# User Profile Management New Features and Automation

This document highlights the recent enhancements and new features to add to the User Profile Management application.

## 1. User Authentication

# Frontend (Signup/Login)

The frontend now facilitates user signup and login to provide a secure and personalized experience.

# - Signup:

- Users can register using their email, username, and password.
- Passwords are securely hashed using Django's authentication system.

## - Login:

- Existing users can log in with their email/username and password.
- Sessions and authentication tokens are managed by Django.

# - Email Confirmation and/or 2FA:

- The code currently does not deploy any email confirmation, as that is normal/traditional way of handling signups, nor does it handle 2FA.
- Ideally, this would be integrated with something like sendgrid where templates would be sent out that allows prospective users to click on an email to confirm they are the owner of the email address

# 2. Phone Number Region Code Selection

### **Frontend**

To enhance user experience and accommodate international phone numbers, a new feature to select the region code for phone numbers during profile creation.

## **Region Code Selection:**

- During profile creation or update, users can now select their region code from a dropdown menu.
- This ensures accurate formatting of phone numbers based on regional standards.

## 3. Automation

### Terraform IaC

Terraform Infrastructure as Code ensures consistent and automated server provisioning.

- Terraform Script:
  - Defines server specifications (e.g., Ubuntu, ports, security groups).
  - Ensures reproducible infrastructure.

# 4. Conclusion

With these possible new additions, the User Profile Management application would offer a seamless authentication experience, robust profile management capabilities, and automated deployment processes. These features aim to enhance user interaction and maintain a scalable and maintainable codebase.