**Elite Tech Park - Zoho Creator Assessment**

**Objective:**  
Develop a *Library System* application in Zoho Creator with validations, workflows, and reports, completing the tasks below in sequence.

**Task-Based Instructions**

**Task 1: Create Modules and Forms**

1. **Books Module**
   * Create a form with the following fields:
     + **Book ID** (Auto-generated)
     + **Title** (Text - Mandatory)
     + **Author** (Text - Mandatory)
     + **Genre** (Dropdown - Predefined values: Fiction, Non-Fiction, Sci-Fi, Biography)
     + **Publication Year** (Number - Only valid years between 1900 and the current year)
     + **Available Copies** (Number - Mandatory, minimum value = 0)
     + **ISBN Number** (Text - Unique validation)
     + **Rating** (Number - Accept values between 1 to 5)
2. **Members Module**
   * Create a form with the following fields:
     + **Member ID** (Auto-generated)
     + **Name** (Text - Mandatory)
     + **Email** (Email - Validate for proper email format)
     + **Phone Number** (Number - Mandatory, validate for 10 digits)
     + **Membership Start Date** (Date - Default to the current date)
     + **Membership Type** (Dropdown - Values: Basic, Premium, Elite)
     + **Max Books Allowed** (Number - Auto-filled based on Membership Type: Basic=2, Premium=5, Elite=10)
3. **Transactions Module**
   * Create a form with the following fields:
     + **Transaction ID** (Auto-generated)
     + **Member** (Lookup to Members)
     + **Book** (Lookup to Books)
     + **Issue Date** (Date - Default to the current date)
     + **Return Date** (Date - Must be greater than Issue Date)
     + **Status** (Dropdown - Values: Issued, Returned, Overdue)
     + **Fine Amount** (Currency - Auto-calculated for overdue books)
4. **Staff Members Module**
   * Create a form with the following fields:
     + **Staff ID** (Auto-generated)
     + **Name** (Text - Mandatory)
     + **Email** (Email - Validate for proper email format)
     + **Role** (Dropdown - Values: Librarian, Assistant)
     + **Phone Number** (Number - Mandatory, validate for 10 digits)

**Task 2: Implement Form Validations**

1. **Books Form**
   * Ensure ISBN Number is unique.
   * Validate Publication Year to accept only years between 1900 and the current year.
2. **Members Form**
   * Prevent duplicate entries based on the Email field.
   * Automatically populate Max Books Allowed based on the selected Membership Type.
3. **Transactions Form**
   * Prevent transactions if Available Copies of the selected book is 0.
   * Validate Return Date to ensure it is later than the Issue Date.

**Task 3: Create Workflows**

1. Books Module:
   * Automatically decrease Available Copies by 1 when a book is issued.
   * Automatically increase Available Copies by 1 when a book is returned.
2. Transactions Module:
   * Calculate Fine Amount for overdue books ($2 per day overdue).
   * Send an email to members for overdue books, including fine details.
3. **Members Module:**
   * Send a welcome email to new members upon form submission.
4. **Staff Members Module:**
   * Set role-based permissions:
     + Librarians can issue and return books.
     + Assistants can only view books and members but cannot make changes.
5. **Task 4: Generate Reports and Dashboards**
6. **Reports:**
   * **Overdue Books Report:** Display all overdue transactions with member and fine details.
   * **Top Members Report:** List the top 10 members who borrowed the most books in a given month.
7. **Dashboards:**
   * **Genre Popularity Chart:** Create a pie chart showing the distribution of books borrowed by genre.
   * **Staff Activity Log:** Track and display actions performed by staff members.

**Task 5: Add Custom Features**

1. **Books Module:**
   * Add a button to mark a book as "Featured." When clicked, the book will be highlighted in reports.
2. **Transactions Module:**
   * Add a custom action to "Mark as Lost" for books, which will set Available Copies to 0 and log a note in the Transactions report.

**Submission Requirements**

1. **Zoho Creator Application:** Export the application as a .ds file.
2. **Demo Video:** Record a video (10-15 minutes) showcasing:
   * Completion of each task.
   * Validations, workflows, and reports in action.
   * Role-based permissions in use.

**Evaluation Criteria**

1. **Task Completion:** All tasks should be completed as specified.
2. **Accuracy:** Proper implementation of validations, workflows, and reports.
3. **Usability:** Clean and user-friendly interface.
4. **Demo Clarity:** Clear explanation of how requirements are met.