



 **MAID IN KC** 

**RESERVATION  
SYSTEM**

**Brought to you by Elizabeth Needham**

Final Presentation Date: Thursday, December 4<sup>th</sup> 2020

# ABOUT ME

After 15 plus years in customer service, I had hit a wall. I was frustrated and felt that I needed a big change if I wanted to reach my full potential. I tried my hand at many things, traveled for years, learned so much, made amazing connections and had a blast, but something was missing. I needed to find a career that would be challenging and allow me to realize my personal and financial goals.

When I started researching IT, a lightbulb turned on and I felt a weight lift off my shoulders. Here was a field that is ever expanding and necessary in almost every aspect of our daily lives, making it an excellent fit for me. I will always be faced by new challenges and opportunities for growth and learning, and with remote work a viable option I can continue my world travels. I'm excited that my new career will allow me to have the lifestyle I desire.

Centriq has re-iterated some personal traits, I have no issue asking for help and I am not afraid to leverage the knowledge of my team – allowing me to accomplish exponentially more than I could alone. I bring people together. During training, I instigated countless group study sessions through zoom and in person that helped all involved achieve project goals, deepen knowledge by explaining code to others, and improve our ability to communicate using technical terms.

This may sound silly, but my favorite thing about coding so far is when my code works! The best feeling is when I've been coding to build certain functionality, I have had to pour over notes, tutorials, step-by-steps, and I feel like it's all in there, I launch and ---- IT WORKS! I also enjoying making things more efficient and getting things to work that weren't working before, it's a great sensation.

## PROJECT BRIEF

Reservation System – This project is responsive application created for a company with multiple locations that allows users to create an account, create assets and make reservations for said assets. Locations have a daily reservation limit that is overridable by the admin.

Must have: ASP.Net MVC, Login Capabilities, and a database.

## REQUIREMENTS BY ROLE

Admin	Employee	Client
CRUD functionality for Locations	View all reservations by location	CRUD functionality for personal account
View all reservations	Add/edit asset notes	CRUD functionality for asset
Ability to override reservation limit		Asset photo upload

