# SD203 Web Application Design Document

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## Date: 10 / 07 / 2020

## Class: SD1103 - Project - Sona Patel - 9 / 30 / 2020

## Assignment: Final Project Plan

## Project Name

“Hort\_Ed” – Horticulture Education seminar enrollment application.

## Overview

In the horticulture industry, specifically flower shops, garden centers, and landscape design firms, provide educational seminars to their communities. The combined goal is to share information with horticulture enthusiasts – home gardeners, garden clubs – and to increase sales with the purchases of garden supplies and tools from these enthusiasts.

The Hort\_Ed application will allow seminar participants to review and enroll for seminars by world renowned horticulture speaker Kim Hartmann. As participants enroll, they will review and select seminar material kits that they will pick-up curbside or have shipped to them for use during online seminars. For in-person seminars, materials kits will be available at the seminar location.

As participants are enrolled, the application will create database tables that will enable participant management, ordering of materials, billing, and other related activities (potential future applications/connections).

## Tech Stack

The following technical stack will be used to create the Hort\_Ed application.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| HTML |  | Presentation Layer |
| CSS3 |  | Presentation Layer |
| Bootstrap |  | Presentation Layer |
| JavaScript |  | Presentation Layer |
| C# |  | Application Layer |
| ASP.NET | 2.1 (16.7.532.28833) | Application Layer |
| .NET Framework | 4.8.03761 | Application Layer |
| MSSQL | 18.5.1 | Data Layer |
| Visual Studio 2019 | V16.7.2 | IDE |
| HP Laptop | Windows 8.1 | Hardware |

## Hosting

The web developer has an interest in learning Amazon Web Services (AWS), so hosting and certificate management is planned for AWS.

Hosting: <https://aws.amazon.com/getting-started/hands-on/host-net-web-app/>

Certificate Management: <https://aws.amazon.com/certificate-manager/>

Pricing: <https://Calculator.aws/#/>

## Functionality / Features

Desired functionality of this first version include:

|  |  |
| --- | --- |
| Feature / Function | Access |
| Register for application | Create |
| Enter customer information | Create, Update |
| View seminar list | Read |
| View seminar detail | Read |
| Select seminar | Update |
| View seminar materials kit options | Read |
| Select seminar materials kit options | Update |
| Display enrollment confirmation | Read |
| Cancel enrollment | Delete |
| Display current enrollments  🡪 Instructors, Materials Inventory/Ordering, Billing | Read |

## Security & User Roles

Access to the application will be controlled by login credentials. Roles will be used to manage available features for each user.

|  |  |
| --- | --- |
| Role | Access |
| Site Administrator | Full access to all features/functionality |
| Seminar Participant | Access to features related to enrollment/cancellation |
| Instructor | Access to summary enrollment information |
| Materials Management | Access to summary enrollment information |
| Billing | Access to summary enrollment information |

## Page Templates

The following page templates will used to create the pages described in the Site Layout.

|  |  |
| --- | --- |
| Template | Web Pages |
| Roster View | Seminar, Class Roster, Current Enrollments, Materials Kits |
| Detail View | Seminar Descriptions, Materials Kit Descriptions |
| Contact Info | Site Registration, Enrollment Contact, Confirmation |
| Login | Login to Application |
| Contact | Application Contact Info |
| History | Transaction Record/History |

## Site Layout / Site Map

Graphical user interface, application

Description automatically generated

## Browser and Device Support

The following browsers are planned as options for using Hort\_Ed application. Initial testing will be on the bolded browsers.

|  |  |  |
| --- | --- | --- |
| Browser | Version | Device |
| Google Chrome | v85.0.4183.121 | Desktop / Mobile |
| *Mozilla FireFox* | *v79.0* | *Desktop* |
| *Internet Explorer* | *v11.0.210* | *Desktop* |
| *Microsoft Edge* | *v85.0.564.68* | *Desktop* |
| Safari | - | iPad |

## Database Design

|  |
| --- |
| Standard security / Registration Tables |
| AspNetRoleClaims |
| AspNetRoles |
| AspNetUserClaims |
| AspNetUserLogins |
| AspNetUserRoles |
| AspNetUsers |
| AspNetUserTokens |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Customers | CustomerID | primary key, int, not null |
|  | FirstName | nvarchar(50), not null |
|  | LastName | nvarchar(50), not null |
|  | Address1 | nvarchar(50), not null |
|  | Address2 | nvarchar(50) |
|  | City | nvarchar(50), not null |
|  | State | nvarchar(50), not null |
|  | ZipCode | nvarchar(50), not null |
|  | Phone | nvarchar(50) |
|  | EmailAddress | nvarchar(50), not null |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Seminars | SeminarID | primary key, int, not null |
|  | SeminarTitle | nvarchar(50), not null |
|  | Season | nvarchar(20), not null |
|  | DeliveryType | nvarchar(20), not null |
|  | Description | nvarchar(500), not null |
|  | MaterialKit1 | int |
|  | MaterialKit2 | Int |
|  | MaterialKit3 | Int |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Kits | KitID | primary key, int, not null |
|  | KitName | nvarchar(50), not null |
|  | Description | nvarchar(500), not null |
|  | Cost | nvarchar(20), not null |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Enrollments | TransactionID | foreign key, int, not null |
|  | CustomerID | foreign key, int, not null |
|  | SeminarID | foreign key, int, not null |
|  | KitID | foreign key, int, not null |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| History | TransactionID | primary key, int, not null |
|  | Date/Time | datetime |
|  | CustomerID | foreign key, int, not null |
|  | SeminarID | foreign key, int, not null |
|  | KitID | foreign key, int, not null |
|  | Action | nvarchar(50), not null |