

Jerry  
Crow



The  
Abandoned  
Farm

Presentation Date : 06/07/2019

[www.JerryCrow.com](http://www.JerryCrow.com)

Full Stack Development Project

## About Me

I am a “solutions developer.” As a kid, I was always building creations with Lego. I would continuously modify and make my creations better. I was able to take that passion and channel it into building software solutions.

I began my computer education at Southwest Baptist University and completed a Computer Information Systems degree at Missouri State University. I spent the first part of my career working at DST Systems. I built solutions for the desktop using Visual Basic. The last 7 years, I worked on many projects that involved team and solo work using Java Core. I built and supported a reporting product that would take mainframe reports and break them down into individual work items. The items would be formatted and placed in DST’s AWD (Automated Work Distributer) product. I also spent a year working and learning HTML and CSS for a DST product, FAN Web. DST was purchased by SS&C, and many of us were laid off.

Coming to Centriq has been a wonderful opportunity for me. I always had an interest to expand my computer training to include web technologies, but I was never given the opportunity to learn these new skills. Centriq has given me that training, and I have loved every minute of it. I am excited about my career and where my new knowledge will take me. As I leave Centriq and begin looking for a job, I will continue to learn. I will be taking classes in Angular in my spare time, and I will also be back at Centriq in July for training in Azure.

When I am not working with new technologies, I enjoy spending time with my family, working at my church, and adding to my Star Wars collection.

## Project Story



George MacDonald owns 3 farms. During the last 5 years, he has been running fall events to better utilize his farms. The events include a Haunted House, Pumpkin Patch, Paint Ball, Hay Ride, Fun Barn, and Corn Maze. George was looking for a system that would allow customers to register for the Halloween events. This project is a prototype to solve George MacDonald's needs.

# Project Requirements

## **Description:**

Abandoned Farm Website contains information about the farm and its events. It is also a reservation system that allows customers to setup family or friends and reserve events for them.

## **Anonymous Users:**

Anonymous Users can browse the website, learn of the events, and information about the farm.

## **Customers:**

Customers can create an account and set up the attendees in their party. The attendees can be assigned reservations.