DATABASE

SCHEMA



USE CASE

DIAGRAMS



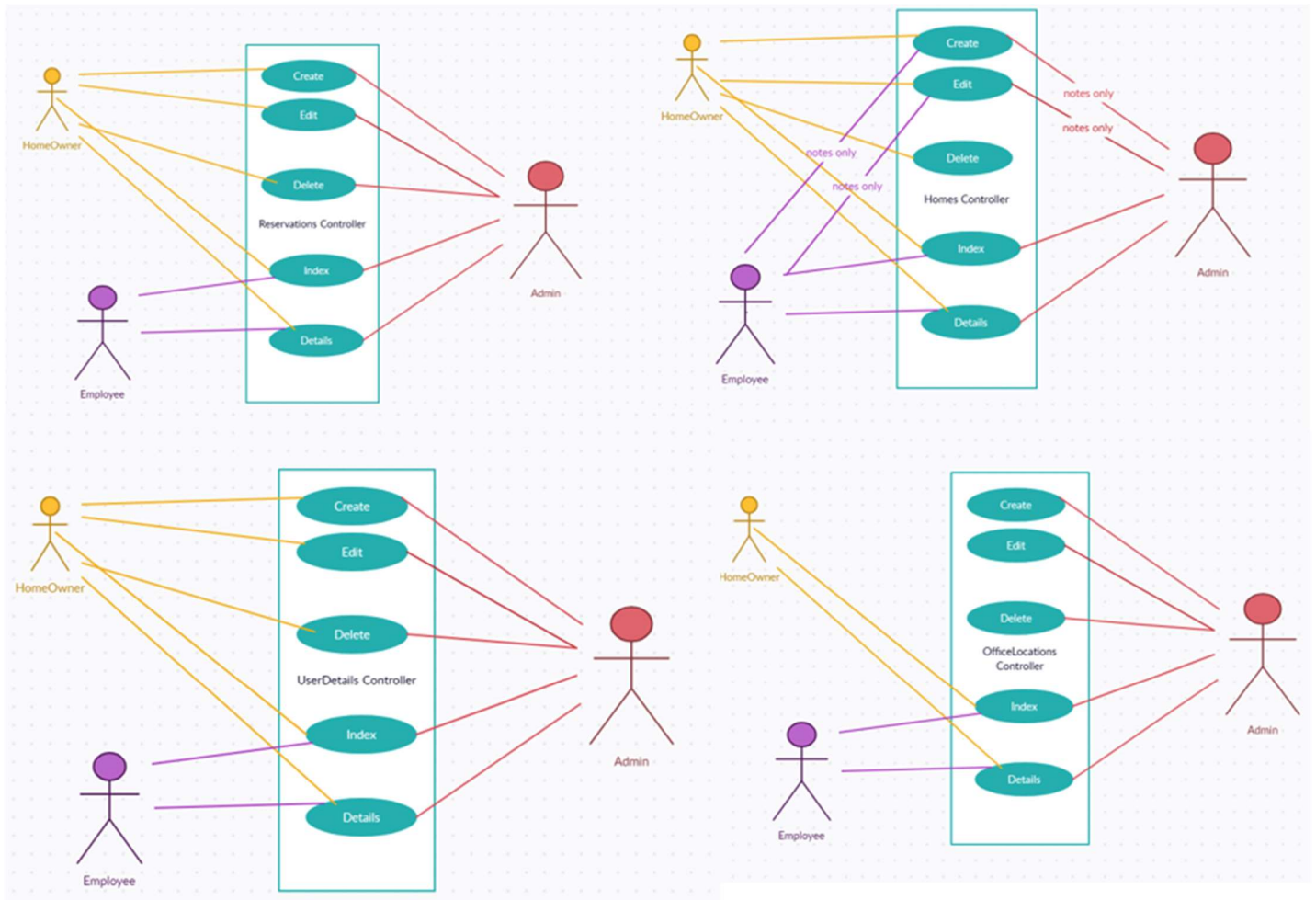
Locations			
Column Name	Data Type	Allow Nulls	
LocationId	int	<input type="checkbox"/>	
LocationName	nvarchar(50)	<input type="checkbox"/>	
Address	varchar(100)	<input type="checkbox"/>	
City	varchar(100)	<input type="checkbox"/>	
State	char(2)	<input type="checkbox"/>	
ZipCode	char(5)	<input type="checkbox"/>	
ReservationLimit	tinyint	<input type="checkbox"/>	

Reservations			
Column Name	Data ...	Allow Nulls	
ReservationId	int	<input type="checkbox"/>	
HomeId	int	<input type="checkbox"/>	
LocationId	int	<input type="checkbox"/>	
ReservationDate	date	<input type="checkbox"/>	
ServiceId	int	<input checked="" type="checkbox"/>	

