fluid h-custom">
    <div class="row d-flex justify-content-center align-items-center shadow py-5">

        <div class="col-md-8 col-lg-6 col-xl-4 offset-xl-1">
            <form>

                <div>
                    <p class="fs-1">Login</p>
                </div>
                <!-- Email input -->
                <div class="mb-3">
                    <label for="exampleInputEmail" class="form-label">Email</label>
                    <input type="email" class="form-control" id="exampleInputEmail" aria-describedby="emailHelp">
                </div>

                <!-- Password input -->
                <div class="mb-3">
                    <label for="exampleInputPassword1" class="form-label">Password</label>
                    <input type="password" class="form-control" id="exampleInputPassword1">
                </div>

                <div class="text-center text-lg-start mt-4 pt-2">
                    <a type="button" class="btn btn-primary btn-md" asp-action="MainPage" asp-controller="Auth"
                        style="padding-left: 2.5rem; padding-right: 2.5rem;">
                        Login
                    </a>
                </div>
            </form>
        </div>
        <div class="col-md-9 col-lg-6 col-xl-5">
            
        </div>
    </div>
</div>
</section>
```

Mainpage.cshtml

```
@{
    ViewData["Title"] = "Register";
}
<div>
<div class="border-bottom py-2">
    <div class="row align-items-center">

        <div class="col">
            <p class="text-uppercase fs-1 fw-bolder fst-italic">welcome to <span class="text-primary">Academic
Registration system</span></p>
        </div>
        <div class="col">
            
        </div>
    </div>
</div>

<div id="features">
    <div class="d-flex align-items-center justify-content-center pb-4 pt-4">
        <p class="px-4 py-1 fw-bolder fs-4">ARS Features</p>
    </div>
    <div>
        <div class="">
            <div class="row d-flex align-items-center justify-content-center">
                <div class="col-3">
                    <div>
                        <div class="change cursor-pointer p-2 border border-primary rounded-xl h-36 shadow-lg
transition-all delay-100 text-center flex items-center justify-center ">
                            <a asp-action="Create" asp-controller="Auth">
                                
                            </a>
                        </div>
                        <p class="text-center pt-4 fw-bold text-black-700 capitalize">
                            Create User
                        </p>
                    </div>
                </div>
                <div class="col-3">
                    <div>
                        <div class=" change cursor-pointer p-2 border border-primary rounded-xl h-36
shadow-lg transition-all delay-100 text-center flex items-center justify-center ">
                            <a asp-action='Display' asp-controller='Auth'>
                                
                            </a>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
</div>
```

```
</a>
</div>
<p class="text-center pt-4 fw-bold text-black-700 capitalize">
  Display User
</p>
</div>
</div>
  <div class="col-3">
    <div>
      <div class="change cursor-pointer p-2 border border-primary rounded-xl h-36
shadow-lg transition-all delay-100 text-center flex items-center justify-center ">
        <a>
          <img src='/img/totalusers.jpg' height="200px" class="feature" />
        </a>
      </div>
      <p class="text-center pt-4 fw-bold text-black-700 capitalize">
        Details of Users
      </p>
    </div>
    </div>
      <div class="col-3">
        <div>
          <div class=" change cursor-pointer p-2 border border-primary rounded-xl h-36
shadow-lg transition-all delay-100 text-center flex items-center justify-center ">
            <a>
              <img src='/img/detailsuser.webp' height="200px" class="feature" />
            </a>
          </div>
          <p class="text-center pt-4 fw-bold text-black-700 capitalize">
            Total Users
          </p>
        </div>
      </div>
    </div>
  </div>
</div>
</div>
```

Layout.cshtml

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>@ViewData["Title"] - AcademicRegistrationSystem</title>
  <link rel="stylesheet" href="~/lib/bootstrap/dist/css/bootstrap.min.css" />
  <link rel="stylesheet" href="~/css/site.css" asp-append-version="true" />
  <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
  <link rel="stylesheet" href="~/AcademicRegistrationSystem.styles.css" asp-append-version="true" />
</head>
<body>
  <header>
    <nav class="navbar navbar-expand-lg nav_header position-sticky">
      <div class="container-fluid align-items-center d-flex justify-content-between">
        <div class="d-flex align-items-center justify-content-between">
          <div class="d-flex align-items-center">
            <img src='~/img/amslogo.jpg' width="25px" class="logo"/>
            <a class="navbar-brand text-white px-2 fs-6" href="#">Academic Registration System</a>
          </div>
          <button class="navbar-toggler text-white" type="button" data-bs-toggle="collapse"
data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent"
aria-expanded="false" aria-label="Toggle navigation">
            <i class="fa fa-bars arial-hidden="true""></i>
          </button>
        </div>

        <div class="collapse navbar-collapse d-lg-flex justify-content-lg-end" id="navbarSupportedContent">
          <ul class="navbar-nav me-auto mb-2 mb-lg-0">
            <li class="nav-item px-2">
              <a class="nav-link active text-white" aria-current="page" href="/">Home</a>
            </li>
            <li class="nav-item px-2">
              <a class="nav-link text-white" href="#aboutus">About</a>
            </li>
            <li class="nav-item px-2">
              <a class="nav-link text-white" href="#features">Features</a>
            </li>
            <li class="nav-item px-2">
              <a class="nav-link text-white" href="#contactus">Contact </a>
            </li>
          </ul>
        </div>
      </div>
    </nav>
  </header>
</body>
</html>
```

```
<div>
  <a type="button" class="btn btn-secondary" asp-action="Login" asp-controller="Auth">Signin</a>
</div>
</div>
</div>
</nav>
</header>
<div class="px-5">
  <main role="main" class="pb-3">
    @RenderBody()
  </main>
</div>

<footer class="border-top footer text-muted">
  <div class="text-break">
    ©Pokhrel Groups of Company Copyright 2022. All Rights Reserved
  </div>
</footer>
<script src="~/lib/jquery/dist/jquery.min.js"></script>
<script src="~/lib/bootstrap/dist/js/bootstrap.bundle.min.js"></script>
<script src="~/js/site.js" asp-append-version="true"></script>
@await RenderSectionAsync("Scripts", required: false)
</body>
</html>
```