## **Employees:**

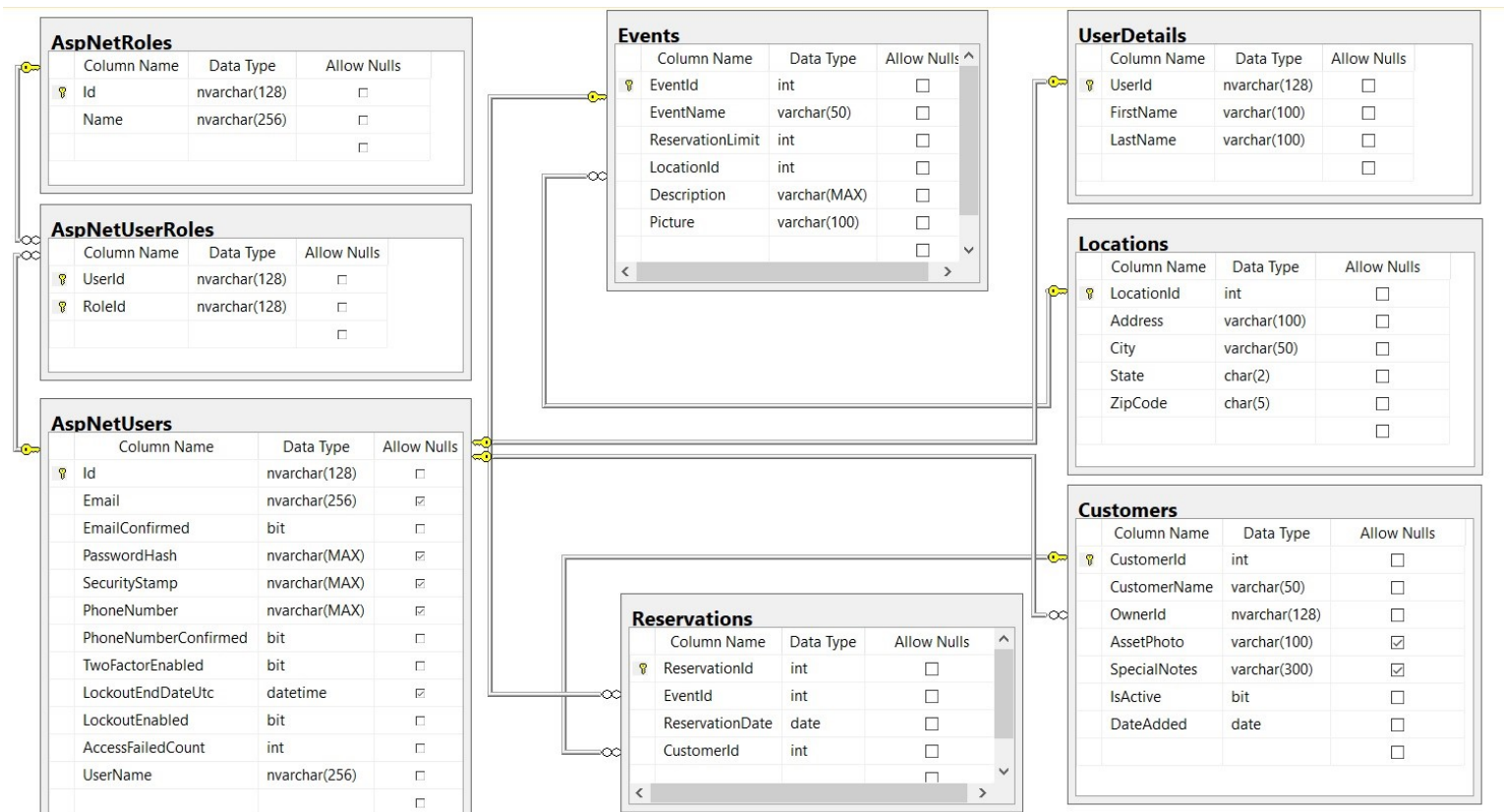
Employees also have the ability to create accounts and attendees. They have complete access to add and edit attendees and reservations. They cannot override the reservation limits. They also have access to the farm information webpage.

## **Administrator:**

The administrator has full access to attendees, reservations, and the farm information page. The administrator can also add additional events and locations to the website.

