using System;

using System.Collections.Generic;

namespace Cabrera

{

class ParkingReservation

{

static List<string> reservations = new List<string>();

const int MAX\_RESERVATIONS = 50;

static void Main(string[] args)

{

Console.WriteLine("WELCOME TO ONLINE PARKING RESERVATION SYSTEM!");

while (true)

{

Console.WriteLine("\n==================================================");

Console.WriteLine("1. Reserve a parking space.");

Console.WriteLine("2. Remove a parking reservation.");

Console.WriteLine("3. View all reservations.");

Console.WriteLine("4. Exit.");

Console.WriteLine("==================================================\n");

Console.Write("Enter a number: ");

string input = Console.ReadLine();

switch (input)

{

case "1":

ReserveSpot();

break;

case "2":

RemoveReservation();

break;

case "3":

ViewReservations();

break;

case "4":

Console.WriteLine("Exiting program.");

return;

default:

Console.WriteLine("Invalid input.");

break;

}

}

}

static void ReserveSpot()

{

if (reservations.Count >= MAX\_RESERVATIONS)

{

Console.WriteLine("Sorry, no more reservations can be made at this time.");

return;

}

Console.Write("Please enter your plate number: ");

string name = Console.ReadLine();

Console.Write("Please enter the number of hours for your reservation: ");

int hours = Convert.ToInt32(Console.ReadLine());

Console.Write("Please enter the number of minutes for your reservation: ");

int minutes = Convert.ToInt32(Console.ReadLine());

DateTime endTime = DateTime.Now.AddHours(hours).AddMinutes(minutes);

string reservation = $"{name} - {endTime.ToString()}";

reservations.Add(reservation);

Console.WriteLine($"\nReservation for {name} from {DateTime.Now.ToString()} to {endTime.ToString()} has been made.");

}

static void RemoveReservation()

{

Console.Write("Please enter the name associated with the reservation to remove: ");

string name = Console.ReadLine();

int removed = reservations.RemoveAll(r => r.StartsWith(name));

if (removed > 0)

{

Console.WriteLine($"\nRemoved {removed} reservation(s) associated with {name}.");

}

else

{

Console.WriteLine($"\nNo reservations found for {name}.");

}

}

static void ViewReservations()

{

Console.WriteLine("\nCurrent Reservations:");

foreach (string reservation in reservations)

{

Console.WriteLine(reservation);

}

}

}

}