

## Salesforce Developer

Course Objectives	Course Outcomes
<ul style="list-style-type: none"> <li> <b>Fundamentals of Salesforce:</b> Gain the knowledge of Salesforce fundamentals and concepts required for implementing Salesforce.         </li> </ul>	<ul style="list-style-type: none"> <li>Navigate Salesforce and utilize its various functionalities for business operations.</li> </ul>
<ul style="list-style-type: none"> <li> <b>Salesforce Platform and Data Security:</b> Gain the knowledge of the fundamentals of Salesforce Platform and concepts required for implementing Data Security on Salesforce Platform.         </li> </ul>	<ul style="list-style-type: none"> <li>Getting started with Salesforce platform's components, including standard and custom objects, fields, relationships, and workflows.</li> </ul>
<ul style="list-style-type: none"> <li> <b>Data Modeling:</b> Gain the knowledge of the fundamentals of Data Modeling concepts required for implementing and Use the Platform According to the Business Requirements.         </li> </ul>	<ul style="list-style-type: none"> <li>Designing and implement data models to meet specific business requirements.</li> </ul>
<ul style="list-style-type: none"> <li> <b>Creating Reports and Dashboards:</b> Reports and dashboards can be customized further based on specific business requirements and goals. Regular review and analysis of these metrics can drive informed decision-making, optimize sales strategies, and improve overall sales performance.         </li> </ul>	<ul style="list-style-type: none"> <li>Customize reports and dashboards to meet specific business requirements and goals.</li> </ul>
<ul style="list-style-type: none"> <li> <b>Fundamentals of Salesforce Apex Basics:</b> Gain a solid Fundamentals of the Apex basic concepts, Oops Concepts, DML Operations, Collection frame sets, SOQL -SOSL, Developer Console Introduction.         </li> </ul>	<ul style="list-style-type: none"> <li>Develop hands on skill about the Apex programming language, including syntax, data types, and control structures.</li> </ul>
<ul style="list-style-type: none"> <li> <b>Automation in Salesforce:</b> Prelude - What is Trigger, Types of Triggers, Different types of events in Trigger, what is flow Builder, Types of flows, Screen Flow Creation, Record Trigger Flow Creation.         </li> </ul>	<ul style="list-style-type: none"> <li>Create screen flows and record-triggered flows to automate repetitive tasks and streamline operations.</li> </ul>

<ul style="list-style-type: none"> <li>● <b>Asynchronous Apex &amp; LWC Basics:</b> Prelude -Queueable Apex-Batch Apex-Scheduled Apex-Future Methods-Platform Events-@future Annotation vs code Setup - What is scratch Org - Building the Component - Deploying the Component to Production Org</li> </ul>	<ul style="list-style-type: none"> <li>● Implement the basics of Lightning Web Components (LWC) development, including setting up development environments, building components, and deploying to production orgs.</li> </ul>
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**Course Duration:** 45 Hours

**Course Content:**

**Unit 1: Introduction to Salesforce And Platform Creation**

Introduction to Salesforce - What is Salesforce CRM? - Setup a free developer account in Salesforce? - Architecture of Salesforce - Creating a FREE Salesforce Org

**Unit 2: Data Modeling and Data Security**

Data Modeling - Object and Field Creation - Object Relationships - Validation Rules - Record Ownership - Role Hierarchies - Sharing rules - Manual Sharing

**Unit 3: Salesforce Apex Basics**

What is Apex? - Oops Concepts - Best Practice of Writing Apex - Loops in Apex class - Access Modifiers - DML Operations - Collection frame sets - SOQL -SOSL - Governor Limits - Order Of Execution - What is the Query Editor? - Developer Console Introduction

**Unit 4: Automation in Salesforce**

What is Trigger? - Types of Triggers - Different types of events in Trigger - What is flow Builder? - Types of flows - Screen Flow Creation - Record Trigger Flow Creation

