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M-WEB CA Project Bookshop Reimagined – StrandBookstore

1. **Creation of Database**
2. Open Visual Studio
3. Create an ASP.NET Web Application (.NET Framework) e.g. Strand
4. On the next screen, choose Web Forms and choose Individual User Accounts for Authentication
5. Open Web.config to change the DefaultConnection to the following:

<add name="DefaultConnection" connectionString="Data Source=.;Initial Catalog=StrandBookstore;Integrated Security=True" providerName="System.Data.SqlClient" />

1. Open Default.aspx in browser
2. After the page has loaded in the browser, click on Register to create a user e.g. test@gmail.com / Test12!
3. Open SSMS to check that the StrandBookstore database has been created with the user credentials stored in its AspNetUsers data table
4. While in SSMS and with StrandBookstore selected, key in the following SQL commands to create the following Book and Category data tables in the same database:

CREATE TABLE Book (

BookID int PRIMARY KEY IDENTITY(1,1) NOT NULL,

Title varchar(120) NOT NULL,

CategoryID int NOT NULL,

ISBN varchar(22) NOT NULL,

Author varchar(64) NOT NULL,

Stock int NOT NULL,

Price decimal(18, 2) NOT NULL

);

CREATE TABLE Category (

CategoryID int PRIMARY KEY IDENTITY(1,1) NOT NULL,

Name varchar(16) NOT NULL

)

1. We designed an Orders data table for our website to store and retrieve book orders and this is created in SSMS with the following:

CREATE TABLE Orders (

       OrderID int PRIMARY KEY IDENTITY(1,1) NOT NULL,

Id nvarchar(128) FOREIGN KEY REFERENCES AspNetUsers(id),

BookID int FOREIGN KEY REFERENCES Book(BookID),

       Title varchar(120) NOT NULL,

       CategoryID int NOT NULL,

       ISBN varchar(22) NOT NULL,

       Author varchar(64) NOT NULL,

       Price decimal(18, 2) NOT NULL,

       Purchased bit NOT NULL,

       Quantity int NOT NULL

);

1. Check to see that the Orders table has been properly set up and ensure that the foreign key relationships are tied correctly e.g. Id to AspNetUsers(id) and BookID to Book(BookID)
2. Save your database in SSMS
3. **Loading of Books**
   1. Return to Visual Studio
   2. Right-click on the Solution to add a New Project which is a Console App (.NET Framework) and name it e.g. DataReader
   3. Add a new ADO.NET Entity Data Model called “Mybook” which links to the “Book” and “Category” data tables
   4. Right-click on DataReader project and set it as the StartUp Project
   5. Paste the following code into its Program.cs to set up the data-reading functionality:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.IO;

using System.Data.Entity.Validation;

namespace DataReader

{

class Program

{

static Mybooks shop;

static int Name2Cat(string cat)

{

List<Category> result = shop.Categories.Where

(c => c.Name.Equals(cat)).ToList<Category>();

if (result.Count == 0)

{

Category c = new Category { Name = cat };

shop.Categories.Add(c);

shop.SaveChanges();

return c.CategoryID;

}

else

return result[0].CategoryID;

}

static void Main(string[] args)

{

using (shop = new Mybooks())

{

int k = 1;

StreamReader r = new StreamReader("books.txt");

string line;

while ((line = r.ReadLine()) != null)

{

string title = line;

string cat = r.ReadLine();

string isbn = r.ReadLine();

string author = r.ReadLine();

string price = r.ReadLine();

r.ReadLine();

Console.WriteLine("{0}/{1}", isbn, title);

Book b = new Book

{

Title = title,

CategoryID = Name2Cat(cat),

ISBN = isbn,

Author = author,

Price = Decimal.Parse(price),

Stock = 10

};

try

{

shop.Books.Add(b);

shop.SaveChanges();

}

catch (Exception e)

{

foreach (DbEntityValidationResult v in shop.GetValidationErrors())

foreach (DbValidationError err in v.ValidationErrors)

Console.WriteLine("{0}/{1}", err.ErrorMessage,

err.PropertyName);

}

}

r.Close();

}

}

}

}

* 1. Save the following book list as books.txt in the DataReader\bin\Debug\ folder which is where the DataReader.exe will be located after build:

