Shawn Snyder

Reservation Application

Date Presented: Feb 21, 2020

A little about me:

Even during high-school I toyed in programming. After I graduated, I was brought on by a company called Kanone inc who taught me front end web development. After that I got a part time job as a cook and have been there since. While working I decided to go to college for computer science. After the first semester I learned of Centriq and thought... I keep my college progress and get to learn what I know I want to do. it's a win-win.

Things I learned from this project:

From the project, I learned how important the planning is (database wise) and why when making one you got to make sure you got everything and then some. Spare no small detail. This experience also got me more familiar with accessing related columns in different tables to display them in the front end. Also… just use DateTime instead of military time in an attempt to save database space, saves from a headache later.

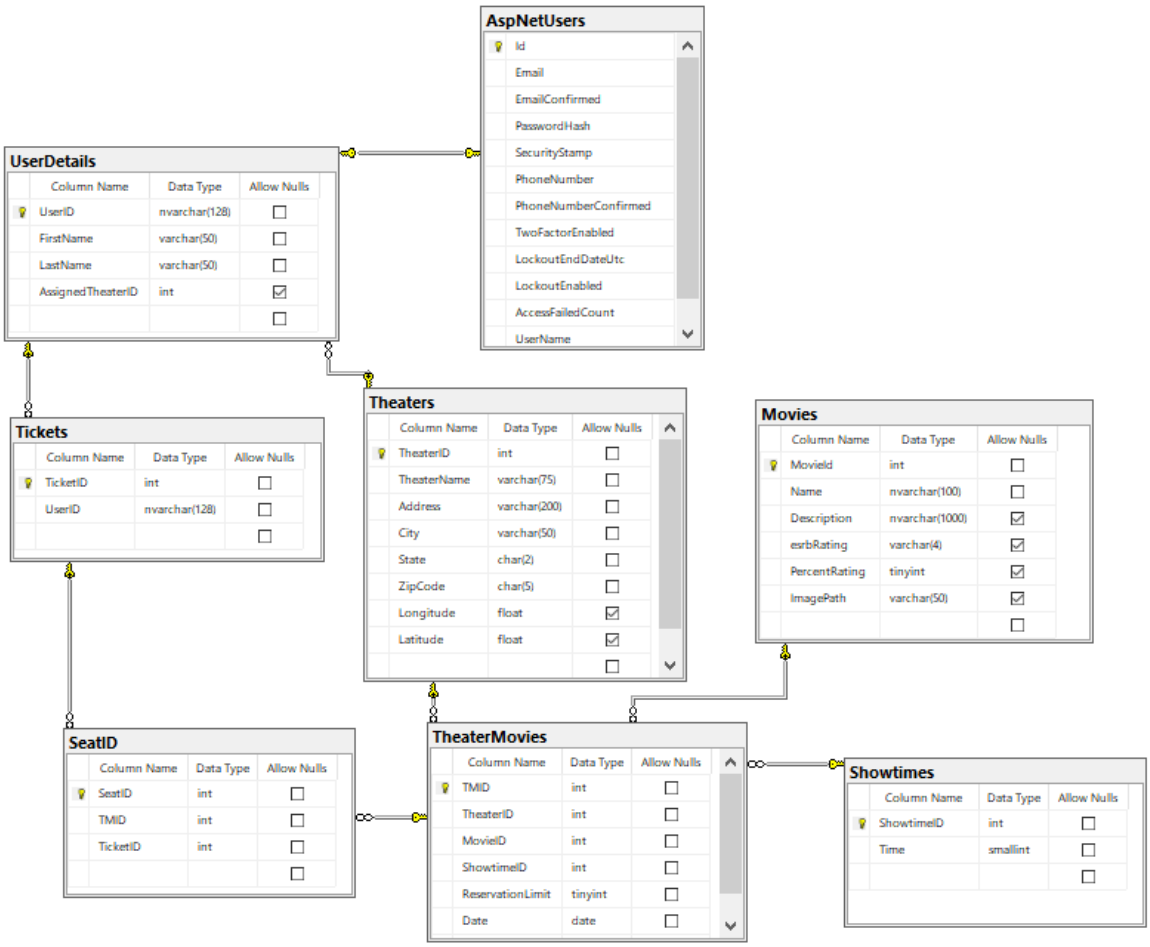
Why choose this project type:

Soon before starting this project I had gone to see about getting some movie tickets, so I thought… “Can I make this even more streamlined and easier to do?”.