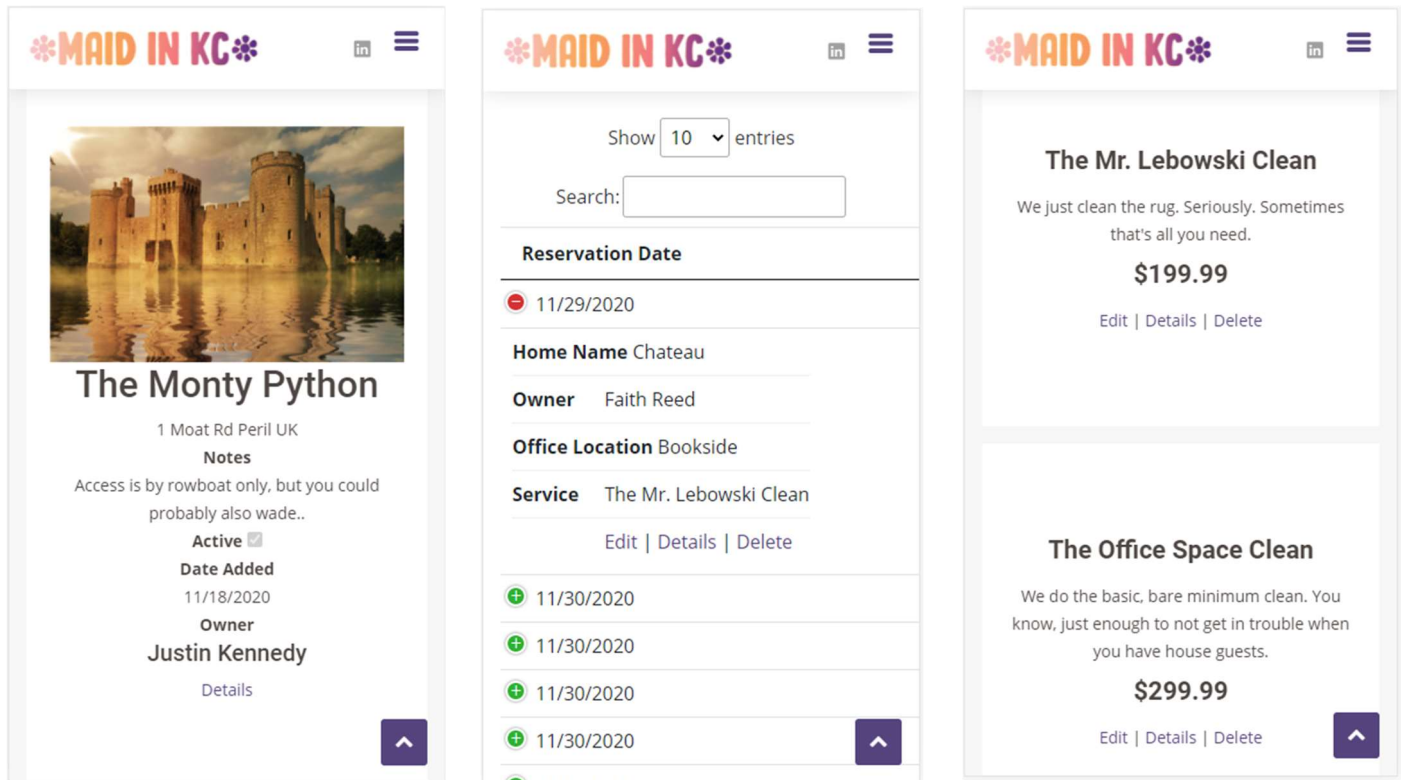
Services			
Column Name	Data Type	Allow Nulls	
ServiceId	int	<input type="checkbox"/>	
ServiceType	varchar(100)	<input type="checkbox"/>	
Price	money	<input type="checkbox"/>	
Description	varchar(300)	<input type="checkbox"/>	

Homes			
Column Name	Data Type	Allow Nulls	
HomeId	int	<input type="checkbox"/>	
HomeName	varchar(50)	<input type="checkbox"/>	
Address	varchar(100)	<input type="checkbox"/>	
City	varchar(100)	<input type="checkbox"/>	
State	char(2)	<input type="checkbox"/>	
ZipCode	char(5)	<input type="checkbox"/>	
OwnerId	nvarchar(128)	<input type="checkbox"/>	
HomePhoto	varchar(50)	<input checked="" type="checkbox"/>	
SpecialNotes	varchar(300)	<input type="checkbox"/>	
IsActive	bit	<input type="checkbox"/>	
DateAdded	date	<input type="checkbox"/>	