**Unit 5: Asynchronous Apex & LWC Basics**

Queueable Apex - Batch Apex - Scheduled Apex - Future Methods - Platform Events - @future Annotation - vscode Setup - What is scratch Org - Building the Component - Deploying the Component to Production Org

## Test Projects:

### Use Cases

OVERALL COURSE LEARNING OUTCOME ASSESSMENT CRITERIA AND USECASES		
LEARNING OUTCOME	ASSESSMENT CRITERIA	USECASES
<ul style="list-style-type: none"> <li>Navigate Salesforce and utilize its various functionalities for business operations across sales, marketing, service, and beyond.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate comprehension of Salesforce's role as a versatile cloud platform catering to diverse business needs encompassing sales, marketing, service, and beyond.</li> </ul>	<p><b>Use Case 1:</b> CRM Application for Jewel Management</p> <p><b>Scenario:</b> The Jewel Inventory System is a comprehensive software Solution designed to streamline and manage the inventory and sales processes of a jewellery store or a jewellery manufacturer. The system aims to provide an efficient and user-friendly solution to track and control the inventory of various jewellery items, maintain accurate records, and facilitate seamless sales transactions.</p> <p><b>Task:</b> Develop a comprehensive Salesforce CRM, the Jewel Inventory System, to streamline and manage inventory and sales processes for jewellery stores or manufacturers. Focus on creating an efficient and user-friendly system to track and control jewellery inventory, maintain accurate records, and facilitate seamless sales transactions.</p> <p><b>Use Case 2:</b> PWD Management using Salesforce CRM</p> <p><b>Scenario:</b> With a commitment to efficient public works projects, ConstructIQ Construction adopts Salesforce for PWD management. Leveraging</p>

		<p>Salesforce's robust features, the construction company optimizes project planning, resource allocation, and budgeting processes. Project managers effortlessly create, assign, and track tasks, ensuring seamless project execution.</p> <p><b>Task:</b> Implement Salesforce for PWD management at ConstructIQ Construction to enhance project planning, resource allocation, and budgeting processes. Enable project managers to efficiently create, assign, and track tasks for seamless project execution. Leverage Salesforce's robust features to streamline workflows and improve project management efficiency.</p>
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<p>In Salesforce data management create and customize objects and fields, establishing meaningful object relationships, enforcing data integrity with validation rules, managing record ownership and access through role hierarchies and sharing rules, and utilizing manual sharing for flexible and controlled data access.</p>	<ul style="list-style-type: none"> <li>• Assess understanding and proficiency in Salesforce data management, including object and field customization.</li> <li>• Establishing object relationships, implementing validation rules for data integrity, managing record ownership and access via role hierarchies and sharing rules, and effectively utilizing manual sharing for controlled data access.</li> </ul>	<p><b>Use Case 1:</b> A CRM Application for Cosmetics Store Management</p> <p><b>Scenario:</b> Cosmetics Store Management in Salesforce is a solution that helps cosmetics stores manage their operations efficiently and effectively. The solution is built on the Salesforce platform, which provides a powerful and scalable platform for managing customer relationships, sales, and inventory. cosmetics stores improve their operational efficiency, enhance customer engagement, and drive growth.</p> <p><b>Task:</b> Develop a Cosmetics Store Management solution on the Salesforce platform to efficiently manage operations, customer relationships, sales, and inventory for cosmetics stores. Focus on enhancing operational efficiency, customer engagement, and driving growth through scalable and powerful Salesforce features. Implement features for inventory management, sales tracking, and customer relationship management to optimize store operations and drive business success.</p> <p><b>Use Case 2:</b> A CRM Application to Manage the Booking of Co-Living</p> <p><b>Scenario:</b> Our co-living space project aims to create a vibrant and inclusive community where individuals can live, work, and connect with like-minded people. We believe that living</p>
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		<p>together in a shared environment fosters collaboration, reduces isolation, and enhances the overall quality of life.</p> <p>The co-living space will feature a carefully designed layout that balances privacy and communal areas. Co-living Space is an application where customer Details is stored in order to choose the different AC rooms with Multiple Sharing. Special foods items will be selected by the user in Daily and make Payments in different modes. And Also give the feedback of the service like Room cleaning, internet connection and foods etc.</p> <p><b>Task:</b> Develop the Co-living Space application to store customer details for selecting AC rooms with multiple sharing options and choosing special food items daily. Implement payment functionality with various modes and incorporate a feedback system for room cleaning, internet connection, and food service. Focus on creating a vibrant and inclusive community environment that fosters collaboration and enhances overall quality of life through carefully designed layouts and balanced privacy and communal areas.</p>
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- Implement the (OOP) concepts, such as classes, inheritance, and Explore. DML operations, and collection frameworks for data manipulation. Understand how to query and search data using SOQL and SOSL, while also mastering governor limits and the order of execution in Salesforce transactions. Exhibit the Query Editor and Developer Console tools for interactive development, testing, and debugging of Apex code within the Salesforce platform.