REQUIREMENTS FOR THE PROJECT:

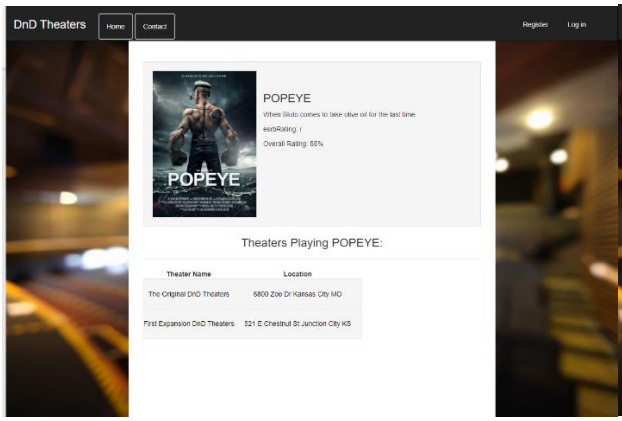
- Application must have at least 3 roles
- App must work on a mobile device
- Admins must have full CRUD functionality
- Employees must be able to see reservations but NOT edit
- Sensitive information must be shielded from non-authorized users

Database Diagram:

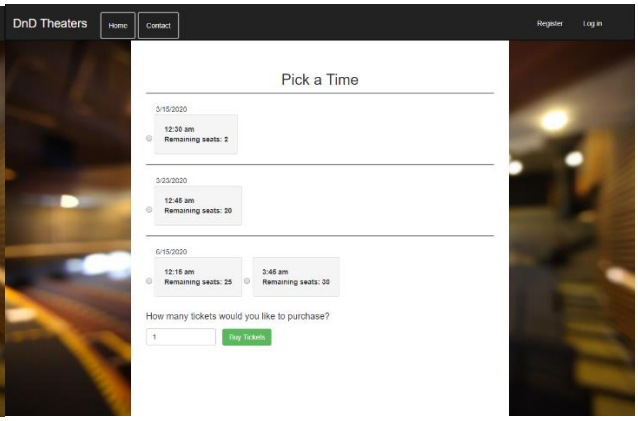


The Pages Worth Making Note Of:

Selecting a Theater



Selecting the number of tickets



These 2 pages are worth bringing up because, this is where the magic happens. On the selecting a theater page, 2 things are being done. It shows you the information on the movie that you'd want to know and offers locations currently playing that movie.

On the second page (selecting the number of tickets), it only shows showtimes for that movie at that theater grouped by day and if:

1) The show hasn't already started
2) There is available seating at the showtime

On the second page there is also several checks to make sure that the user is prompted that they did something wrong AND to keep them from doing something that would cause an error. It keeps them from getting more tickets than what is allowed, and they can't get tickets to no showtime.

After they finish selecting the time and place the program takes care of everything else in the background. It gives them a ticket and assigns those tickets to the corresponding showtime and the remaining seats update accordingly.

Code made with the intention that it would have to deal with a worse case user scenario and makes the pages previously listed work:

```
[HttpGet]
public ActionResult GetReservation(int? theaterID, int? movieID)
{
    Session["selectedTheater"] = theaterID;
    Session["selectedMovie"] = movieID;

    if (theaterID == null || movieID == null)
    {
        return new HttpStatusCodeResult(HttpStatusCode.BadRequest);
    }
    var theaterMovies = db.TheaterMovies.Include(t => t.Movy).Include(t => t.Showtime).Include(t => t.Theater).Include(t => t.SeatIDs);
    var movies = theaterMovies.Where(x => (x.ReservationLimit - x.SeatIDs.Count) > 0 && x.TheaterID == theaterID && x.MovieID == movieID && x.Date > DateTime.Now).ToList();
    return View(movies);

}
```

^ Above remembers what the user was trying to see and where they were trying to see it. It also controls what showtimes can be seen by the user

```
<script>
    function updateForm(tmid, limit) {
        document.getElementById("tmid").value = tmid;
        document.getElementById("nbrTickets").max = limit;
    }
</script>
```