Create.cshtml

```
@{
    ViewData["Title"] = "Create";
}

<div class="container bg-light pb-2 mt-4">
    <p class="text-dark text-center fs-4 fw-bold py-2">Create User</p>
    <div>
        <div class="row">
            <div class="col">
                <!-- Name input -->
                <div class="mb-3">
                    <label for="exampleFormControlInput1" class="form-label">Name</label>
                    <input type="text" class="form-control" id="exampleFormControlInput1" placeholder="Enter your full
name">
                </div>
            </div>
            <div class="col">
                <!-- Email input -->
                <div class="mb-3">
                    <label for="exampleFormControlInput1" class="form-label">Email</label>
                    <input type="email" class="form-control" id="exampleFormControlInput1"
placeholder="email@gmail.com">
                </div>
            </div>
        </div>
        <div class="row">
            <div class="col">
                <!-- Name input -->
                <div class="mb-3">
                    <label for="exampleFormControlInput1" class="form-label">Phone No</label>
                    <input type="number" class="form-control" id="exampleFormControlInput1"
placeholder="+977-9876543210">
                </div>
            </div>
            <div class="col">
                <!-- Email input -->
                <div class="mb-3">
                    <label for="exampleFormControlInput1" class="form-label">Address</label>
                    <input type="text" class="form-control" id="exampleFormControlInput1" placeholder="Enter your
address">
                </div>
            </div>
        </div>
    </div>
</div>
```

```
<div class="col">
  <!-- Name input -->
  <div class="mb-3">
    <label for="exampleFormControlInput1" class="form-label">Department</label>
    <select class="form-select" aria-label="Default select example">
      <option selected>Select Department</option>
      <option value="1">Student</option>
      <option value="2">Teacher</option>
      <option value="3">Staffs</option>
      <option value="4">Accountant</option>
    </select>
  </div>
</div>
<div class="col">
  <!-- Email input -->
  <div class="mb-3">
    <label for="exampleFormControlInput1" class="form-label">Designation</label>
    <input type="text" class="form-control" id="exampleFormControlInput1" placeholder="Enter your designation">
  </div>
</div>
<div class="row">
  <div class="col">
    <!-- Name input -->
    <div class="mb-3">
      <label for="exampleFormControlInput1" class="form-label">Date of Birth(DOB)</label>
      <input type="date" class="form-control" id="exampleFormControlInput1" placeholder="">
    </div>
  </div>
  <div class="col">
    <!-- Email input -->
    <div class="mb-3">
      <label for="exampleFormControlInput1" class="form-label">Gender</label>
      <select class="form-select" aria-label="Default select example">
        <option selected>Select Gender</option>
        <option value="1">Male</option>
        <option value="2">Female</option>
        <option value="3">Others</option>
      </select>
    </div>
  </div>
</div>
```



```
<div class="row">
  <div class="col">
    <!-- Name input -->
    <div class="mb-3">
      <label for="exampleFormControlInput1" class="form-label">Married Status</label>
      <select class="form-select" aria-label="Default select example">
        <option selected>Select Married Status</option>
        <option value="1">Married</option>
        <option value="2">Unmarried</option>
      </select>
    </div>
  </div>
  <div class="col">
    <!-- Email input -->
    <div class="mb-3">
      <label for="exampleFormControlInput1" class="form-label">Country</label>
      <input type="text" class="form-control" id="exampleFormControlInput1" placeholder="Enter Country">
    </div>
  </div>
</div>
<div class="d-grid col-6 mx-auto my-4">
  <button class="btn btn-primary" type="button">Create</button>
</div>
</div>
```