# Data Base Schema

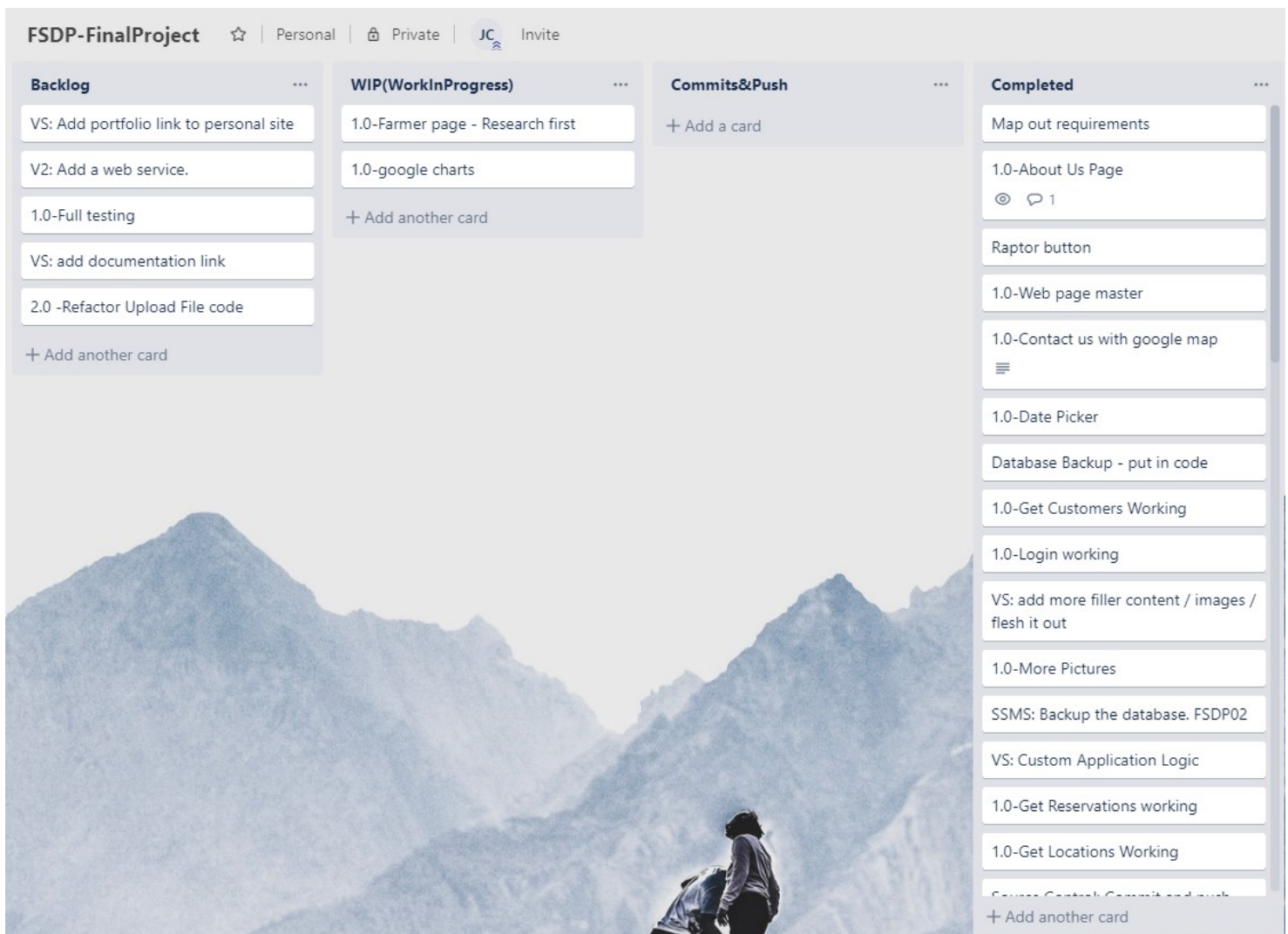
The schema started out as the standard reservation database. The events table was added and the location table was changed to accommodate many of the events located at the same address. Pictures were also added to the events so they could be displayed on the website main index. Identity tables were added to give more flexibility to Linq calls. All picture fields store the file name and not the actual file. The physical photo files are stored in the content folder.





# Kanban

Trello was used to manage the project from start to finish. It was used for initial planning, mapping out requirements, and setting specific tasks that were needed to complete the project. Trello was essential to time management and tracking work flow. It was also used in daily stand-ups for discussing what was accomplished, any road blocks, and next steps to be taken.



# Use Case

	Anonymous	Customer	Admin	Employee
<b>Customers</b>				
Index		X Only theirs	X	X
Details		X Only theirs	X	X
Create		X	X	X
Edit		X Only theirs	X	X
Delete			X	X
<b>Events</b>				
Index			X	
Details			X	
Create			X	
Edit			X	
Delete			X	
<b>Locations</b>				
Index			X	
Details			X	
Create			X	
Edit			X	
Delete			X	
<b>Reservations</b>				
Index		X Only theirs	X	X
Details			X	X
Create		X	X	X
Edit			X	X
Delete			X	X
<b>Home</b>				
Index	X	X	X	X
About	X	X	X	X
Contact	X	X	X	X
Farm Info			X	X

A use case diagram was built to identify what access each role would have in the Abandoned Farm Website. The big difference in this project was customers do not have access to change the reservation once it is made.

