

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	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.

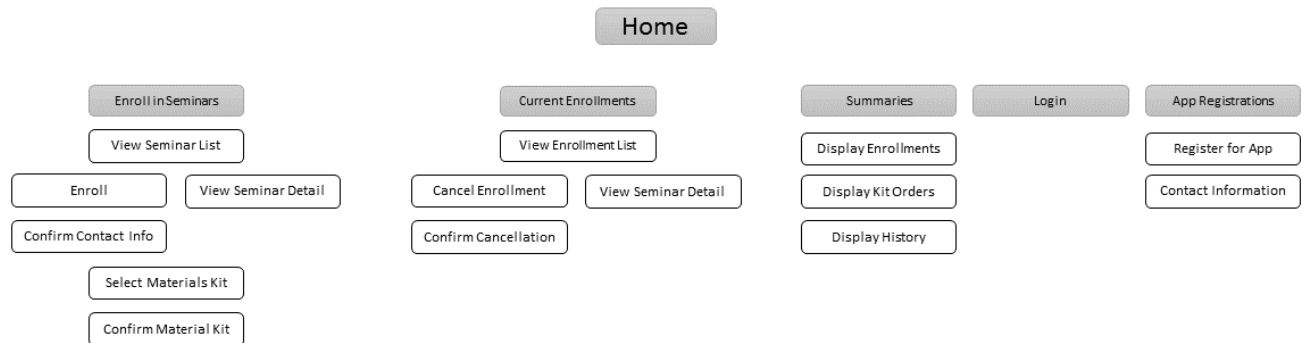
Role	Access
Site Administrator	Full access to all features/functionality
Seminar Participant	Access to features related to enrollment/cancellation
Instructor	Access to summary enrollment information
Materials Management	Access to summary enrollment information
Billing	Access to summary enrollment information

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

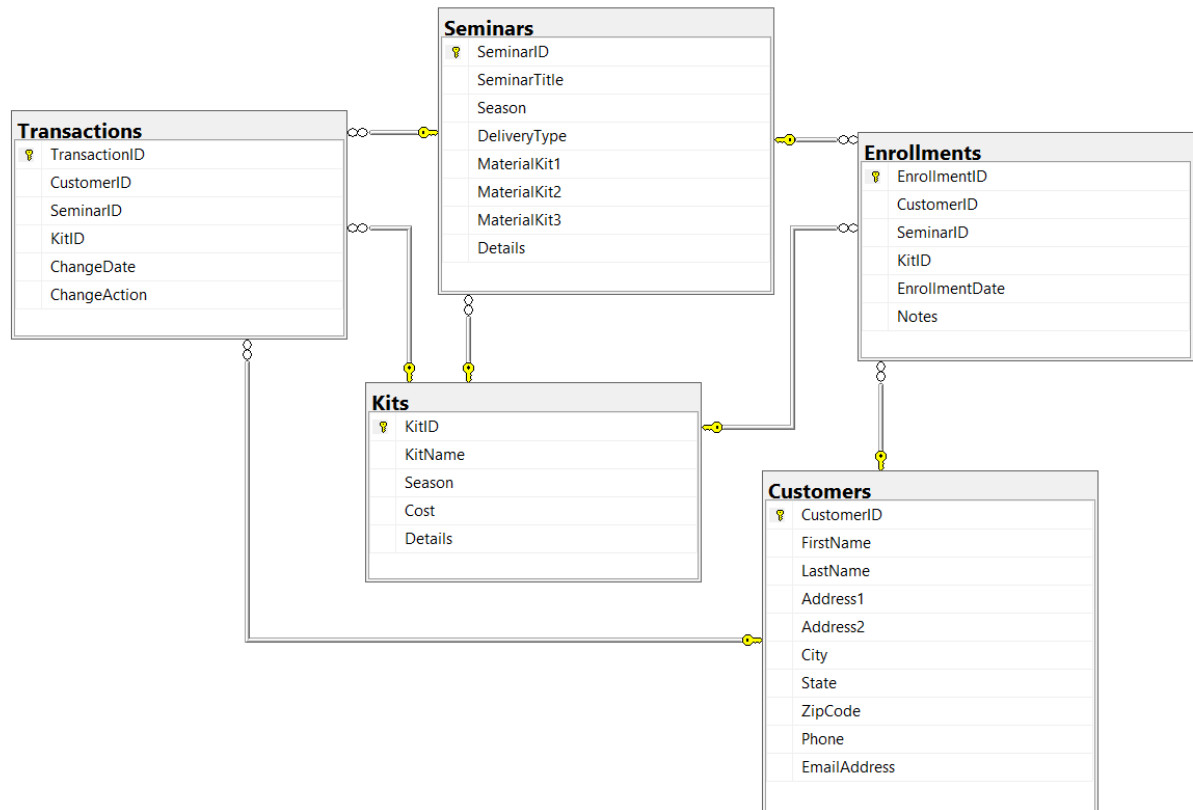
Customers	CustomerID	primary key, int, not null
	FirstName	nvarchar(50), not null
	LastName	nvarchar(50), not null
	Address1	nvarchar(50), not null
	Address2	nvarchar(50)
	City	nvarchar(50), not null
	State	nvarchar(50), not null
	ZipCode	nvarchar(50), not null
	Phone	nvarchar(50)
	EmailAddress	nvarchar(50),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

