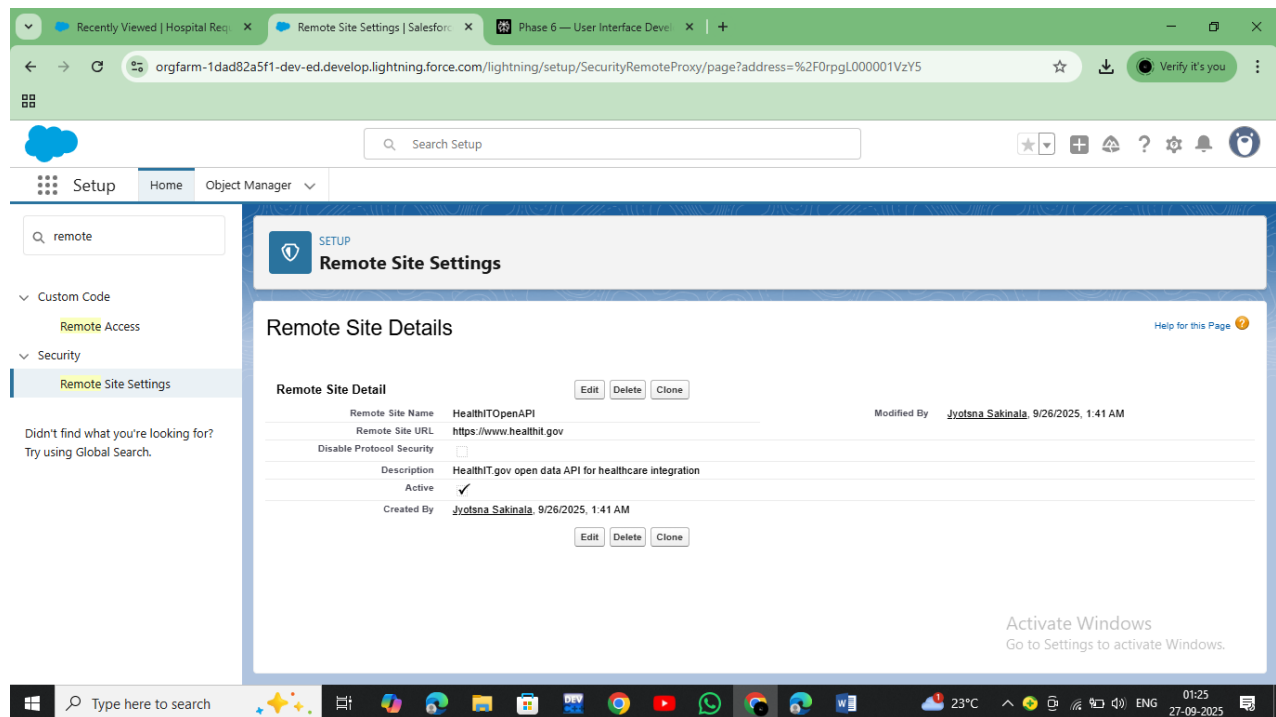


# Phase 7: Integration & External Access

## Named Credentials & Remote Site Settings

- Configured Named Credentials in Salesforce to securely store endpoint URLs and authentication details for external APIs.
- Set up Remote Site Settings to authorize callouts to external API endpoints, ensuring adherence to security protocols.

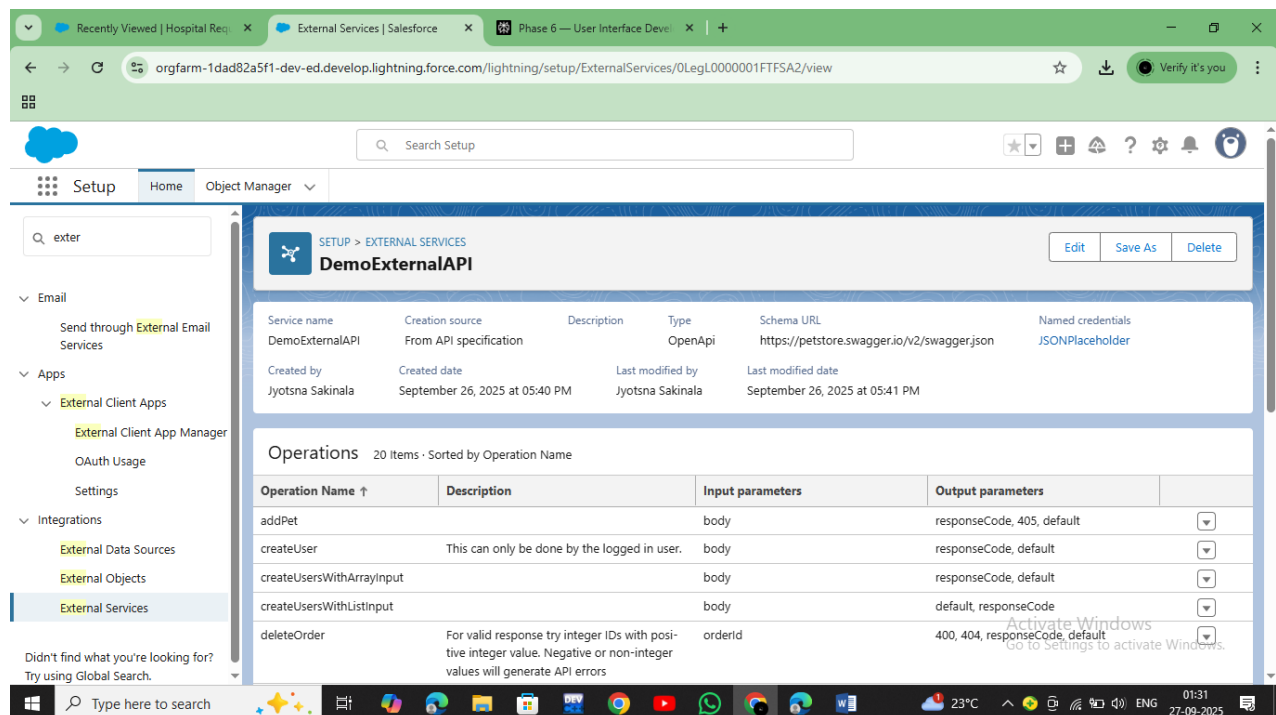


## Apex REST Callouts

- Developed Apex classes using HTTP methods to perform REST API callouts to external services, such as JSONPlaceholder for testing.
- Implemented GET requests to fetch data and processed responses with Apex classes.
- Integrated with Lightning Web Components to display external API data directly within the Salesforce UI, providing a seamless user experience.

## External Services Registration

- Registered external REST APIs declaratively in Salesforce External Services using Swagger (OpenAPI) specifications.
- Used Named Credentials for secure connection and authentication to external APIs.
- Enabled no-code invocation of external APIs via Flow actions auto-generated from API schemas.



## Flow Integration with External Services

- Built Salesforce Flows that call external APIs declaratively through registered External Services.
- Flow actions enabled API calls interactively or automatically within Salesforce processes.
- Some flows encountered unhandled fault errors due to time constraints and were deferred for future fixes.

## **Apex REST Web Service Exposure**

- Created Apex REST service classes exposing Salesforce custom object data (e.g., Pet\_\_c) for external system consumption.
- Developed secure, queryable REST endpoints providing JSON responses.
- Tested REST endpoints with OAuth/session tokens to verify secure data access.

## **Conclusion**

Phase 7 established robust, secure, and flexible integration between Salesforce and external systems by combining Apex programming, declarative services, and web technologies. This facilitates real-time data sharing and automation, enhancing the operational efficiency of the Blood Donation Management System.