Validation Checklist Creation: HungerStation System.

**Description:**

It is Online Food Delivery Platform. To ensure the accuracy, completeness, and security of data within the HungerStation food delivery platform. The validation is for user information, restaurant information, menu items, order Information, and Payment Information.

1. **user information**

**- User ID**:

**Validation:**

* + - Cannot be null.
* @NotNull(message = "User ID cannot be null")
  + - Length must be more than 2 characters.
* @Size(min = 3, message = "User ID must be more than 2 characters")
  + - Must be unique.

**-Name**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "Name cannot be null")
  + - Length must be more than 4 characters.
* @Size(min = 5, message = "Name must be more than 4 characters")
  + - Must contain only characters (no numbers).
* @Pattern(regexp = "^[A-Za-z]+$", message = "Name must contain only characters")

**-Email**:

**Validation**:

* + - Must be a valid email format.
* @Email(message = "Must be a valid email format")
  + - Cannot be null.
* @NotNull(message = "Email cannot be null")

**-Phone Number**:

**Validation**:

* + - Must start with "05" (assuming a specific country code).
    - Must consist of exactly 10 digits.
* @Pattern(regexp = "^05[0-9]{8}$", message = "Phone Number must start with '05' and consist of exactly 10 digits")
  + - Cannot be null.
* @NotNull(message = " Phone Number cannot be null")

**-Address**:

**Validation** :

* + - Cannot be null.
* @NotNull(message = "Address cannot be null")

1. **restaurant information**

* **Restaurant ID**:
  + **Validation**:
    - Cannot be null.
* @NotNull(message = "Restaurant ID cannot be null")
  + - Length must be more than 2 characters.
* @Size(min = 3, message = "Restaurant ID must be more than 2 characters")
  + - Must be a unique identifier.
* **Restaurant Name**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "Restaurant Name cannot be null")
  + - Length must be more than 4 characters.
* @Size(min = 5, message = "Restaurant Name must be more than 4 characters")
  + - Must contain only characters (no numbers).
* @Pattern(regexp = "^[A-Za-z]+$", message = "Restaurant Name must contain only characters")
* **Cuisine Type**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "Cuisine Type cannot be null")
  + - Must be a valid type from a predefined list (e.g., Italian, Chinese, Indian).
* @Pattern(regexp = "^(Italian|Chinese|Indian)$", message = "Cuisine Type must be one of the predefined types ( Italian, Chinese, Indian)")
* **Operating Hours**:

**Validation**:

* + - Must be a valid time range ( 10:00 AM - 10:00 PM).
* @Pattern(regexp = "^[0-9]{2}:[0-9]{2} - [0-9]{2}:[0-9]{2}$", message = "Operating Hours must be in the format HH:MM - HH:MM")
  + - Cannot be null.
* @NotNull(message = "Operating Hours cannot be null")

1. **menu items**

* **Menu Item ID**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "Menu Item ID cannot be null")
  + - Length must be more than 2 characters.
* @Size(min = 3, message = "Menu Item ID must be more than 2 characters")
* **Item Name**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "Item Name cannot be null")
  + - Length must be more than 2 characters.
* @Size(min = 3, message = "Item Name must be more than 2 characters")
  + - Must contain only characters (no numbers).
* @Pattern(regexp = "^[A-Za-z]+$", message = "Item Name must contain only characters")
* **Price**:

**Validation**:

* + - Must be a positive number.
* @PositiveOrZero(message = "Price must be zero or a positive number")
  + - Cannot be null.
* @NotNull(message = "Price cannot be null")
* **Description**:

**Validation**:

* + - More than 500 characters.
* @Size(max = 500, message = "Description must not be more than 500 characters")

1. **order Information**

* **Order ID**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "Order ID cannot be null")
  + - Length must be more than 2 characters.
* @Size(min = 3, message = "Order ID must be more than 2 characters")
  + - Must be a unique identifier.
* **User ID**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "User ID cannot be null")
  + - Must be a valid and existing user ID.
* **Restaurant ID**:

**Validation**:

* + - Cannot be null.
* @NotNull(message = "Restaurant ID cannot be null")
  + - Must be a valid and existing restaurant ID.
* **Order Status**:

**Validation**:

* + - Must be one of the predefined statuses (e.g., Pending, In Progress, Completed, Canceled).
* @Pattern(regexp = "^(Pending|In Progress|Completed|Canceled)$", message = "Order Status must be one of the predefined statuses")
  + - Cannot be null.
* @NotNull(message = "Order Status cannot be null")
* **Delivery Time**:

**Validation**:

* + - Must be a valid time format (e.g., YYYY-MM-DD HH:MM).
* @DateTimeFormat(pattern = "yyyy-MM-dd HH:mm:ss")
  + - Cannot be in the past.
* @FutureOrPresent(message = "Delivery Time must be in the present or future")
  + - Cannot be null.
* @NotNull(message = "Delivery Time cannot be null")

**5. Payment Information**

* **Payment ID**:

**Validation**:

* + - Must be a unique identifier.
    - Cannot be null.
* @NotNull(message = "Payment ID cannot be null")
  + - Length must be more than 2 characters.
* @Size(min = 3, message = "Payment ID must be more than 2 characters")
* **Amount**:

**Validation**:

* + - Must be a positive number.
* @PositiveOrZero(message = "Amount must be zero or a positive number")
  + - Cannot be null.
* @NotNull(message = "Amount cannot be null")
* **Payment Method**:

**Validation**:

* + - Must be one of the predefined methods (e.g., Credit Card, PayPal, Cash).
* @Pattern(regexp = "^(Credit Card|PayPal|Cash)$", message = "Payment Method must be one of the predefined methods")
  + - Cannot be null.
* @NotNull(message = "Payment Method cannot be null")
* **Transaction Date**:

**Validation**:

* + - Must be a valid date format (e.g., YYYY-MM-DD).
* @DateTimeFormat(pattern = "yyyy-MM-dd")
  + - Cannot be in the future.
* @PastOrPresent(message = "Transaction Date must be in the past or present")
  + - Cannot be null.
* @NotNull(message = "Transaction Date cannot be null")