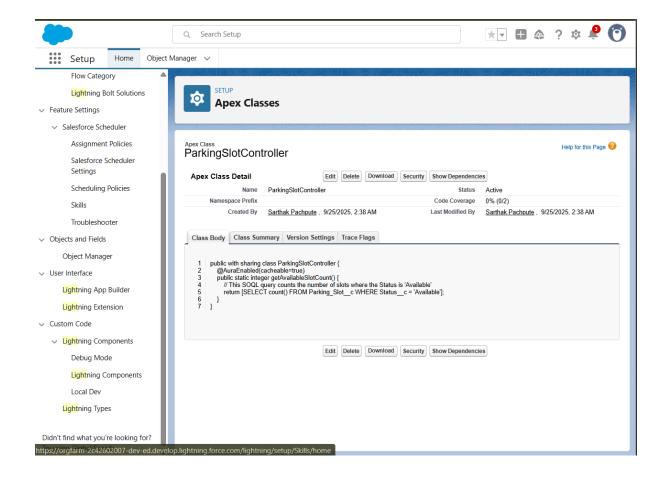
Phase 6: Lightning Web Components (LWC) for a Modern User Experience

Objective

The primary goal of this phase was to build a modern, responsive, and efficient user interface using Lightning Web Components (LWC). Unlike older technologies, LWC provides a fast and highly interactive experience for users of the "Make Parking Easier" application.

Key Development Activity

- 1. Parking Availability Component (parkingSlotAvailability) The core of the custom user interface is the parkingSlotAvailability component. This single, powerful component serves as a real-time, visual dashboard of the entire parking lot.
 - Function: This LWC calls the ParkingSlotController Apex class to fetch the current status of all Parking Slots. It then displays this data in a user-friendly grid or map format, using different colors or icons to show whether a slot is "Available" or "Occupied".
 - **Purpose:** To provide an intuitive, at-a-glance dashboard for both customers looking for a spot and managers overseeing the lot, streamlining the entire parking management process.



Conclusion

Phase 6 successfully delivered a modern and dynamic user interface centered around the parkingSlotAvailability Lightning Web Component. This component provides a fast, responsive, and rich user experience for managing and viewing parking information. By connecting the LWC front-end with the Apex back-end, the application is now a powerful and user-friendly tool.