# Custom Code

USDA National Farmers Market Directory API

Enter Valid Zip Code

Get Farmers Markets in area

Miles	Market Name
3.2	INDEPENDENCE UPTOWN MARKET
4.3	Raytown Farmers' Market
6.0	Urbavore Urban Farm and Market

```
37 function parseResults(searchResults) {
38   let counter = 0;
39   let tempText = "<table id='USDAMarket'>"
40   tempText += "<tr>"
41   tempText += "<th>Miles</th>"
42   tempText += "<th>Market Name</th>"
43   tempText += "</tr>"
44
45
46   for (counter in searchResults.results) {
47     // Splitting on spaces. The first array item contains the miles.
48     let milesArray = searchResults.results[counter].marketname.split(" ");
49     let marketName = "";
50     // If the word "Didn't" is found in the first item, the zip code
51     // was invalid. Update the table with a message.
52     if (milesArray[0] == "Didn't")
53     {
54       // clear out the miles array to be empty
55       milesArray[0] = " ";
56       marketName = "That zip code was not found!";
57     }
58     else
59     {
60       marketName = searchResults.results[counter].marketname.slice(milesArray[0].length + 1);
61     }
62     // Slice at first space index and get the name of the market
63     tempText += "<tr><td>"
64     tempText += milesArray[0];
65     tempText += "</td>"
66     tempText += "<td>"
67     tempText += marketName;
68     tempText += "</td></tr>"
69   }
70   tempText += "</table>"
71   document.getElementById("USDAData").innerHTML = tempText;
72 }
73 }
```

One of the requirements of the project was to use an API service. The USDA has a service that displays farmers markets in the area.

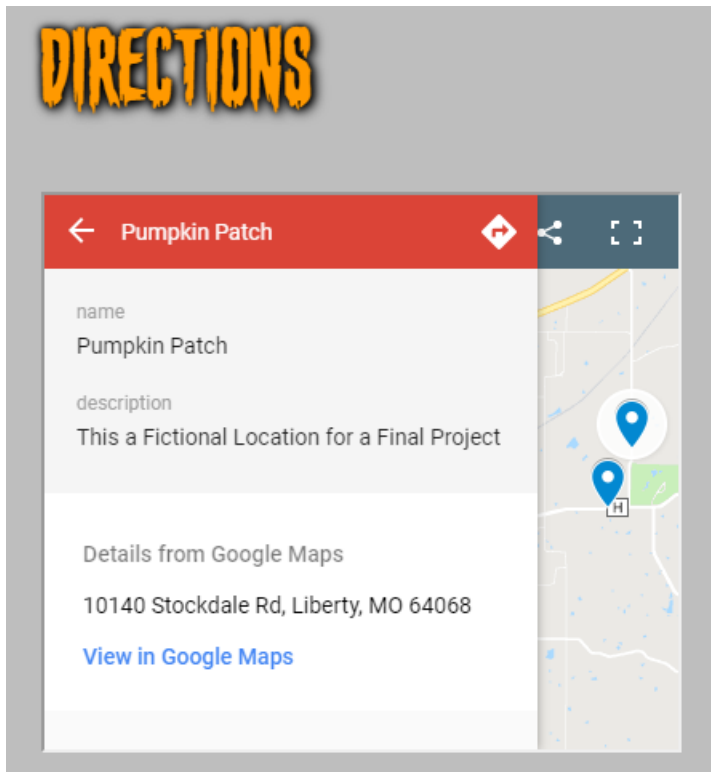
The USDA site showed how to display the data; however, the code did not work. A Javascript function was built to read and to format Json data into a HTML table.

The USDA data contained the mileage and the name in the same string.

