

# **USER GUIDE DOCUMENT**

National Park Management System(NPMS)

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## **National Park Management System(NPMS)**

Project focusing on managing national parks, passes and events in The USA.

### **Requirements**

1. Windows Machine
2. Microsoft Visual Studio Code 2022
3. Web Browser(Microsoft Edge, Google Chrome, Mozilla Firefox etc..)
4. ASP.NET Core 6.0 LTS
5. Git Bash

### **Packages Required**

1. Microsoft.AspNetCore.Identity.EntityFrameworkCore
2. Microsoft.EntityFrameworkCore.SqlServer
3. Microsoft.EntityFrameworkCore.Tools
4. Microsoft.VisualStudio.Web.CodeGeneration.Design
5. NReco.Logging.File by Vitalii Fedorchenko
6. Konscious.Security.Cryptography.Argon2(optional)

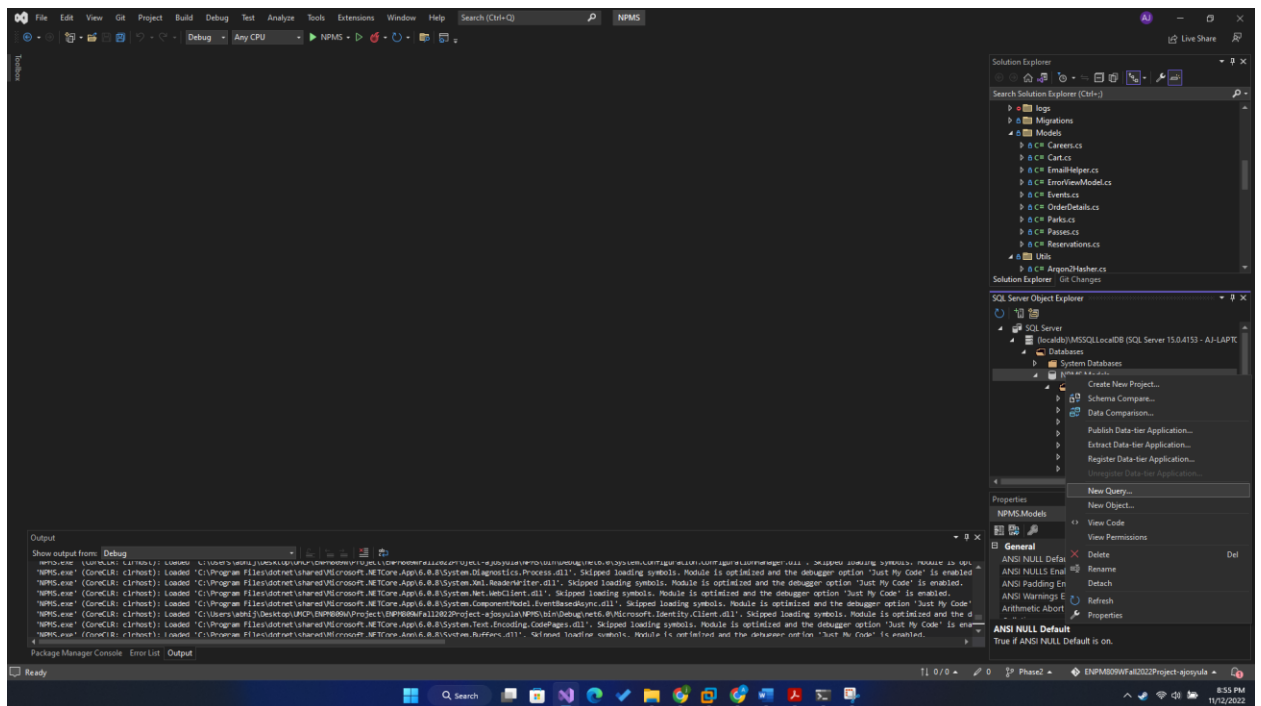
### **Steps to setup NPMS**

1. Start by cloning the repository to the local machine from code.umd.edu using Git Bash at your desired location.

```
git clone git@code.umd.edu:ajosyula/ENPM809WFall2022Project-ajosyula.git
```

2. Once cloned, a folder will be created with the name ENPM809WFall2022Project-ajosyula. Navigate into the directory in Git Bash and then checkout to Phase2 branch using  
`cd ENPM809WFall2022Project-ajosyula && git checkout Phase2`
3. In Visual Studio navigate to the project folder and open the NPMS.sln file which loads the project into Visual Studio.
4. To view databases, click on View => SQL Server Object Explorer. You can find NPMS.Models database which is used in the web application.

