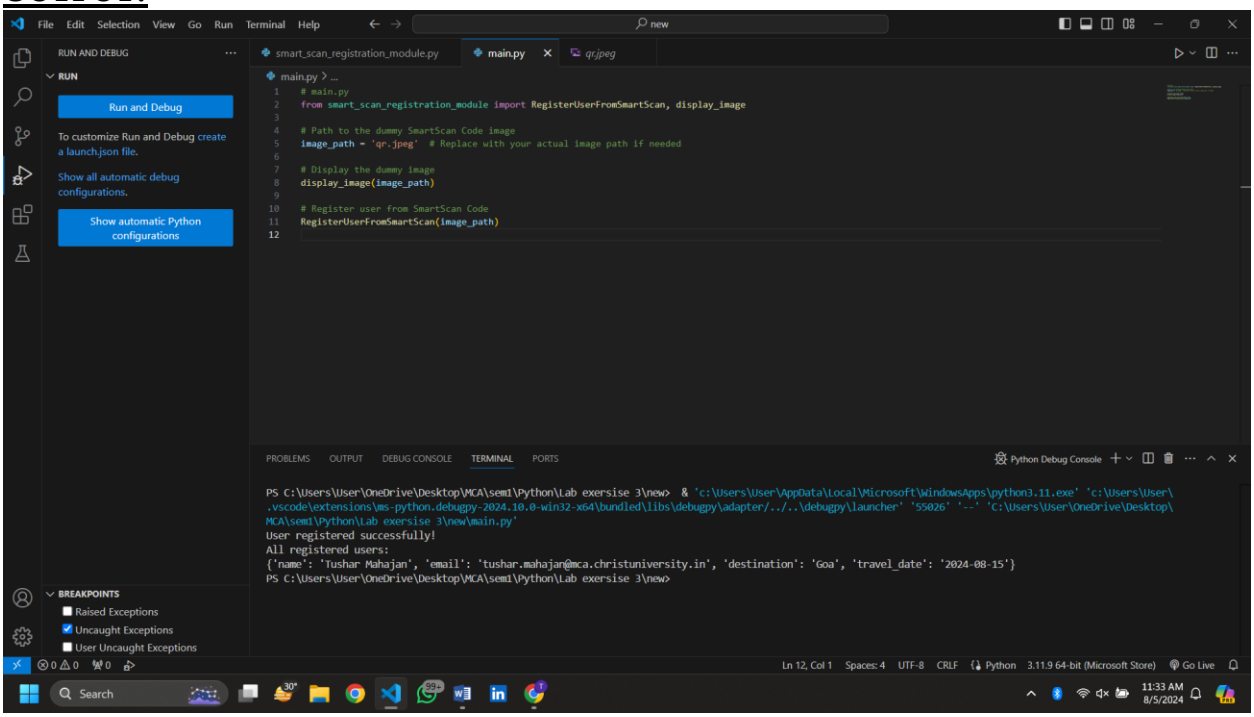
PYTHON
Lab Exersise 3

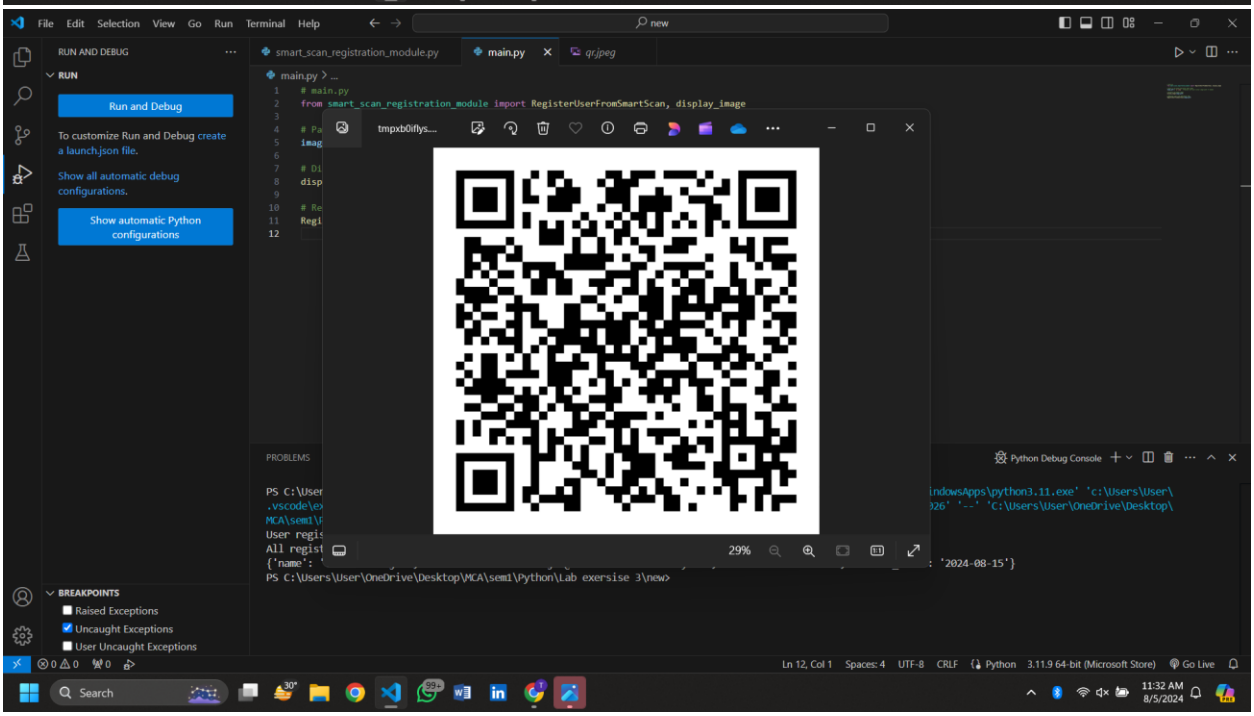
CODE:

```python
# smartscan_registration_module.py
from PIL import Image

# In-Memory Storage: Simulate a database using a list of dictionaries
user_database = []

# Lambda functions for creating, inserting, and fetching user records
create_user_record = lambda name, email, destination, travel_date: {
    "name": name,
    "email": email,
    "destination": destination,
    "travel_date": travel_date
}
insert_user_record = lambda record: user_database.append(record)
fetch_all_users = lambda: user_database

# Function to simulate scanning and decoding SmartScan Code
def scan_smartscan_code(image_path):
    dummy_data = "Tushar Mahajan,tushar.mahajan@mca.christuniversity.in,Goa,2024-08-15"
    return dummy_data

# Function to register user from SmartScan
def RegisterUserFromSmartScan(image_path):
    user_data = scan_smartscan_code(image_path)
    if user_data:
        name, email, destination, travel_date = user_data.split(',')
        user_record = create_user_record(name, email, destination, travel_date)
        insert_user_record(user_record)
        print("User registered successfully!")
    else:
        print("Failed to scan the SmartScan Code.")

    print("All registered users:")
    for user in fetch_all_users():
        print(user)

# Function to display the dummy image
def display_image(image_path):
    img = Image.open(image_path)
    img.show()

if __name__ == "__main__":
    print("This is a module and should be imported to use the functions.")
```

```python
# main.py
from smart_scan_registration_module import RegisterUserFromSmartScan, display_image

# Path to the dummy SmartScan Code image
image_path = 'qr.jpeg'  # Replace with your actual image path if needed

# Display the dummy image
display_image(image_path)

# Register user from SmartScan Code
RegisterUserFromSmartScan(image_path)
```

OUTPUT:


File Edit Selection View Go Run Terminal Help
new
RUN AND DEBUG
RUN
Run and Debug
To customize Run and Debug create a launch.json file.
Show all automatic debug configurations.
Show automatic Python configurations
smart_scan_registration_module.py
main.py
qr.jpeg
# main.py
from smart_scan_registration_module import RegisterUserFromSmartScan, display_image
# Path to the dummy SmartScan Code image
image_path = 'qr.jpeg' # Replace with your actual image path if needed
# Display the dummy image
display_image(image_path)
# Register user from SmartScan Code
RegisterUserFromSmartScan(image_path)
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python Debug Console
PS C:\Users\User\OneDrive\Desktop\MCA\sem1\Python\Lab exersise 3\new> & 'c:\Users\User\AppData\Local\Microsoft\WindowsApps\python3.11.exe' 'c:\Users\User\.vscode\extensions\ms-python.debugpy-2024.10.0-win32-x64\bundled\libs\debugpy\adapter/../..\debugpy\launcher' '55026' '--' 'C:\Users\User\OneDrive\Desktop\MCA\sem1\Python\Lab exersise 3\new\main.py'
User registered successfully!
All registered users:
{'name': 'Tushar Mahajan', 'email': 'tushar.mahajan@mca.christuniversity.in', 'destination': 'Goa', 'travel_date': '2024-08-15'}
PS C:\Users\User\OneDrive\Desktop\MCA\sem1\Python\Lab exersise 3\new>
BREAKPOINTS
Raised Exceptions
Uncaught Exceptions
User Uncaught Exceptions
Ln 12, Col 1 Spaces: 4 UTF-8 CRLF Python 3.11.9 64-bit (Microsoft Store) Go Live
Search
11:33 AM 8/5/2024


File Edit Selection View Go Run Terminal Help
new
RUN AND DEBUG
RUN
Run and Debug
To customize Run and Debug create a launch.json file.
Show all automatic debug configurations.
Show automatic Python configurations
tmpxb0iflys....
29%
PROBLEMS
Python Debug Console
PS C:\Users\User\OneDrive\Desktop\MCA\sem1\Python\Lab exersise 3\new>
BREAKPOINTS
Raised Exceptions
Uncaught Exceptions
User Uncaught Exceptions
Ln 12, Col 1 Spaces: 4 UTF-8 CRLF Python 3.11.9 64-bit (Microsoft Store) Go Live
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