

Azure User Manager

Overview

The Azure User Manager is designed to manage user subscriptions, roles, and resources. It provides a user-friendly interface built using Python's `tkinter` library for GUI and integrates with backend data structures to facilitate seamless user management.

Features Implemented

1. *Main Interface*

- Title: "Azure User Manager" displayed prominently.
- Subscription Selection: Checkboxes for each subscription allow users to select which subscription's users to manage.

2. *User List Display*

- Upon selecting a subscription, the application dynamically updates to display users associated with that subscription.
- Users are listed with their names and roles, providing a quick overview of each user's permissions.

3. *Search Functionality*

- Search Users: Allows users to search for specific users based on their names or roles.
- Users can filter based on name, role, or both criteria, enhancing usability and efficiency in finding specific users.

4. *User Details Popup*

- Clicking on a user opens a detailed popup displaying:
 - Roles: Lists all roles assigned to the user within the selected subscription.
 - Resources: Shows all resources accessible to the user, providing insights into their scope of access.

5. *User Operations*

- Add User: Enables adding new users to selected subscriptions with roles and resource assignments.
- Edit User: Allows editing existing user details including name, roles, and resources.
- Delete User: Supports deletion of users from subscriptions, with confirmation prompts to prevent accidental deletions.

6. *Role and Resource Management*

- Manage Roles: Opens a dialog to add, edit, or delete roles assigned to a specific user within a subscription.
- Manage Resources: Provides functionality to manage resources accessible to users, allowing additions, edits, and deletions.

Technical Implementation

- **Technologies Used:** Python, tkinter for GUI development, `tkinter.ttk` for themed widgets, and dialog handling using `messagebox` and `simplifiedialog`.
- **Data Structure:** Utilizes dictionaries and lists to store subscription details and manage user data effectively.