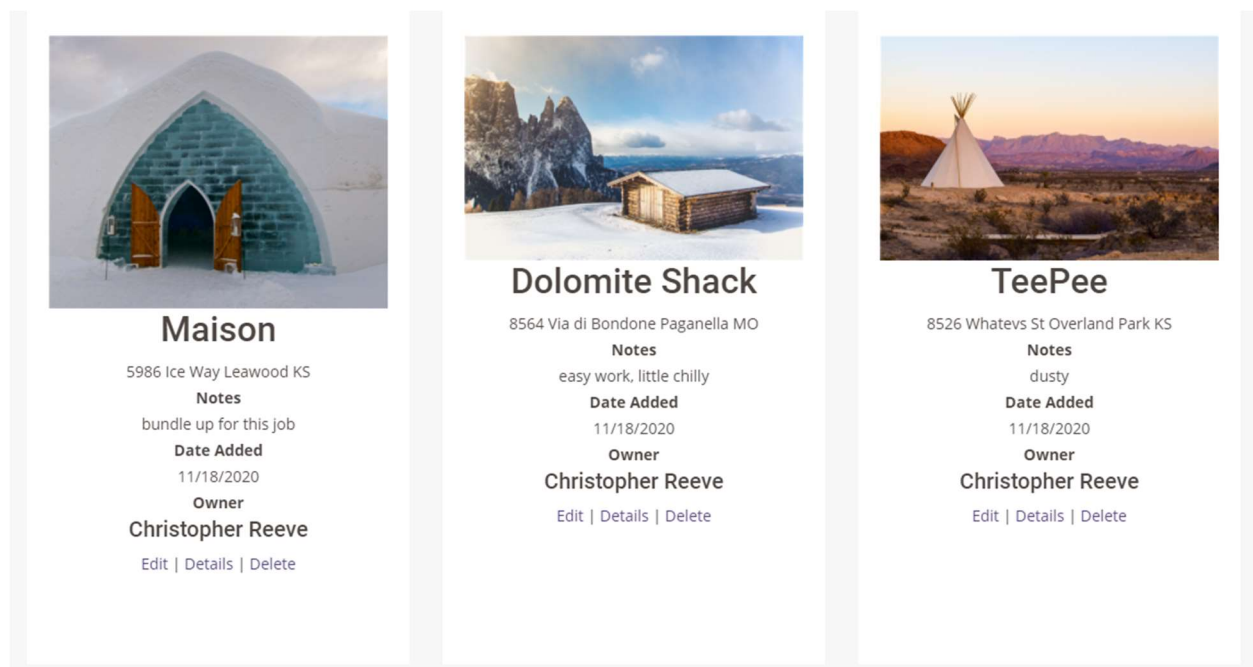
UserDetails			
Column Name	Data Type	Allow Nulls	
UserId	nvarchar(128)	<input type="checkbox"/>	
CompanyName	nvarchar(100)	<input checked="" type="checkbox"/>	
FirstName	varchar(50)	<input type="checkbox"/>	
LastName	varchar(50)	<input type="checkbox"/>	
UserPhoto	varchar(50)	<input checked="" type="checkbox"/>	



# STYLED AND RESPONSIVE VIEWS



The above views are beautifully styled and responsive for easy mobile access. On the left, the Homes (Assets) Index view is in a nice, tiled view that fades in as you scroll and responds to your screen size. Center, the reservations list is in a searchable datatable that is also responsive and to the right, the services index is also done in a responsive, tiled view which creates depth on the screen. Below is the homes view as seen from a laptop.





# UNIQUE CODE

Here I used LINQ and if else statements in the Reservations Controller to

- Filter reservations for only the client who is currently logged in
- Show employees and clients only future reservations or day of reservations
- Allow admin to see all the reservations for each client, past and present