Display.cshtml

```
@{
    ViewData["Title"] = "Display";
}

<div class="bg-light pb-2 mt-4">
    <p class="text-dark text-center fs-4 fw-bold py-2">Display User</p>
    <table class="table table-striped table-hover">
<thead>
<tr class="bg-success" class="tabletitle">
    <th scope="col" style="font-size:13px">S.N.</th>
    <th scope="col" style="font-size:13px">Name</th>
    <th scope="col" style="font-size:13px">Email</th>
    <th scope="col" style="font-size:13px">Phone No</th>
    <th scope="col" style="font-size:13px">Address</th>
    <th scope="col" style="font-size:13px">Department</th>
    <th scope="col" style="font-size:13px">Designation</th>
    <th scope="col" style="font-size:13px">DOB</th>
    <th scope="col" style="font-size:13px">Gender</th>
    <th scope="col" style="font-size:13px">Married Status</th>
    <th scope="col" style="font-size:13px">Country</th>
    <th scope="col" style="font-size:13px">Action</th>
</tr>
</thead>
<tbody>
<tr>
<th scope="row" style="font-size:13px">1</th>
<td style="font-size:13px">Joe Root</td>
<td style="font-size:13px">joe@gmail.com</td>
<td style="font-size:13px">+01-23232444</td>
<td style="font-size:13px">Samakhusi</td>
<td style="font-size:13px">Student</td>
<td style="font-size:13px">Student</td>
<td style="font-size:13px">1998-02-08</td>
<td style="font-size:13px">Male</td>
<td style="font-size:13px">UnMarried</td>
<td style="font-size:13px">Nepal</td>
<td>
        <i class="fa fa-pencil-square-o" aria-hidden="true"></i>
        <i class="fa fa-trash-o" aria-hidden="true"></i>
</td>
</tr>
<tr>
<th scope="row" style="font-size:13px">2</th>
<td style="font-size:13px">Sandesh</td>
```

```

<td style="font-size:13px">sandesh@gmail.com</td>
<td style="font-size:13px">+01-03232444</td>
<td style="font-size:13px">Kathmandu</td>
<td style="font-size:13px">Devops Engineer</td>
<td style="font-size:13px">IT HEAD</td>
<td style="font-size:13px">1998-03-18</td>
<td style="font-size:13px">Male</td>
<td style="font-size:13px">Married</td>
<td style="font-size:13px">Nepal</td>
<td>
    <i class="fa fa-pencil-square-o" aria-hidden="true"></i>
    <i class="fa fa-trash-o" aria-hidden="true"></i>
</td>
</tr>
</tbody>
</table>
<nav aria-label="Page navigation example" class="px-2">
<ul class="pagination justify-content-end">
<li class="page-item disabled">
    <a class="page-link">Previous</a>
</li>
<li class="page-item"><a class="page-link" href="#">1</a></li>
<li class="page-item"><a class="page-link" href="#">2</a></li>
<li class="page-item"><a class="page-link" href="#">3</a></li>
<li class="page-item">
    <a class="page-link" href="#">Next</a>
</li>
</ul>
</nav>
</div>

```

Departments.cshtml

```
@{
    ViewData["Title"] = "Departments";
}
<div class="row mt-4">
    <p class="text-dark text-center fs-4 fw-bold py-2">Total Departments</p>
    <div class="col-3">
        <div class="card" style="width: 18rem;height:80%">
            
            <div class="card-body">
                <p class="card-text fw-bold text-center">Student</p>
            </div>
        </div>
    </div>
    <div class="col-3">
        <div class="card" style="width: 18rem;height:80%">
            
            <div class="card-body">
                <p class="card-text fw-bold text-center">Teacher</p>
            </div>
        </div>
    </div>
    <div class="col-3">
        <div class="card" style="width: 18rem;height:80%">
            
            <div class="card-body">
                <p class="card-text fw-bold text-center">Librarian</p>
            </div>
        </div>
    </div>
    <div class="col-3">
        <div class="card" style="width: 18rem;height:80%">
            
            <div class="card-body">
                <p class="card-text fw-bold text-center">Accountant</p>
            </div>
        </div>
    </div>
</div>
```

AuthController.cs

```
using Microsoft.AspNetCore.Mvc;
```

```
namespace AcademicRegistrationSystem.Controllers
```

```
{  
    public class AuthController : Controller  
    {  
        public IActionResult MainPage()  
        {  
            return View();  
        }  
        public IActionResult Login()  
        {  
            return View();  
        }  
        public IActionResult Create()  
        {  
            return View();  
        }  
        public IActionResult Display()  
        {  
            return View();  
        }  
    }  
}
```

