**Slide 1: Validation Rules for Library System UI Windows**

* **Title**: Introduction to UI Validation
* **Text**:
  + "In the Library System, validation rules ensure that all data entered is accurate and complete. This presentation covers the validation rules implemented for three key windows: BooksWindow (Books & Authors), MembersWindow, and CheckoutWindow."

**Slide 2: BooksWindow - Input Validation**

* **Title**: BooksWindow (Books & Authors) Validation Rules
* **Bullet Points**:
  + **ISBN Field**:
    - Format: XX-XXXXX (e.g., 12-34567).
    - Uniqueness is enforced.
    - **Error Message**: "ISBN must be unique and in the format 00-00000."
  + **Title Field**:
    - Cannot be empty.
    - **Error Message**: "Title cannot be empty."
  + **Author List**:
    - At least one author must be added.
    - **Error Message**: "At least one author must be added."
  + **Author Validation**:
    - First name and last name are required.
    - Telephone must follow a valid US format (e.g., 123-456-7890).
    - Street, city, state, and ZIP code fields are required.
    - ZIP code must be 5 digits.
    - **Error Message**: "Author fields cannot be left empty or incorrectly formatted."
  + **Checkout Period**:
    - User must select either 7 days or 21 days.
    - **Error Message**: "Please select a checkout period (7 or 21 days)."

**Slide 3: BooksWindow - Validation Flow**

* **Title**: BooksWindow Validation Flow
* **Text**:
  + "When a user attempts to add or edit a book, the system validates the ISBN for uniqueness and formatting. It also verifies that the title, author list, and author details are correctly filled. Additionally, the user must select a checkout period. If any validation fails, the system displays an error message and does not save the data."

**Slide 4: MembersWindow - Input Validation**

* **Title**: MembersWindow Validation Rules
* **Bullet Points**:
  + **Member ID**:
    - Automatically generated and cannot be edited.
  + **First Name and Last Name**:
    - Both fields are required.
    - **Error Message**: "First name and last name cannot be empty."
  + **Phone Number**:
    - Must follow a valid US format: (123) 456-7890 or 123-456-7890.
    - **Error Message**: "Invalid phone number. Please enter a valid 10-digit US phone number."
  + **Address Fields**:
    - Street, city, state, and ZIP code are required.
    - ZIP code must be 5 digits.
    - **Error Message**: "ZIP code must be a 5-digit number."

**Slide 5: MembersWindow - Validation Flow**

* **Title**: MembersWindow Validation Flow
* **Text**:
  + "In the MembersWindow, the system ensures that all fields, including name, phone number, and address, are completed. Any missing or incorrectly formatted fields trigger validation errors and prevent submission."

**Slide 6: CheckoutWindow - Input Validation**

* **Title**: CheckoutWindow Validation Rules
* **Bullet Points**:
  + **Member Selection**:
    - Must select an existing library member.
    - **Error Message**: "Please select a library member."
  + **Book Selection**:
    - Must select an available book.
    - **Error Message**: "Please select a book."
  + **Checkout Date**:
    - Automatically generated.
  + **Due Date**:
    - Calculated based on the selected book's checkout period.

**Slide 7: CheckoutWindow - Validation Flow**

* **Title**: CheckoutWindow Validation Flow
* **Text**:
  + "In the CheckoutWindow, the user must select a valid member and book for checkout. The checkout date is automatically generated, and the due date is calculated based on the selected book’s checkout period."

**Slide 8: Conclusion**

* **Title**: Summary of Validation Rules
* **Text**:
  + "The validation rules implemented across the BooksWindow,(MembersWindow, and CheckoutWindow ensure that data entered is complete, accurate, and prevent invalid information from being saved. This process maintains the integrity and reliability of the library system."