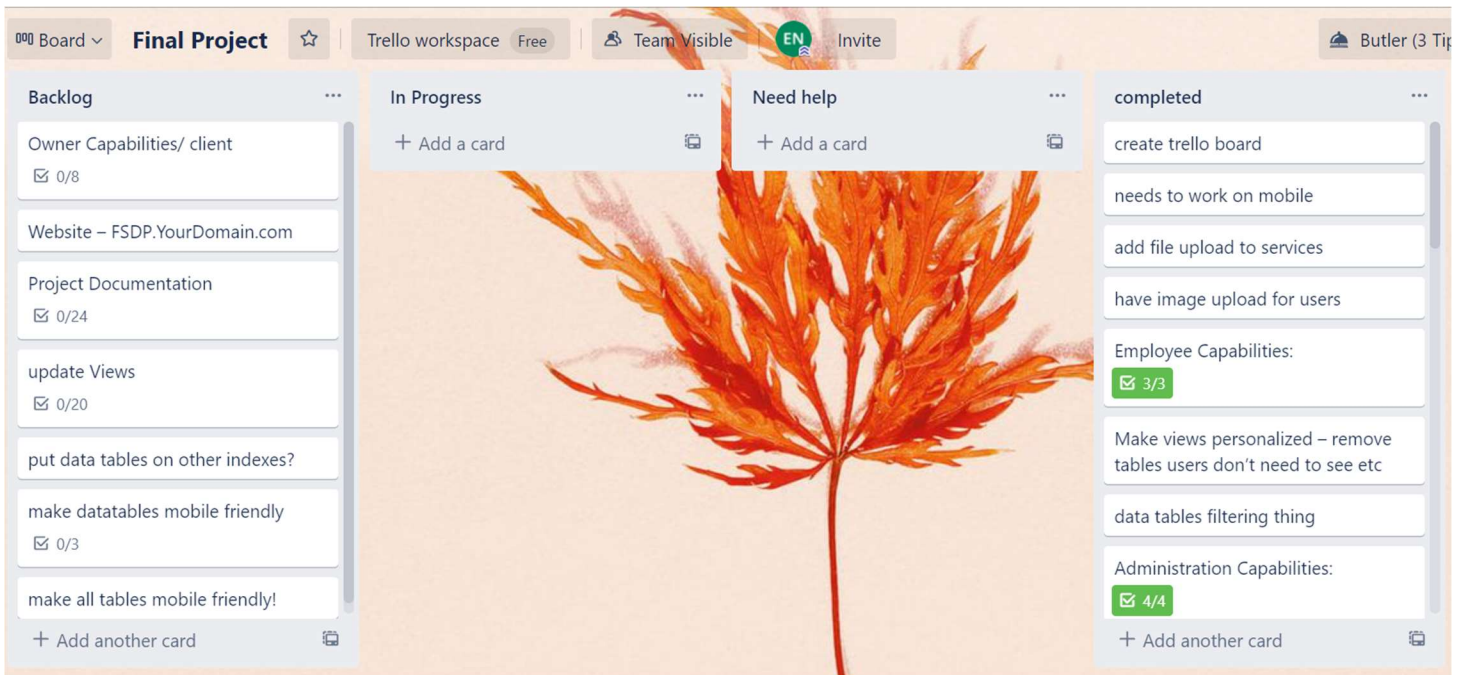
```
// GET: Reservations
public ActionResult Index()
{
    if (User.IsInRole("Admin"))
    {
        var reservations = db.Reservations.Include(r => r.Homes).Include(r => r.Locations).Include(r => r.Services);
        return View(reservations.ToList());
    }
    else if (User.IsInRole("Employee"))
    {
        DateTime now = DateTime.Now.Date;
        var reservations = from r in db.Reservations
                           where r.ReservationDate >= now
                           select r;
        return View(reservations.ToList());
    }
    else
    {
        DateTime now = DateTime.Now.Date;
        string currentUserID = User.Identity.GetUserId();
        var reservations = from r in db.Reservations
                           where r.Homes.OwnderId == currentUserID
                           &&
                           r.ReservationDate >= now
                           select r;
        return View(reservations.ToList());
    }
}
```

Below I used LINQ and if else statements to give the admin override capabilities on reservations being made for locations.

```
int location = reservations.LocationId;
int home = reservations.HomeId;
DateTime date = reservations.ReservationDate;
var currentResos = from x in db.Reservations
                   where x.LocationId == location && x.ReservationDate == date
                   select x;
var resoNbr = currentResos.Count();
var resolimit = (from x in db.Locations
                 where x.LocationId == location
                 select x.ReservationLimit).FirstOrDefault();
//linq always wants to return a collection - first or default lets you return just one - looking for a single record

if (resoNbr < resolimit || User.IsInRole("Admin"))
{
    db.Reservations.Add(reservations);
    db.SaveChanges();
    return RedirectToAction("Index");
}
else
{
    ViewBag.Message = $"Whoops! Sorry..... that location is booked for {date}, please select a different office location or date for your cleaning service.";
    return View("Create");
}
```

# ORGANIZATION



I used Trello to map out all the requirements for the project and keep track of where I was at in the process. At times it was hard to know what to work on, and Trello made it much easier to prioritize. It also creates a sense of accomplishment when you see your completed list growing! I used GitHub as source control for the project and committed often with detailed notes.