HomeController.cs

```
using AcademicRegistrationSystem.Models;
using Microsoft.AspNetCore.Mvc;
using System.Diagnostics;

namespace AcademicRegistrationSystem.Controllers
{
    public class HomeController : Controller
    {
        private readonly ILogger<HomeController> _logger;

        public HomeController(ILogger<HomeController> logger)
        {
            _logger = logger;
        }


        public IActionResult Index()
        {
            return View();
        }

        public IActionResult Privacy()
        {
            return View();
        }


        [ResponseCache(Duration = 0, Location = ResponseCacheLocation.None, NoStore = true)]
        public IActionResult Error()
        {
            return View(new ErrorViewModel { RequestId = Activity.Current?.Id ??
HttpContext.TraceIdentifier });
        }
    }
}
```

Output:

Homepage Section

 Academic Registration System

Home About Features Contact [Signin](#)



Academic Registration System

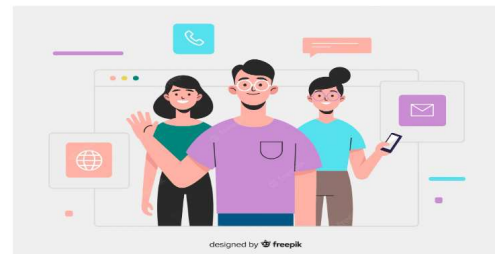
ARS (Academic Registration System) is a flexible, powerful, user friendly and affordable registration solution for institutions and organizations of any size or budget. It will cover the basics of user registrations related to academic institutions like user creations, user update, user search and user deletion. ARS empowers staff and management with the transparency of data and ease of use to manage their information, data and save those details for future reference. Every organization has a large number of users. So, it would be convenient to have a software utility to manage them. So, this system helps us to view, add, edit, search or delete the user information digitally which saves time to a great extent.

About US Section

About Us

What we do?

The proposed registration system is a web application called ARS (Academic Registration System). The goal of this project is to provide a flexible, powerful, user friendly and affordable registration solution for institutions and organizations of any size or budget. It will cover the basics of user registrations related to academic institutions like user creations, user update, user search and user deletion. This web application helps system managers to view, search, edit, create or delete user details from the web interface and keep track of user details for future purposes.

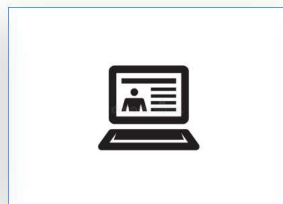


Features

ARS Features



Create User



Display User



Departments



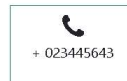
Total Users

Contact Us Section

Contact Us

Any queries?

Connect with us Here.



Admin Login

Login

Email

Password

Login

Create User Form

Academic Registration System

Home About Features Contact Signin

Create User

Name	Email
<input type="text" value="Enter your full name"/>	<input type="text" value="email@gmail.com"/>
Phone No	Address
<input type="text" value="+977-9876543210"/>	<input type="text" value="Enter your address"/>
Department	Designation
<input type="text" value="Select Department"/>	<input type="text" value="Enter your designation"/>
Date of Birth(DOB)	Gender
<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="Select Gender"/>
Married Status	Country
<input type="text" value="Select Married Status"/>	<input type="text" value="Enter Country"/>

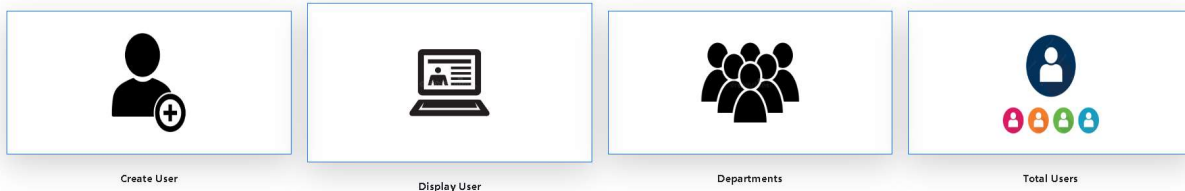
Create

Admin Dashboard



**WELCOME TO ACADEMIC REGISTRATION
SYSTEM**



ARS Features



Display User Table

Display User											
S.N.	Name	Email	Phone No	Address	Department	Designition	DOB	Gender	Married Status	Country	Action
1	Joe Root	joe@gmail.com	+01-23232444	Samakhusi	Student	Student	1998-02-08	Male	UnMarried	Nepal	 
2	Sandesh	sandesh@gmail.com	+01-03232444	Kathmandu	Devops Engineer	IT HEAD	1998-03-18	Male	Married	Nepal	