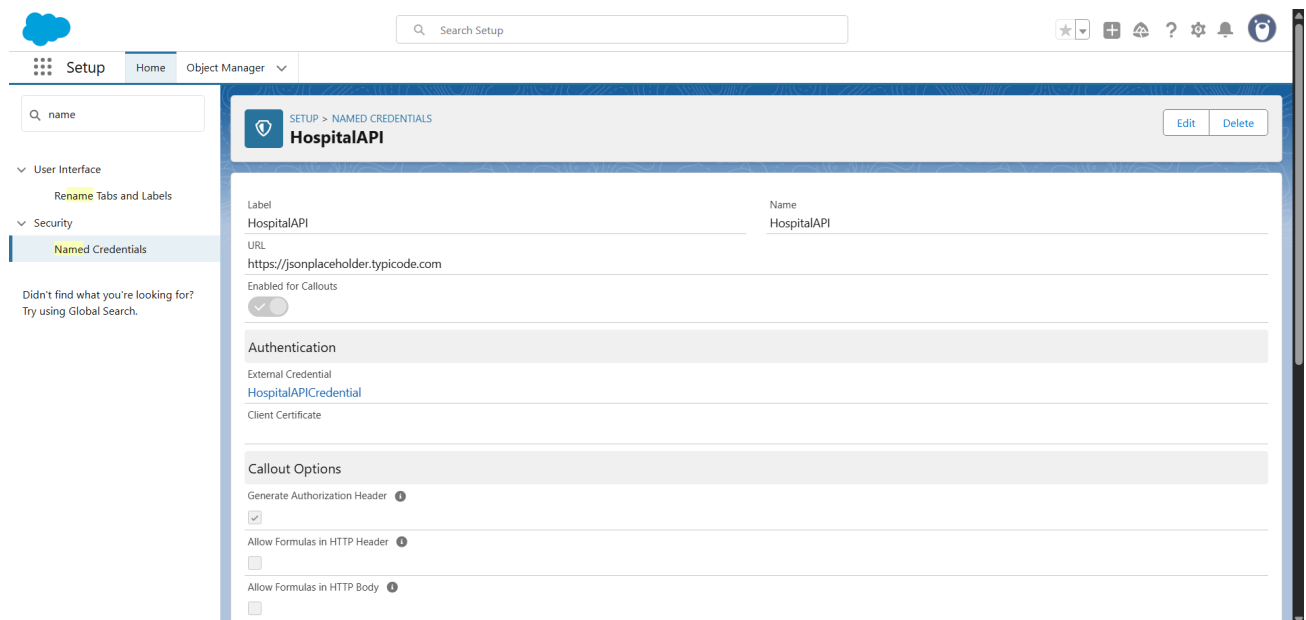# Phase 7 — Integration & External Access

1) Named Credentials

- **Created a Named Credential called HospitalAPI pointing to `https://jsonplaceholder.typicode.com`.**

- **Linked it with an External Credential and mapped access through a permission set.**

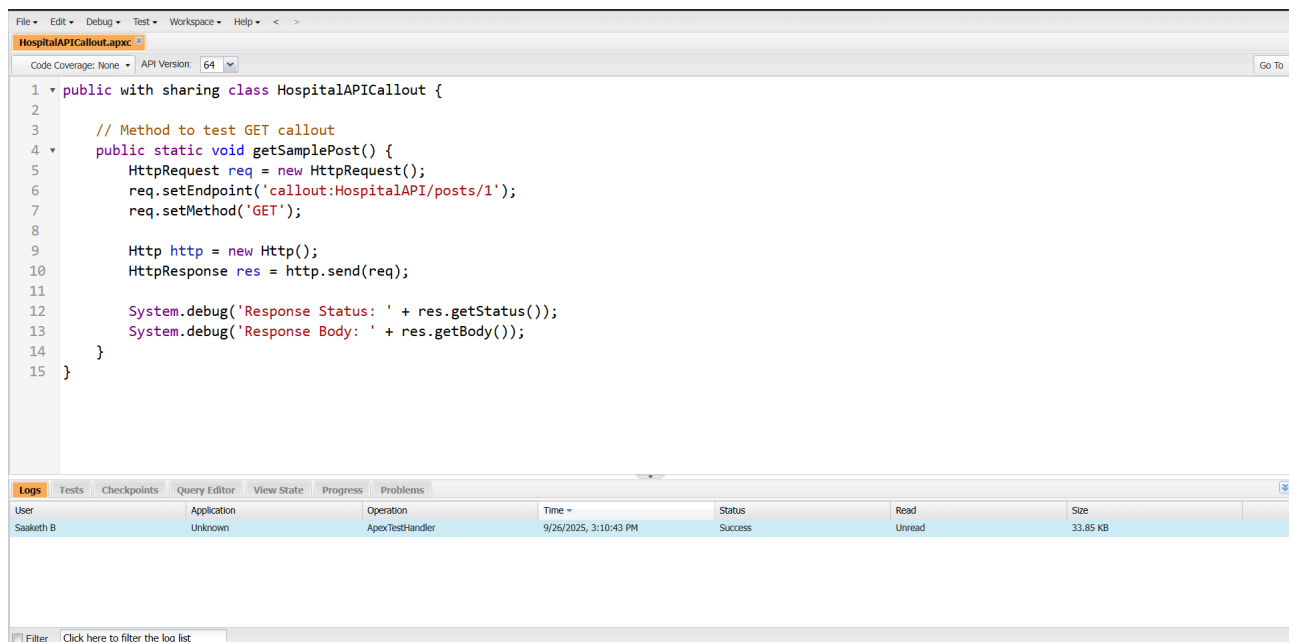- **Enabled secure callouts without hardcoding endpoints in Apex.**