- Evaluate comprehension and proficiency in Salesforce Apex, including understanding and application of Object-Oriented Programming (OOP) concepts,.
- mastery of DML operations and collection frameworks, proficiency in querying and searching data using SOQL and SOSL, knowledge and adherence to governor limits and transaction order of execution, and proficiency in utilizing Query Editor and Developer Console tools for interactive development, testing, and debugging of Apex code.

**Use Case 1:** Purchase & Feedback System

**Scenario:** When the user navigates to the product page, He should see an option to enter a referral code or coupon code during the checkout process. Upon entering a valid referral code or coupon code, the system should apply the relevant discount to my order. The checkout process should be seamless, allowing me to review my order and complete the purchase. Customers can buy products at discounted rates by using referral codes and coupons. To enhance customer interaction and satisfaction, email alerts are included to notify customers about their upcoming purchases and encourage them to review their bought items.

**Task:** The project aims to enhance user experience and customer engagement through seamless checkout processes and email notifications.

Components needed include product page integration, discount calculation logic, checkout, feedback system that collects surveys and customer

		<p>reviews, email notification system, and effective data management. Overall, the project focuses on improving user experience and engagement during the purchase process.</p> <p><b>Use Case 2:</b> A CRM Application to Manage the Services offered by an Institution</p> <p><b>Scenario:</b> EduConsultPro Institute is a leading educational institution offering a variety of courses and programs in diverse fields. With a growing number of prospective students seeking admission each year, the institute faces challenges in managing the admission process, students enquiry, and expert consulting services efficiently. To address these challenges, EduConsultPro Institute decides to leverage Salesforce CRM to streamline the admission process and enhance the overall experience for both students and admissions staff.</p>
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		<p><b>Task:</b>The use case focuses on the admission process for prospective students interested in enrolling in courses and programs offered by EduConsultPro Institute. The goal is to provide a seamless and transparent experience for students while enabling admissions staff to efficiently review and process admission applications, students enquiry and case management.</p>
<ul style="list-style-type: none"> <li>• Execute triggers as Apex code executing before or after specific events; grasp before and after triggers, event types like insert/update/delete/undelete etc; comprehend Flow Builder for visual workflow creation; learn autolaunched, screen, and record-triggered flows, enabling guided experiences and advanced automation.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate understanding and proficiency in triggers as Apex code executing before or after specific events, including knowledge of before and after triggers, different event types (insert/update/delete/undelete)</li> <li>• comprehension of Flow Builder for and proficiency in designing autolaunched, screen, and record-triggered flows to enable guided experiences and advanced automation in Salesforce.</li> </ul>	<p><b>Use Case 1:</b> A CRM Application To Engineering Works</p> <p><b>Scenario:</b> An application is required to efficiently manage client information for engineering projects, encompassing details such as company information, owner details, contact information, worker details, and their respective requirements for materials, including measurements. Additionally, the application should automatically calculate the price based on the specified materials and measurements.</p> <p><b>Task:</b> This project encompasses the implementation of a comprehensive solution tailored to the specific needs of fabrication, pipe-lining, and shed construction activities.</p>

