**Salesforce Capstone Project**

This project demonstrates the use of Apex Triggers, Apex Classes, Test Classes, Lightning Web Components (LWC), and Data Modeling with Junction Objects in Salesforce.

**Components**

**Apex Class and Trigger:** Job Application Automation

**File:** JobAppAutomation.cls

**Trigger:** JobAppTrigger.trigger

**Purpose:** Automates updates when a Job Application Record is created or updated.

**Key Features:**

- Calculates Paycheck Fields based on Salary.

- Creates Follow-Up Task Records automatically.

- Encapsulates logic in a Handler Class for reusability.

**Test Class**

**File:** JobAppAutomationTest.cls

**Purpose:** Validates the functionality of the Trigger and automation logic.

**Key Features:**

- Inserts and updates Job Application records.

- Verifies that fields are correctly calculated.

- Asserts that related Task records are created.

**Importance:** Ensures compliance with Salesforce’s requirement of ≥75% test coverage and verifies business logic correctness.

**Lightning Web Component:** Take Home Pay Calculator

**Files:**

- payCalculator.js

- payCalculator.html

- payCalculator.css

- payCalculator.js-meta.xml

**Purpose:** A front-end calculator that lets Users input a Salary and instantly see estimated Take Home Pay after Federal Tax, Social Security, and Medicare.

**Key Features:**

- Real-time calculation as the User types.

- Uses SLDS (Salesforce Lightning Design System) for styling.

- Demonstrates client-side interactivity with LWC.

**Junction Object:** Job Application Contact

**Purpose:** Represents a many-to-many relationship between Job Applications and Contacts.

**Why is this Important?**

- Realistically, one Contact (person) can have many Job Applications (applied to different jobs).

- One Job Application might involve multiple Contacts (like candidate and references or candidate and recruiter).

- This is a many-to-many relationship and Salesforce handles that via a junction Object.

- Adding this Object makes the data model more realistic and scalable.

**Business Value**

**This Project Demonstrates:**

- Realistic automation of business processes (Trigger and Handler).

- Testing best practices for reliability and compliance.

- A User-friendly front-end calculator with LWC.

- Strong data modeling with junction Objects.