Partner Matching System - Final Setup Guide (User-Only with Authentication)

1. MySQL Database Setup

```
CREATE DATABASE partner_matching;

USE partner_matching;

CREATE TABLE IF NOT EXISTS users (
    id INT AUTO_INCREMENT PRIMARY KEY,
    name VARCHAR(100),
    skill1 VARCHAR(50),
    skill2 VARCHAR(50),
    skill3 VARCHAR(50),
    skill4 VARCHAR(50),
    skill5 VARCHAR(50),
    experience VARCHAR(50),
    years_of_experience INT,
    availability VARCHAR(50),
    contact VARCHAR(100),
    username VARCHAR(50) UNIQUE,
    password VARCHAR(100)
);
```

2. Python-MySQL Connection (db_config.py)

```
import mysql.connector

def get_connection():
    return mysql.connector.connect(
        host="localhost",
        user="root",  # Change if your MySQL username is different
```

```
        password="root",  # Change if your password is different
        database="partner_matching"
    )
```

3. User Registration (auth.py)

```
from db_config import get_connection

def register_user():
    con = get_connection()
    cur = con.cursor()
    name = input("Name: ")
    skills = [input(f"Skill {i+1}: ") for i in range(5)]
    experience = input("Experience (e.g. Beginner): ")
    years = int(input("Years of Experience: "))
    availability = input("Availability: ")
    contact = input("Contact: ")
    username = input("Create Username: ")
    password = input("Create Password: ")

    query = '''
      INSERT INTO users (name, skill1, skill2, skill3, skill4, skill5, experience, years_of_experience, availability, contact, username, password)
    VALUES (%s, %s, %s, %s, %s, %s, %s, %s, %s, %s, %s, %s)
    '''
    values = (name, *skills, experience, years, availability, contact, username, password)
    cur.execute(query, values)
    con.commit()
    con.close()
    print("User registered successfully!")
```

4. User Login and Partner Matching (main.py)

```
from db_config import get_connection

def login_user():
    con = get_connection()
    cur = con.cursor()
    username = input("Username: ")
    password = input("Password: ")

     cur.execute("SELECT * FROM users WHERE username=%s AND password=%s", (username,
password))
    user = cur.fetchone()
    if user:
        print("Login successful. Welcome", user[1])
        find_partner()
    else:
        print("Invalid credentials.")
    con.close()

def find_partner():
    con = get_connection()
    cur = con.cursor()
    skill = input("Enter required skill: ")
    availability = input("Enter preferred availability: ")
    query = '''
    SELECT * FROM users WHERE
    (skill1=%s OR skill2=%s OR skill3=%s OR skill4=%s OR skill5=%s)
    AND availability=%s
    '''
    cur.execute(query, (skill, skill, skill, skill, skill, availability))
    matches = cur.fetchall()
    if matches:
        print("Matching Partners Found:")
        for m in matches:
```

```
            print(m)
    else:
        print("No matching partners found.")
    con.close()
```

5. Running the App

1. Run `register_user()` to create a new account
2. Run `login_user()` to log in and find a partner

Make sure to update MySQL credentials in db_config.py before running.