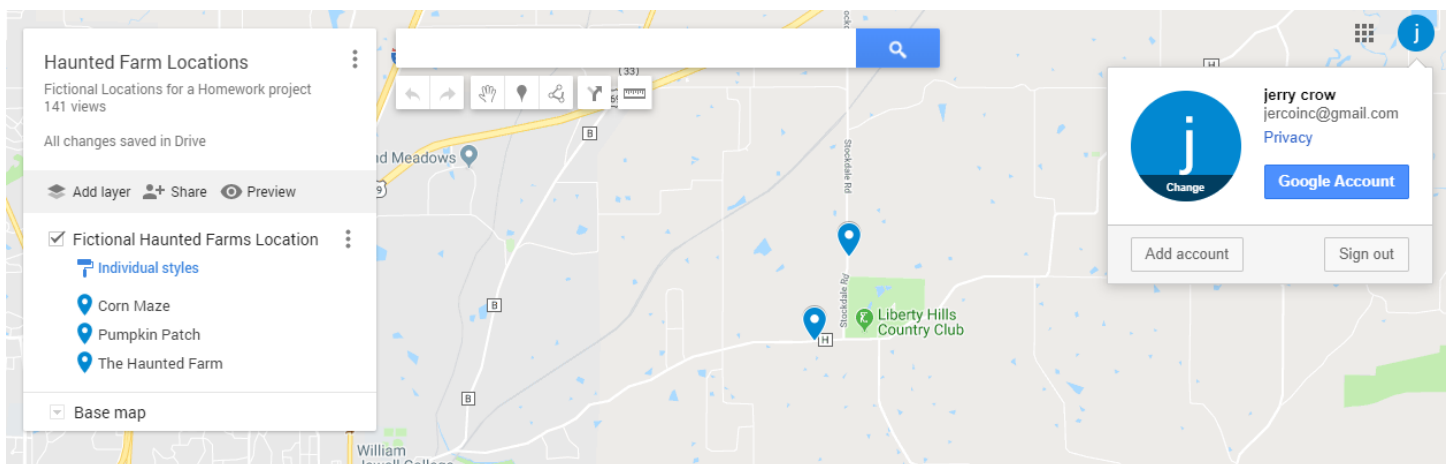
The Javascript methods `split()` and `slice()` were used.



# Fun With Maps



One of the challenges was using an embedded map that contained multiple landmarks. After some research, this was accomplished with Google Maps by setting up a map overlay that was tied to a Google account. It automatically gave the embedded link to use on the website.



# Flexbox

The event containers in the web page template would display with different heights depending on how much text was in each one. After some research, Flexbox was used to ensure all event boxes had the same height. Media queries were used to make the event boxes responsive.

Flexbox was not taught in the course. All research was performed independently.



## CSS

```
935 .flex-container {
936   display: flex;
937   flex-wrap: wrap;
938 }
939
940
941 .flex-container > div {
942   background-color: #FF9900;
943   width: 30%;
944   margin: 15px;
945   line-height: 20px;
946   font-size: 20px;
947 }
948
949
950 @media (max-width: 900px) {
951   .flex-container > div {
952     width: 50%;
953   }
954 }
955
956
957
958 @media (max-width: 600px) {
959   .flex-container > div {
960     display: block;
961     width: 100%;
962   }
963 }
```

## HTML

```
82 <div class="flex-container">
83   @foreach (var item in Model)
84   {
85
86     <div class="center team-member">
87       <div class="team-image">
88         @*src="~/Content/Images/@Html.DisplayFor(modelItem => item.ProductImage)"*@
89         
90         <div class="overlay">
91           <a class="preview btn btn-outlined btn-primary" href="~/Content/Images/Events/@Html.DisplayFor(modelItem => item.ProductImage)" />
92         </div>
93       </div>
94       <div class="team-content fade-up">
95         <h2>@Html.DisplayFor(modelItem => item.EventName)</h2>
96         <h5>
97           @Html.DisplayFor(modelItem => item.Location.Address)<br />
98           @Html.DisplayFor(modelItem => item.Location.City) @Html.DisplayFor(modelItem => item.Location.State)
99         </h5>
100        <p><strong>@Html.DisplayFor(modelItem => item.Description)</strong></p>
101      </div>
102    </div>
103  }
104 </div>
```

## SUMMARY OF QUALIFICATIONS

- Solid foundational knowledge of designing and developing full-stack web applications using .NET framework.
- Software Developer with experience in analysis, design, and the development of small and large projects using Java and VB.
- Built customized solutions to improve business processes and operations that increased profitability.