2) External Services

- **External Services allow APIs defined in OpenAPI schemas to be imported for declarative use.**

- **Documented as an available approach for future integrations.**

- **Not required in this project.**

3) Web Services (REST / SOAP)

- **Implemented a REST Web Service callout using Apex (`HospitalAPIDemo`) with the Named Credential.**

- **Verified JSON response from the endpoint `callout:HospitalAPI/posts/1` in Developer Console logs.**

- **SOAP services documented for future reference but not used here.**


```apex
public with sharing class HospitalAPICallout {

    // Method to test GET callout
    public static void getSamplePost() {
        HttpRequest req = new HttpRequest();
        req.setEndpoint('callout:HospitalAPI/posts/1');
        req.setMethod('GET');

        Http http = new Http();
        HttpResponse res = http.send(req);

        System.debug('Response Status: ' + res.getStatus());
        System.debug('Response Body: ' + res.getBody());
    }
}
```

4) Callouts

- **Configured callouts through Named Credentials for secure and simplified integration.**

- **Verified successful connection by executing Apex and reviewing HTTP 200 response.**

- **Demonstrated that callouts are functional and reusable across Apex and Flows.**

5) Platform Events

- **Platform Events provide asynchronous, event-driven messaging across systems.**

- **Suitable for scenarios such as notifying external systems of new appointments.**

- **Not required for current project scope.**

6) Change Data Capture

- **Enables real-time streaming of record changes to external subscribers.**

- **Relevant for syncing patient or appointment data with external systems.**

- **Not implemented in this phase.**

7) Salesforce Connect

- **Allows access to external data sources as external objects inside Salesforce.**

- **Suitable for integrating large external datasets such as EHR or insurance data.**

- **Not implemented as callouts covered project needs.**

8) API Limits

- **Documented Salesforce daily API limits (e.g., 15,000/day for Developer Edition).**

- **Verified that current usage fits well within the available quota.**

- **No configuration changes required.**
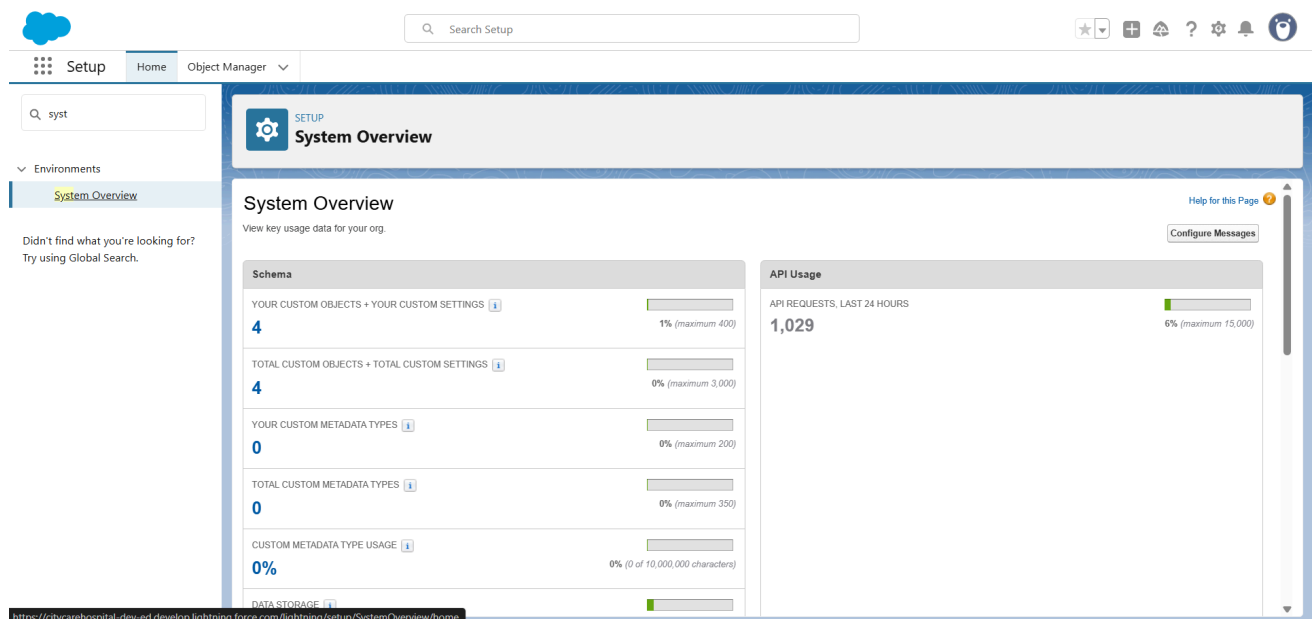
9) OAuth & Authentication

- **Salesforce supports OAuth authentication flows for secure integrations.**

- **Current implementation used "No Authentication" as the external API was public.**

- **OAuth documented for future use with protected APIs.**

10) Remote Site Settings

- **Remote Site Settings whitelist external endpoints for callouts.**

- **Modern integrations rely on Named Credentials instead.**

- **Documented for completeness as a legacy option.**