Document Template Filling Application

**Overview**

The Document Template Filling Application is a web-based tool designed to streamline the process of populating and generating customized document templates based on user data stored in a database. The application allows users to select a specific user from a database, choose a template, preview the filled document, and download it. Additionally, a "Download All" feature is provided to download templates for multiple users simultaneously.

**Features**

**1. User Selection**

* Users can be selected from a database, with relevant information displayed in a user-friendly list format on the application's interface.

**2. Template Selection**

* Users can choose from a list of document templates. These templates are stored in the system and are associated with specific fields that need to be filled.

**3. User List Display**

* Upon selecting a user, a list of users appears on the page, displaying relevant information for each user.

**4. Preview Button**

* For each user in the list, there is a "Preview" button. Clicking this button opens a preview of the filled document based on the selected template and user data.

**5. Download Button**

* Each user entry has a "Download" button that allows the user to download the filled document for the selected template.

**6. Download All Button**

* At the bottom of the user list, there is a "Download All" button. Clicking this button generates and downloads filled documents for all selected users and the chosen template.

**Technical Implementation**

**1. Frontend**

* The application is built using React and Vite for a fast and efficient development experience.

**2. Database Integration**

* Supabase is used as the backend, providing a scalable and flexible database to store user information and document templates.

**3. Document Generation**

* Word document templates are stored in a format compatible with a document generation library (e.g., Docxtemplater). Upon user request, the application fetches user data from the database and dynamically fills the template fields.

**4. Preview Functionality**

* The application includes a preview feature that displays the filled document before allowing the user to download it.

**5. Styling and User Interface**

* The user interface is designed to be intuitive, providing a seamless experience for selecting users, templates, and interacting with document previews and downloads.

**6. Authentication (Optional)**

* To ensure data security, user authentication can be implemented, allowing only authorized users to access and modify data.

**Development Steps**

1. Set up the React and Vite project.
2. Integrate Supabase for database operations.
3. Design and create database tables for users and document templates.
4. Implement components for user selection, template selection, and user list display.
5. Fetch data from the database to populate the user list and template options.
6. Implement document generation logic based on selected user and template.
7. Develop preview functionality.
8. Implement download functionality for individual users.
9. Implement "Download All" functionality.
10. Style the application for a polished user interface.
11. Test the application thoroughly for functionality and responsiveness.
12. Deploy the application for public or private use.

**Conclusion**

The Document Template Filling Application provides a powerful solution for efficiently generating customized documents based on user data. It streamlines the process, saving time and ensuring accuracy in document creation.