## **E2E Test Cases – Food Truck Search UI**

The following test cases were written using **Playwright with TypeScript** to validate the behavior of the frontend interface located at /foodTruckSearch/index.html. The page should be accessible when running the application at the folder radAiChallenge in docker or using dotnet run.

This UI interacts with the backend API exposed at /api/MobileFoodTrucks, consuming the following endpoints:

* GET /api/MobileFoodTrucks/searchByName
* GET /api/MobileFoodTrucks/searchByStreet
* GET /api/MobileFoodTrucks/nearestFoodTrucks

If the application scope increases, implementing the **Page Object Model (POM)** is recommended to better organize selectors and interaction logic.

### **UI Smoke and Structural Tests**

**should load the page with key UI elements** Tags: @smoke @ui  
 Action: Visit the home page.  
 **Expect**: Page contains the title, dropdown selector, input field, search and clear buttons.

### **Validation Tests**

**should show validation message when no input is provided** Tags: @validation @ui  
 Action: Click the "Search" button without filling any input.  
 **Expect**: Error box becomes visible with message prompting for input.

**should show error for invalid coordinates in nearest search** Tags: @search @nearest @negative @validation  
 Action: Select “Nearest”, fill both latitude and longitude with 0, then click "Search".  
 **Expect**: Error box appears with validation message: "Latitude and longitude cannot be 0."

### **Search Functionality Tests**

**should return results for a valid name search** Tags: @search @name @positive  
 Action: Input "Taco" in the text field and click "Search".  
 **Expect**: Results table appears with one or more rows.

**should show paginated results if more than 15 found** Tags: @pagination @search  
 Action: Input "Pizza" and click "Search".  
 **Expect**: Results table appears with pagination buttons shown below.

### **Clear and Reset Tests**

**clear button should reset the form and hide results** Tags: @clear @ui  
 Action: After a search, click "Clear".  
 **Expect**: Input field resets and results table disappears.

### **Dropdown UI Behavior Tests**

**should display street placeholder when street is selected** Tags: @dropdown @ui  
 Action: Select “Street” from the dropdown.  
 **Expect**: Text input placeholder changes to "Type address".

**should display latitude and longitude inputs when nearest is selected** Tags: @dropdown @ui @nearest  
 Action: Select “Nearest” from the dropdown.  
 **Expect**: Latitude and longitude input fields are shown; text input is hidden.

### **Error Handling Tests**

**should hide error box when dismissed** Tags: @error @ui  
 Action: Trigger a validation error, then click the close (×) button.  
 **Expect**: Error box becomes hidden.