# Elizabeth Needham

FULL-STACK WEB DEVELOPER

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## QUALIFICATIONS

- Solid foundational knowledge of designing and developing full-stack web applications using .NET framework.
- Great communication, people skills, and enjoys taking initiative.



## 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



## INDEPENDENT DEVELOPMENT PROJECTS

- **Personal Site:** [www.YouNeedham.net](http://www.YouNeedham.net)
- **StoreFront:** 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 and organization of hardware and software within a company. Administrators have the ability to manage employee, department data and all details relating to assigned hardware and software.
- **Bob's Burgers Dungeon** – a C# role play console application.
- **Fed1Studio Project** – Created a website using only HTML and CSS to fit a project brief.



## TECHNICAL TRAINING & EDUCATION

**CENTRIQ TRAINING | KANSAS CITY, MO**

**AUGUST 2020 – DECEMBER 2020**

FULL-STACK DEVELOPER PROGRAM

*Core Competencies:*

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

**MISSOURI WESTERN STATE UNIVERISTY | ST. JOSEPH, MO**

**2004 – 2008**

Bachelor of Arts with a Major in French



## PROFESSIONAL EXPERIENCE

### GREAT PLAINS LABORATORY | LENEXA, KS

2019 – 2020

#### INTERNATIONAL OPERATIONS SPECIALIST

- Built and maintained strong relationships with clients.
- Welcomed new clients by email and phone and tracked their growth within the lab.
- Acted as liaison for the International Department to the rest of the company.
- Created new SOPs, maintained and updated the master instructions for lab testing in English and also translated to French and Italian.

### OFFICE REMEDIES INC | KANSAS CITY, MO

2019

#### INTERVIEWER AND DATA SPECIALIST

- Responsible for collecting confidential data from clients.
- Managed case load and scheduled to meet deadlines.
- Performed outbound and inbound calls with prompt and courteous service.

### THE SAVOY AT 21C | KANSAS CITY, MO

2018

#### SERVER

- Delivered exceptional customer service to all guests and team members.
- Trained new employees to perform commensurately with company standards.
- Educated guests on artwork in the facility.

### FRESHIES RESTAURANT AND BAR | SOUTH LAKE TAHOE, CA

2013 – 2018

#### SERVER

- Provided exceptional customer service to all guests.
- Maintained a calm and professional demeanor during periods of high volume.
- Followed company cash handling procedures and acted as shift lead.

### DIAMOND RESORTS INTERNATIONAL | SOUTH LAKE TAHOE, CA

2015

#### ACCOUNT EXECUTIVE

- Followed up with customers and team members on all sales leads.
- Represented and sold vacation ownership products for the world's largest vacation ownership company.
- Consistently exceeded sales goals by 20% and built successful relationships with customers.
- Worked well in a fast-paced, high pressure, performance-based environment.

### ANTICO CAFFE MAFFEI | ITALY

2009 – 2012

#### BARTENDER, BARISTA

- Prepared drinks in a timely manner and ensured they were delivered in a timely manner.
- Provided excellent customer service which created an environment of welcoming and belonging.

### FOGAROLLI | SWEDEN AND DENMARK

2010

#### BARISTA, WAREHOUSE & EVENT COORDINATOR

- Managed inventory, logistics, and employee scheduling for traveling pop up barista events.
- Ensured quality products were delivered to all customers.

### INTREPID SUNTREK ADVENTURE TRAVEL | UNITED STATES

2009

#### TOUR LEADER

- Drove tour groups across the United States as driver and guide.
- Managed all reservations, stops, and activities for guests and was responsible for the safety and satisfaction of guests.