## TECHNICAL SKILLS

**Front End:** HTML5, JavaScript, jQuery, jQueryUI, CSS3, Responsive/Mobile Web Development, Bootstrap

**Middle Tier:** Visual Studio, C#.NET, ASP.NET, LINQ, MVC, EF

**Back End:** ADO.NET, SQL, SQL Server, SSMSE

**Other:** Java, Visual Basic, Git, NodeJS, Apache Tomcat, DB2, MySql

## INDEPENDENT DEVELOPMENT PROJECTS

- **Personal Site:** [www.jerrycrow.com](http://www.jerrycrow.com)
- **U Store:** Created a secure application for managing product data. Application is built to simulate an online store front with a shopping cart. Administrators have the ability to manage product, category and vendor data.
- **Final Project:** Created a secure, data-driven ASP.NET MVC application from design through deployment for managing the tracking reservations for a farm with fall attractions. Customers have the ability to make reservations, and administrators have the ability to manage and assist in those reservations.

## PROFESSIONAL EXPERIENCE

**DST SYSTEMS**, Kansas City, MO

1995 – 2018

### Programmer Analyst

- Supported DST open source apps built in Java framework.
- Maintained client web templates in DST Fan Web product.
- Built Java application that processed client emails, detaching xlsx files, and converting them to a DST format for processing.
- Wrote Java application to convert mainframe reports to PDF's and emailed them to clients.
- Wrote several Java applications that gathered data from external databases. Data was then converted to XML language so items could be utilized by AWD Automated Work Distributor.
- Designed and built a custom Java application that ran multiple client queries and converted them to DST flat files. The program used JDBC to connect to different databases, including DB2, Teiid, and Oracle. All program settings were stored in a database.

- Designed and built a Java application that read complex client mainframe reports and converted the specified transactions into XML files used by DST work distributor. This program was designed to be easily expanded to include multiple reports by adding new classes for each new report requirement.
- Rewrote and adjusted a variety of internally developed Visual Basic applications to Java.
- Built and supported AWD Rip servers.
- Developed HTML forms for High Speed Data Entry product.
- Developed check file generator for BottomLine Checkguard product.
- Developed Crystal Reports viewer with security options using Visual Basic.
- Participated in DST Small Client Training. Attended online classes in personal time.
- Updated skills by attending Java and HTML classes at community colleges for 3 years.

**COUNTRY MEADOWS BAPTIST CHURCH, Kansas City, MO**

2000 – 2009

**Voluntary Technology Specialist**

- Designed and built a Visual Basic attendance tracking application.
- Built and maintained Windows server. Maintained all staff accounts.
- Designed and installed Cat5 network in new building. Setup all routers and connectivity between old and new buildings.
- Designed and built wireless network in building using multiple wireless routers.
- Built and repaired computers. Installed Windows and setup all software.
- Designed and installed projector media system.

**TECHNICAL TRAINING AND EDUCATION**

**CENTRIQ TRAINING, Kansas City, MO**

02/2019 – 06/2019

**Full-Stack Developer Program - Awarded Centriq Student of the Month**

*Technical Competencies:*

- |                                      |  |
|--------------------------------------|--|
| • MVC Framework                      | • Pair Programming   |
| • Trouble Shooting & Debugging       | • Code Review  |
| • Agile/Scrum (Created Team Project) | • Professionalism, Teamwork, Problem Solving & Effective Communication |
| • Website Deployment                 |  |

**MISSOURI STATE UNIVERSITY, Springfield, MO**

**B.S. in Computer Information Systems**

**SOUTHWEST BAPTIST UNIVERSITY, Bolivar, MO**

**B.A. in Religious Studies**

**Computer Minor**

**PROFESSIONAL ORGANIZATIONS**

- JavaScript KC Group
- Kansas City Web Pro's
- Kansas City Java User Group