5. Now run the project by clicking on NPMS button at the center of the toolbar which starts building the project and opens the web application in a web browser.
6. On initial run, if the application throws an error saying NPMS.Models cannot be accessed. Follow these steps to resolve the error.  
Stop the application by closing the browser.  
Navigate to Tools => NuGet Package Manager => Package Manager Console  
Run the following command  
Update-Database
7. After running the command right click on NPMS.Models database and select New Query which opens SQL editor which will be used to run a SQL script.



8. Open Scripts folder present in directory ENPM809WFall2022Project-ajosyula which has NPMS\_Script.sql file.
9. Open the file using Notepad or Notepad ++ , copy the script and paste in the SQL Editor and execute the script using Ctrl+Shift+E or the green button at the top left corner.
10. Now run the application by clicking the NPMS button at the center of the toolbar which starts the application.

## Use Cases

There is a user already added as admin. Please use the following credentials to login as admin user.

Username: test

Password: Test@123

### Registration

To access this functionality please include your outlook email id in Models/EmailHelper.cs file at <from\_email\_id> placeholder(line 10 and 19) and password at placeholder <from\_email\_id\_password> (line no 19). User can register using the Register Button and please do note that users will get a registration confirmation link and users can login only if they confirm the registration by clicking on the link.

### View Details of National Parks and Events

The Customer can view the details of National Parks and the events happening in national parks in the United States without registering or logging in.

### Buy Parking and Individual Passes

A User can buy parking pass if they are arriving by car and can purchase individual pass if they are arriving by walk by clicking on Buy Pass link to the right side of the park. Please note that users should be logged in to buy the passes. After clicking on Buy Pass the user will be redirected to the list of passes and their prices. User can add a pass to cart and browse a little and click on My Cart button to checkout the item. Please do note that it is left to User Discretion to buy the appropriate passes. Users can use the Contact Us link to contact the administrators regarding any questions.

### Sign up for an event

Users can view the events by clicking on View Events to the right side of the park which shows the details of the events happening in the national parks. Users can sign up for events like rock climbing, hiking, cycling etc. which are happening in national parks by purchasing event passes.

### Reserve a place for an event

Users can reserve a place in national park to host their own events like birthdays, anniversaries etc.. by clicking on Reserve a place button which navigates users to a form which should be filled by the details of the customers. Please note that users should be logged in to fill the form.

### Apply for Careers

Users can apply for careers present in different national parks by navigating to Careers page by clicking on Work For Us button. Users should upload their resumes using the Choose File and Upload button. The resumes will be uploaded and reviewed by administrators.

## **Admin Functionality**

### Add or Update Park Details

Only Admin users can add or update park details. First the admin user must be logged in to access this functionality. After logging in admin can click on Park Management where admin can add details of park by clicking Create New link and fill all the details of the park. Please do note that to populate image of park the park image should be downloaded in wwwroot/images folder and should mention the path in the Park Image URL field. Admin can Update the details by clicking on Edit link which allows admin to update the details of the park. And on clicking Delete link Admin can delete the park which will not be visible to the public.

### Add or Update Passes details

Only Admin users can add or update pass details. First the admin user must be logged in to access this functionality. After logging in admin can click on Pass Management where admin can add details of pass by clicking Create New link and fill all the details of the pass. Admin can Update the details of a pass by clicking on Edit link which allows admin to update the details of the pass. And on clicking Delete link Admin can delete the pass which will not be visible to the public.

### Add or Update Event details

Admins can add or update event details happening in national parks. Please note that admins must be logged in to access this functionality.

### Allocating Spaces based on reservations

Admins can click on Reservation button to view the reservation request made by the users and based on the requests the admins can react accordingly.