^ Above keeps the form updated with the maximum number of tickets the user can get at one time (small detail and code is easy but is extremely important for form functionality)

```
foreach (var day in Dates)
{
    string ampm;
    <div style="border-top:2px solid gray;padding-top:1.5em;padding-left:20px">  @day.ToShortDateString()</div>

    foreach (var time in Model.Where(x => x.Date == day))
    {
        #region timestuff
        int hour = time.Showtime.Time / 100;
        int min = time.Showtime.Time % 100;
        if (hour > 11)
        {
            ampm = "pm";
            hour -= 12;
        }
        else
        {
            ampm = "am";
        }
        #endregion

        <div class="card">
            <input type="radio" name="day-time-selection" id="selectionRadio@(time.Date + "-" + time.Showtime.Time)" value="@time.TMID" onclick="updateForm(@time.TMID,@(time.ReservationLimit - time.SeatIDs.Count))" />
            <label for="selectionRadio@(time.Date + "-" + time.Showtime.Time)" class="well">
                @((hour > 0) ? hour.ToString() : "12"):@min @ampm
                <br />
                Remaining seats: @Html.Raw(time.ReservationLimit - time.SeatIDs.Count)
            </label>
        </div>
    }
}
<br />
```

^ This snippet is how the view builds out time selection for the user to choose from which is fed to the previous script above to keep people from overbooking

```
[HttpPost]
public ActionResult MakeReservation(int? numOfTickets, int? tmid)
{
    if (numOfTickets < 1 || numOfTickets == null || tmid == null || tmid == 0)
    {
        var theaterMovies = db.TheaterMovies.Include(x => x.Movy).Include(x => x.Showtime).Include(x => x.Theater).Include(x => x.SeatIDs);

        TheaterMovy tm = db.TheaterMovies.Where(x => x.TMID == tmid).SingleOrDefault();
        Session["error"] = "you missed something. Double check you chose a time AND how many tickets you want";
        return RedirectToAction("GetReservation", new { theaterID = (int)Session["selectedTheater"], movieID = (int)Session["selectedMovie"] });
    }
    string userID;
    if (Request.IsAuthenticated)
    {
        userID = User.Identity.GetUserId();
    }
    else
    {
        userID = "761aa9be-9849-4596-a8e7-d30611343cb9";
    }
    for (int i = 0; i < numOfTickets; i++)
    {
        Ticket t = new Ticket();

        t.UserID = userID;

        db.Tickets.Add(t);
    }
    db.SaveChanges();

    var purchasedTickets = db.Tickets.Where(x => x.UserID == userID).OrderBy(x => x.TicketID).Take((int)numOfTickets).ToList();
    foreach (var item in purchasedTickets)
    {
        SeatID s = new SeatID();
        s.TMID = (int)tmid;
        s.TicketID = item.TicketID;
        db.SeatIDs.Add(s);
    }
    db.SaveChanges();

    return View();
}
```

^ The above code here is the handler that does all the work for the user after they made their selections. It first checks if everything is valid, then assigns the user the amount of tickets they wanted, and then assigns those tickets to the showtime.

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SHAWN SNYDER

OBJECTIVE

My goal is to get into a position where I can apply my skills to create new projects, and more importantly grow my skills and knowledge of technologies to do bigger and better projects.

TECHNOLGIES & SOFT SKILLS

Technologies: HTML5, CSS3, Java Script, C#, React, npm, jQuery, Json

Soft Skills: Problem solver, Reliable, Easy to work with.

EXPERIENCE

COOK HELPER: LITTLE SISTERS OF THE POOR

March 2018 – Present

Help prepare and portion meals, deserts, special requests, and special diets for about 100 people and fill in when needed.

EDUCATION

CENTRIQ TRAINING – 1740 W 92 ST KANSAS CITY MO

Full Stack Web Developer Track

KANONE INC – NO ADDRESS

Front End Development Course

REFERENCES

TINA LOWE

Dietitian, Little Sister of the Poor

Phone: 913-636-8565

MARGE CLANAHAN

Kitchen Manager, Little Sister of the Poor

Phone: 816-668-2470