UNIVERSITY OF NAIROBI

Master’s Degree in Advanced Computer Science

RETURNS MANAGEMENT SYSTEM

I. USER DASHBOARD

Account Creation & Login

1. Users can create an account and log in to the system.
2. During the account creation process, users are required to fill in the following details:
   - **Company Name**
   - **License Number**
   - **Company Email**
   - **Company Phone Number**
   - **Company Address**
   - **Business Category**: Options include:
     - Bookmaker
     - Online Gaming
     - Physical Casino
     - Lottery

Special Notes for Business Categories

- **Lotteries**
  - Users must provide the **Company Name** and the **specific name(s) of the lottery** being operated.
  - Users can manage multiple lottery types within a single company and add new lottery types in the future.
- **Multiple Business Categories**
  - Companies engaged in more than one business category (e.g., Bookmaker and Online Gaming) can select multiple categories during registration.

Dashboard Features

1. Once logged in, users can view the registered business categories.
2. Users can select a business category and fill in the required **returns** for specific reporting periods.
   - Add a **calendar feature** to make date selection more user-friendly.
3. Users can generate and download reports in **PDF format**, which should include:
   - Company Name
   - Business Category
   - Returns data filled in (with selected dates).

II. ADMIN DASHBOARD

System Admin Roles (Create one Super Admin)

1. Manage system-wide settings and perform administrative tasks such as:
    - Adding and managing user accounts.
    - Editing and deleting company information.
    - Resetting user details and passwords.
    - Registering companies.

Business Admin Roles (Minor Admin)

1. View and analyze company returns based on business categories.
2. Analyze returns for a single company within a specific timeframe (monthly, quarterly, half-yearly, or annually).
    - Generate detailed reports in **PDF format** with:
        - Totals
        - Bar graphs
        - Pie charts
3. Analyze and compare returns across all companies for a specific business category or all categories within selected dates or periods.
    - Generate summarized reports in **PDF format** with graphical visualizations.

III. INTEGRATION OF SMTP SERVICES

1. **Email Verification**
    - Users will receive an **OTP (One-Time Password)** via email to verify their account during the creation process or login attempts.
2. **Filing Notifications**
    - Users will receive an email notification upon successfully filing their returns, including a copy of their report as an attachment.
3. **Admin Alerts**
    - Admins will receive email notifications when a user submits returns.

IV. USER INTERFACE DESIGN (PAGE LAYOUT)

1. **User Dashboard**
    - A clean and intuitive layout with clearly labeled sections for:
        - Business Categories
        - Returns Filing
        - Report Generation and Download
    - Incorporate interactive tools such as a **calendar widget** for date selection.
    - Use a professional color scheme that aligns with the branding of the University of Nairobi or your project theme.
2. **Admin Dashboard**
    - Include tabs or menus for key functions like

        - User Management
        - Company Analysis
        - Reporting and Graph Generation
    - Graphical widgets for visualizing company and business category performance (e.g., bar charts, pie charts).
    - Real-time updates for new submissions and filing statuses.
3. **General Aesthetics**
    - Download modern UI templates online or design your own using **CSS frameworks** like Bootstrap or Materialize.
    - Use **icons** and **progress bars** to enhance the user experience.

Additional Recommendations

1. **Data Security**
    - Implement encryption for sensitive data (e.g., passwords, returns data).
    - Use HTTPS to secure all user interactions.
2. **Audit Logs**
    - Track user actions (e.g., logins, filings, edits) for accountability.
3. **Help and Support**
    - Add a support section where users can access FAQs or contact support via email or chat.