## **Test Cases**

### **Registration:**

Test Name	Registration Unsuccessful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Register Button
Test Cases	The user enters username, password, email fields. If user do not enter a valid email address and enters something like abc the application throws an error saying please enter a valid email address with @ identifier.
Test Status	Failed

Test Name	Registration Unsuccessful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Register Button
Test Cases	The user enters username, password, email fields and clicks on Register button. After entering the username, the application checks for the username and gets an error message saying, "Username already taken". The user should choose a different username other than the given one.
Test Status	Failed

Test Name	Registration Unsuccessful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Register Button
Test Cases	The user enters username, password, email fields and clicks on Register button. The application throws an error saying password should be of length 15 characters which means the application expects the user to give a password of length of at least 15 characters.
Test Status	Failed

Test Name	Registration Unsuccessful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Register Button
Test Cases	The user enters username, password, email fields and clicks on Register button. The application would throw an error saying password confirmation did not match which means the passwords entered by the user did not match and user have to correct their passwords.
Test Status	Failed

Test Name	Registration Unsuccessful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Register Button
Test Cases	The user enters username, password, email fields and clicks on Register button. The application throws an error saying password must have one at least one digit and one uppercase and 6 different characters. This means the application is expecting the user to provide the password which meets the above conditions.
Test Status	Failed

Test Name	Registration Successful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Register Button
Test Cases	The user enters valid username, password, email fields and clicks on Register button which redirects the user to the home page of the web application.
Test Status	Passed

### **Login**

Test Name	Login Unsuccessful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Login Button
Test Cases	The user enters valid username, password and clicks on Login button. The application throws an error saying Invalid Login attempt which means the user haven't confirmed the email.
Test Status	Failed

Test Name	Login Unsuccessful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Login Button
Test Cases	The user enters valid username, password and clicks on Login button. The application throws an error saying Invalid Login attempt which means the user haven't entered a valid password or username.
Test Status	Failed



Test Name	Login Successful
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Login Button
Test Cases	The user enters valid username, password and clicks on Login button. The user is logged into the application.
Test Status	Passed

Test Name	Change Password
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Login Button and logged into the application
Test Cases	After clicking on Change Password button, the user must enter the current password and enter the new password and reenter the new password to which the application throws an error saying old password did not match which implies user should enter valid current password
Test Status	Failed

Test Name	Change Password
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Login Button and logged into the application
Test Cases	After clicking on Change Password button the user must enter the current password and enter the new password and reenter the new password to which the application throws an error saying the password confirmation did not match which means user should enter the same password in both the fields
Test Status	Failed

Test Name	Change Password
Pre-Condition	User should be able to access the application and should be on Home Page and able to click Login Button and logged into the application
Test Cases	After clicking on Change Password button the user must enter the current password and enter the new password and reenter the new password and the password change is successful.
Test Status	Passed

**Buy Pass:**

Test Name	Unsuccessful pass purchase
Pre-Condition	User should be able to access the application and should be logged in.
Test Cases	The user is not logged into the application and on clicking Buy Pass the user is redirected to the login page of the application which means the user should login into the application to buy a pass.
Test Status	Failed

Test Name	Unsuccessful pass purchase
Pre-Condition	User should be able to access the application and should be logged in.
Test Cases	The user did not click on Add To Cart button which adds the pass to the cart which means user should click on Add to Cart Button to purchase a valid pass.
Test Status	Failed

Test Name	Successful pass purchase
Pre-Condition	User should be able to access the application and should be logged in.
Test Cases	The user is logged into the application and on clicking Add to Cart button the user is redirected to checkout page and user is able to purchase the pass.
Test Status	Passed

### **View Events**

Test Name	View Events
Pre-Condition	User should be able to access the application and should be able to see the home page.
Test Cases	The user clicked on View Events button and is able to view events.
Test Status	Passed

Test Name	Sign Up for Events
Pre-Condition	User should be able to access the application and should be able to see the home page.
Test Cases	The user clicked on View Events button and clicked on Interested?Click Here button which redirects to login page which means the user should login to the application to be able to sign up for events
Test Status	Failed

