

SD203 Web Application Design Document

Name: Keith Krystek

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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	Read
→ Instructors, Materials Inventory/Ordering, Billing	

Security & User Roles

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

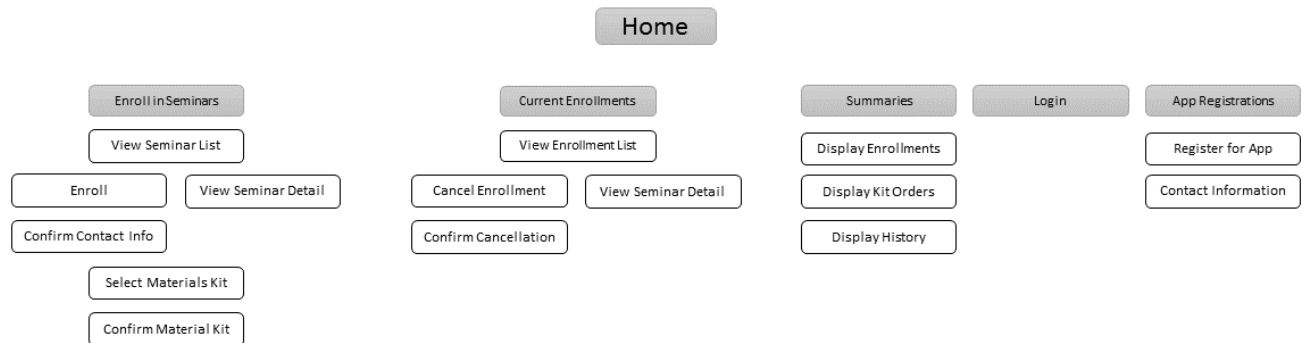
Role	Access
Site Administrator	Full access to all features/functionality
Seminar Participant	Access to features related to enrollment/cancellation
Instructor	Access to summary enrollment information
Materials Management	Access to summary enrollment information
Billing	Access to summary enrollment information

Page Templates

The following page templates will be 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



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
<i>Mozilla FireFox</i>	<i>v79.0</i>	<i>Desktop</i>
<i>Internet Explorer</i>	<i>v11.0.210</i>	<i>Desktop</i>
<i>Microsoft Edge</i>	<i>v85.0.564.68</i>	<i>Desktop</i>
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