**The Trials of Apollo Book Two The Dark Prophecy**

**children**

**9781484746424**

**Rick Riordan**

**19.99**

**The Wonderful Things You Will Be**

**children**

**9780385376716**

**Emily Winfield Martin**

**17.99**

**A Court of Wings and Ruin**

**children**

**9781619634480**

**Sarah J. Maas**

**18.99**

**Lord of Shadows (The Dark Artifices)**

**children**

**9781442468405**

**Cassandra Clare**

**24.99**

**The Day the Crayons Quit**

**children**

**9780399255373**

**Drew Daywalt and Oliver Jeffers**

**17.99**

**If Animals Kissed Good Night**

**children**

**9780374300210**

**Ann Whitford Paul and David Walker**

**7.99**

**The Book with No Pictures**

**children**

**9780803741713**

**B. J. Novak**

**17.99**

**The Hate U Give**

**children**

**9780062498533**

**Angie Thomas**

**17.99**

**Ada Twist, Scientist**

**children**

**9781419721373**

**Andrea Beaty and David Roberts**

**17.95**

**The Trials of Apollo, Book 1: The Hidden Oracle**

**children**

**9781484732748**

**Rick Riordan**

**19.99**

**The Girl Who Drank the Moon**

**children**

**9781616205676**

**Kelly Barnhill**

**16.95**

**We're All Wonders**

**children**

**9781524766498**

**R. J. Palacio**

**18.99**

**The Intelligent Investor**

**finance**

**9780060555665**

**Benjamin Graham and Jason Zweig**

**22.99**

**Set for Life**

**finance**

**9780997584714**

**Scott Trench**

**29.99**

**The Millionaire Next Door**

**finance**

**9781589795471**

**Thomas J. Stanley and William D. Danko**

**16.95**

**Adaptive Markets**

**finance**

**9780691135144**

**Andrew W. Lo**

**37.50**

**Profit First**

**finance**

**9780735214149**

**Mike Michalowicz**

**27.00**

**Fanatical Prospecting**

**finance**

**9781119144755**

**Jeb Blount and Mike Weinberg**

**27.00**

**How to Day Trade for a Living**

**finance**

**9781535585958**

**Andrew Aziz**

**19.99**

**The End of Theory**

**finance**

**9780691169019**

**Richard Bookstaber**

**29.95**

**Venture Deals**

**finance**

**9781119259756**

**Brad Feld and Jason Mendelson**

**49.95**

**Black Edge**

**finance**

**9780812995800**

**Sheelah Kolhatkar**

**28.00**

**Business Adventures: Twelve Classic Tales from the World of Wall Street**

**finance**

**9781497644892**

**John Brooks**

**18.99**

**The Truth About Your Future**

**finance**

**9781501163807**

**Ric Edelman**

**26.00**

**When Breath Becomes Air**

**non-fiction**

**9780812988406**

**Paul Kalanithi**

**25.00**

**Born a Crime: Stories from a South African Childhood**

**non-fiction**

**9780399588174**

**Trevor Noah**

**28.00**

**The Stranger in the Woods: The Extraordinary Story of the Last True Hermit**

**non-fiction**

**9781101875681**

**Michael Finkel**

**25.95**

**The Moth Presents All These Wonders: True Stories About Facing the Unknown**

**non-fiction**

**9781101904404**

**Catherine Burns and Neil Gaiman**

**25.00**

**The Most Beautiful: My Life with Prince**

**non-fiction**

**9780316468978**

**Mayte Garcia**

**27.00**

**The Rules Do Not Apply: A Memoir**

**non-fiction**

**9780812996937**

**Ariel Levy**

**27.00**

**Letterman: The Last Giant of Late Night**

**non-fiction**

**9780062377210**

**Jason Zinoman**

**28.99**

**Richard Nixon: The Life**

**non-fiction**

**9780385537353**

**John A. Farrell**

**35.00**

**Talking as Fast as I Can: From Gilmore Girls to Gilmore Girls (and Everything in Between)**

**non-fiction**

**9780425285176**

**Lauren Graham**

**28.00**

**Born to Run**

**non-fiction**

**9780307279187**

**Bruce Springsteen**

**32.50**

**The Black Hand: The Epic War Between a Brilliant Detective and the Deadliest Secret Society in American History**

**non-fiction**

**9780544633384**

**Stephan Talty**

**28.00**

**The Road to Jonestown: Jim Jones and Peoples Temple**

**non-fiction**

**9781476763828**

**Jeff Guinn**

**28.00**

**The Art of Overwatch**

**technical**

**9781506703671**

**Blizzard**

**49.99**

**Overwatch: Anthology Volume**

**technical**

**9781506705408**

**BLIZZARD ENTERTAINMENT and Matt Burns**

**19.99**

**Cracking the Coding Interview**

**technical**

**9780984782857**

**Gayle Laakmann McDowell**

**26.79**

**Deep Learning**

**technical**

**9780262035613**

**Ian Goodfellow and Yoshua Bengio**

**80.00**

**Hands-On Machine Learning with Scikit-Learn and TensorFlow**

**technical**

**9781491962299**

**AurÃƒÂ©lien GÃƒÂ©ron**

**49.99**

**The Art of Persona 5**

**technical**

**9780744017311**

**Prima Games**

**39.99**

**Everybody Lies:**

**technical**

**9780062390851**

**Seth Stephens-Davidowitz**

**27.99**

**CompTIA A+ Certification All-in-One Exam Guide**

**technical**

**9781259589515**

**Mike Meyers**

**60.00**

**Python Crash Course**

**technical**

**9781593276034**

**Eric Matthes**

**39.95**

**The Legend of Zelda**

**technical**

**9781506703350**

**Nintendo**

**39.99**

**The Legend of Zelda: Breadth of the Wild**

**technical**

**9781911015222**

**Piggyback**

**39.99**

* 1. Build and run the DataReader program in Visual Studio
  2. Check in SSMS that the books and categories have been loaded into the respective data tables
  3. Unload DataReader project

1. **Creation of Site Master**
2. In Visual Studio, open the Site.Master page
3. Do the necessary edits to Site.Master including but not limited to:
   1. Overwriting bootstrap.css elements in site.css
   2. Writing new css code in Site.Master
   3. Creating Menus and corresponding Site Maps
   4. Opening Web.config to add alternate Site Maps and then declaring the alternates in Site.Master
   5. Writing PageLoad events for Site.Master
   6. Creating dummy placeholder pages (via Web Forms with Master Page) e.g. p0, p1, p2 to simulate Default.aspx
4. Use PageLoad to hide/show Admin panel through user authentication
5. **Creation of Individual WebForms**
   1. Creation of AssignRoles.aspx
      1. In SSMS, create the required tables in AspNetRoles (to store role categories)
      2. After creating the aspx page, create a new user e.g. hi@adam.com / Adampng12! and assign it “Owner” status
      3. Log in as new user and go to AssignRoles.aspx to assign it as “Owner”
      4. Load Default.aspx to ensure user can access Admin panel
   2. Creation of

Miscellaneous Notes

|  |  |
| --- | --- |
| Order.cs | Add the following above the Order attribute  [Key]  [DatabaseGenerated(DatabaseGeneratedOption.Identity)] |
| *Hidden* VS *folder* | Delete the folder and things might work! |