Seminars	SeminarID	primary key, nvarchar(10), 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
Action	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, nvarchar(10), 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, nvarchar(10), not null
	KitID	foreign key, int, not null
	Action	nvarchar(50), not null



	SeminarID	SeminarTitle	Season	DeliveryType	MaterialKit1	MaterialKit2	MaterialKit3	Details
1	ES01	Best New Plants for 2021	Early Spring (January-March)	Zoom	0	0	0	We will highlight the best new annuals, perennials, r...
2	ES02	Starting Your Garden from Seed	Early Spring (January-March)	Google Chat	0	0	0	We will help you plan for the vegetables, herbs, annu...
3	ES03	Pruning Trees and Shrubs	Early Spring (January-March)	Zoom	0	0	0	Pruning is essential to the optimal health of trees and...
4	ES04	The Joy of Flowers	Early Spring (January-March)	Countryside	0	0	0	We will cover the joy of having fresh cut flowers in you...
5	ES05	Creating Your Own Fairy Garden	Early Spring (January-March)	Grayslake Library	0	0	0	Time to get creative and have fun! We'll show you ho...
6	ES06	Create an Early Spring Container Garden	Early Spring (January-March)	Zoom	0	0	0	Why wait until summer when you can fill your contain...
7	ES07	Get Your Garden Ready for Spring	Early Spring (January-March)	Google Chat	0	0	0	Come learn the best ways to prepare your garden for ...
8	FA01	Using Native Plants in the Landscape	Fall (September/October)	Zoom	0	0	0	If you are interested in using Illinois native plants in y...
9	FA02	Adding Fall Color to Your Garden	Fall (September/October)	Countryside	0	0	0	Autumn can bring a wide range of colors to your land...
10	FA03	Updating Your Containers for Fall	Fall (September/October)	Grayslake Library	0	0	0	Do your containers need some freshening up for fall?...
11	FA04	Spring-Blooming Bulbs	Fall (September/October)	Zoom	0	0	0	Be inspired by wide array of colors, forms, and fragra...
12	FA05	It's Not Too Late to Plant Perennials!	Fall (September/October)	Google Chat	0	0	0	As the nights get cooler and Indian Summer sets in , ...
13	FA06	Dress up your Home for Autumn	Fall (September/October)	Zoom	0	0	0	Just in time for Halloween and fall entertaining, we w...
14	FA07	Creating Focal Points in Your Garden	Fall (September/October)	Countryside	0	0	0	Basic design principles for incorporating furniture, str...
15	HO01	Make Your Own Holiday Planter	Holiday (November/December)	Grayslake Library	0	0	0	We'll show everything you need to know to create lon...
16	HO02	Decorating Wreathes	Holiday (November/December)	Zoom	0	0	0	We will demonstrate how to embellish your live or arti...
17	HO03	Landscape Design 101: From Planning to Planting	Holiday (November/December)	Google Chat	0	0	0	Does your yard need an update? Wondering how to ...
18	HO04	Creating Gardens with Winter Interest	Holiday (November/December)	Zoom	0	0	0	Want a landscape with four-season interest? We will ...
19	HO05	Preparing Your Garden for Fall and Winter	Holiday (November/December)	Countryside	0	0	0	Various techniques for pruning, mulching, and clean...
20	HO06	Festive Holiday Plants	Holiday (November/December)	Grayslake Library	0	0	0	Want to fill your home with blooming plants for the ho...
21	LS01	Great Combinations for Container Gardens	Late Spring (April/May)	Zoom	0	0	0	Find out what's hot in pots. We combine unusual pla...
22	LS02	Growing Vegetables	Late Spring (April/May)	Countryside	0	0	0	From planning to planting, get tips for crop rotation, p...
23	LS03	Attracting Birds and Butterflies to Your Garden	Late Spring (April/May)	Grayslake Library	0	0	0	Want to create a natural habitat to attract birds and b...
24	LS04	Creating an Blooming Garden in a Basket	Late Spring (April/May)	Zoom	0	0	0	We will show you how to combine potted blooming a...
25	LS05	Growing Fantastic Fruits	Late Spring (April/May)	Google Chat	0	0	0	You don't need an orchard-sized property to grow yo...
26	LS06	Landscape Design 101: From Planning to Planting	Late Spring (April/May)	Zoom	0	0	0	Does your yard need an update? Wondering how to ...
27	SU01	Edible Landscaping	Summer (June-August)	Countryside	0	0	0	Growing our own food has become more popular an...
28	SU02	Growing Beautiful Roses Easily	Summer (June-August)	Grayslake Library	0	0	0	You will learn the about selecting, growing, and main...
29	SU03	Gardening in the Shade	Summer (June-August)	Zoom	0	0	0	We will highlight shade-loving plants that work well a...
30	SU04	Growing and Using Herbs	Summer (June-August)	Google Chat	0	0	0	Ready to grow your own herbs? Come see, touch, s...
31	SU05	Tropical Plants	Summer (June-August)	Zoom	0	0	0	Give your garden that tropical look and feel. Tropical ...
32	SU06	Sensational Shrubs	Summer (June-August)	Countryside	0	0	0	We will help you discover a wide range of shrubs to c...

