Cloud Development Microservice Application Gateway Service Document

Project Name: Holiday Query and Data Storage Service (Holiday Cache Service)
Group: r
File: r_gateway_service.py
Deployment Address: https://carrywen.pythonanywhere.com/

1. Verify the service on PythonAnywhere.

1.1-Here I test the Gateway Service endpoint with curl.
1.1.1
①curl:
curl "http://127.0.0.1:5002/gateway/test"

②screenshots:

```
C:\Users\OMEN>curl "http://127.0.0.1:5002/gateway/test"
{
   "message": "r Group Gateway Service is running"
}
```

1.1.2
①curl:
curl "https://CARRYwen.pythonanywhere.com/gateway/test"

②screenshots:

```
C:\Users\OMEN>curl "https://CARRYwen.pythonanywhere.com/gateway/test"
{"message":"r Group Gateway Service is running"}
```

1.2 -Query Irish Holiday Data

a.
Country &Year
①curl:
curl "https://CARRYwen.pythonanywhere.com/holidays/IE/2026"

②screenshots:

```
C:\Users\OMEN>curl "https://CARRYwen.pythonanywhere.com/holidays/IE/2026"
{"count":11,"country":"IE","data":[{"countryCode":"IE","date":"2026-01-01","month":"01","name":"New Year's Day"},{"countryCode":"IE","date":"2026-02-02","month":"02","name":"Saint Brigid's Day"},{"countryCode":"IE","date":"2026-03-17","month":"03","name":"Saint Patrick's Day"},{"countryCode":"IE","date":"2026-04-03","month":"04","name":"Good Friday"},{"countryCode":"IE","date":"2026-04-06","month":"04","name":"Easter Monday"},{"countryCode":"IE","date":"2026-05-04","month":"05","name":"May Day"},{"countryCode":"IE","date":"2026-06-01","month":"06","name":"June Holiday"},{"countryCode":"IE","date":"2026-08-03","month":"08","name":"August Holiday"},{"countryCode":"IE","date":"2026-10-26","month":"10","name":"October Holiday"},{"countryCode":"IE","date":"2026-12-25","month":"12","name":"Christmas Day"},{"countryCode":"IE","date":"2026-12-26","month":"12","name":"St. Stephen's Day"}],"message":"IE holiday data retrieved successfully","source":"api","year":"2026"}
```

b.

Country &Year & Month

1 curl:

curl "https://CARRYwen.pythonanywhere.com/holidays/IE/2025/03"

2 screenshots:

```
C:\Users\OMEN>curl "https://CARRYwen.pythonanywhere.com/holidays/IE/2025/03"
{"count":1,"country":"IE","data":[{"countryCode":"IE","date":"2025-03-17","month":"03","name":"Saint Patrick's Day"}],"m
essage":"IE holiday data retrieved successfully","source":"cache","year":"2025"}
```

c.

Country & Year & Holiday

1 curl:

**curl
"https://CARRYwen.pythonanywhere.com/holidays/IE/2025/name/Good%20Friday"**

2 screenshots:

```
C:\Users\OMEN>curl "https://CARRYwen.pythonanywhere.com/holidays/IE/2025/name/Good%20Friday"
{"count":1,"country":"IE","data":[{"countryCode":"IE","date":"2025-04-18","month":"04","name":"Good Friday"}],"message":
"IE holiday data retrieved successfully","source":"cache","year":"2025"}
```