		<p>This integrated system will empower project managers, engineers, contractors, and other stakeholders with the tools and insights needed to effectively plan, execute, and oversee engineering works. Just like the Amount and the Final Price are automated based on the values of the area and cost per meter(based on the parameters of length, breadth, width.</p> <p><b>Use Case 2:</b> A CRM Application to Handle the Clients and their property Related Requirements</p> <p><b>Scenario:</b>Dreams World Properties is embarking on a transformative journey by integrating Salesforce into their business operations to streamline customer interactions. With the aim of enhancing user experience and efficiency, the company seeks to automate its processes seamlessly. One of the primary objectives is to establish a seamless connection between their website and Salesforce platform.</p>
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		<p><b>Task:</b> Dreams World Properties integrates Salesforce to streamline customer interactions. Website engagement triggers automated record creation in Salesforce, capturing customer details and preferences. Salesforce categorizes users as approved or non-approved, offering tailored property selections to approved users. This enhances user experience and efficiency, providing personalized recommendations and broader listings. Seamless integration optimizes operations, improving customer engagement and facilitating growth in the real estate market.</p>
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<ul style="list-style-type: none"> <li>• Master and demonstrate various asynchronous Apex techniques including Queueable, Batch, and Scheduled Apex, Future Methods, Platform Events, and @future Annotation, along with VS Code setup, scratch org creation, component development, and deployment to production orgs.</li> </ul>	<ul style="list-style-type: none"> <li>• Assess mastery and proficiency in various asynchronous Apex techniques, including Queueable, Batch, and Scheduled Apex, Future Methods, Platform Events, and @future Annotation.</li> <li>• Evaluate understanding and capability in VS Code setup, scratch org creation, component development, and successful deployment to production orgs in Salesforce development environment.</li> </ul>	<p><b>Use Case 1:</b> Lease Management</p> <p><b>Scenario:</b> A lease management project involves creating a system or application to efficiently handle the processes related to leasing real estate properties, equipment, or other assets. The goal is to streamline and automate various tasks associated with lease agreements, ensuring accurate record-keeping, compliance with regulations, and effective communication between parties involved.</p> <p><b>Task:</b> Develop a lease management system/application to streamline processes related to leasing real estate properties, equipment, or assets. Focus on automating tasks associated with lease agreements, including record-keeping, compliance with regulations, and communication between parties.</p>
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**Use Case 2:** TripAdvisor E-Management

**Scenario:**The TripAdvisor E-Management app with the salesforce works with your all-in-one travel companion, empowering you to plan, book, and make the most of the trips. Discover millions of reviews and insights shared by fellow travelers, helping you make informed decisions for every aspect of your journey. Whether you're seeking the perfect hotel, top-rated restaurants, must-visit attractions, or the best travel deals, TripAdvisor has you covered.

**Task:** Develop the TripAdvisor E-Management app integrated with Salesforce to serve as an all-in-one travel companion for users. Implement features for planning, booking, and maximizing trips, leveraging TripAdvisor's extensive database of reviews and insights. Enable users to discover top-rated hotels, restaurants, attractions, and travel deals, empowering them to make informed

		decisions and enhance their travel experiences. Focus on creating a seamless and user-friendly interface that caters to travelers' needs and preferences.
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<b>LIST OF FINAL PROJECTS (10 PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME)</b>	
<b>SL.NO</b>	<b>FINAL PROJECT</b>
<b>1</b>	Airlines Management System
<b>2</b>	Workforce Administration Solution
<b>3</b>	NGO To Supply Leftover Food to Poor
<b>4</b>	Streamlined Employee Detail Management
<b>5</b>	A CRM application to manage Laptop Rentals
<b>6</b>	A CRM Application To Manage The Mall
<b>7</b>	Stationery Application to manage the inventory
<b>8</b>	A CRM APPLICATION ON E-COMMERCE ACTIVITIES
<b>9</b>	Job Application Tracking System
<b>10</b>	Application To Make The Gas Filling Station Easy Using CRM