Test Name	Sign Up for Events
Pre-Condition	User should be able to access the application and should be able to see the home page.
Test Cases	The user clicked on View Events button and clicked on Interested?Click Here button which redirects to Passes page where user can purchase Event Pass and then be able to sign up for events.
Test Status	Passed

### **Work For Us**

Test Name	Work For Us
Pre-Condition	User should be able to access the application and should be able to see the home page.
Test Cases	The user uploaded a file and application throws an error saying Please upload valid file type which means the user should upload a filetype of pdf or docx
Test Status	Failed

Test Name	Work For Us
Pre-Condition	User should be able to access the application and should be able to see the home page.
Test Cases	The user uploaded a file of pdf or docx and then the user is redirected to a page saying file upload success.
Test Status	Passed

### **Reserve a place**

Test Name	Reserve a place
Pre-Condition	User should be able to access the application and should be logged into the application.
Test Cases	The user clicked on Reserve a place and user is redirected to login page which means the user should be logged in to Reserve a place for the event.
Test Status	Failed

Test Name	Reserve a place
Pre-Condition	User should be able to access the application and should be logged into the application.
Test Cases	The user is logged in and clicked on reserve a place button and is able to fill all the details and click on submit which means user is able to reserve a place.
Test Status	Passed

### **Admin Functionality**

#### **Parks Management**

Test Name	Parks Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Parks Management button is only visible to admin user on logging in and clicks on Add New Park button and clicks create which gives a warning saying fields are required which means the admin should enter all fields
Test Status	Failed

Test Name	Parks Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Parks Management button is only visible to admin user on logging in and clicks on Add New Park button and enters all the fields with appropriate details and clicks create which creates the park and its description which will be visible to the user.
Test Status	Passed

Test Name	Parks Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Parks Management button is only visible to admin user on logging in and clicks on Edit or Details or Delete buttons which enables the admin user to update details of the park or view details of the park or delete the park from the application.
Test Status	Passed

### **Events Management**

Test Name	Events Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Events Management button is only visible to admin user on logging in and clicks on Add New Event button and clicks create which gives a warning saying fields are required which means the admin should enter all fields
Test Status	Failed

Test Name	Events Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Events Management button is only visible to admin user on logging in and clicks on Add New Event button and enters all the fields with appropriate details and clicks create which creates the Event and its description which will be visible to the user.
Test Status	Passed

Test Name	Events Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Events Management button is only visible to admin user on logging in and clicks on Edit or Details or Delete buttons which enables the admin user to update details of the events or view details of the events or delete the events from the application.
Test Status	Passed

### **Pass Management**

Test Name	Pass Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Pass Management button is only visible to admin user on logging in and clicks on Add New Pass button and clicks create which gives a warning saying fields are required which means the admin should enter all fields
Test Status	Failed

Test Name	Pass Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Pass Management button is only visible to admin user on logging in and clicks on Add New Pass button and enters all the fields with appropriate details and clicks create which creates the Pass and its description which will be visible to the user.
Test Status	Passed

Test Name	Pass Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Pass Management button is only visible to admin user on logging in and clicks on Edit or Details or Delete buttons which enables the admin user to update details of the passes or view details of the passes or delete the passes from the application.
Test Status	Passed

### **Careers Management**

Test Name	Career Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Career Management button is only visible to admin user on logging in and clicks on Create New button and clicks create which gives a warning saying fields are required which means the admin should enter all fields
Test Status	Failed



Test Name	Career Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Career Management button is only visible to admin user on logging in and clicks on Create New button and enters all the fields with appropriate details and clicks create which creates the Career and its description which will be visible to the user.
Test Status	Passed

Test Name	Career Management
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Career Management button is only visible to admin user on logging in and clicks on Edit or Details or Delete buttons which enables the admin user to update details of the careers or view details of the careers or delete the careers from the application.
Test Status	Passed

### **Reservations**

Test Name	Reservations
Pre-Condition	Only Admin user will be able to access the application and should be logged into the application.
Test Cases	The Reservations button is only visible to admin user on logging in and clicks on Reservations button and can view the details of the reservations requested by the user.
Test Status	Passed