

Phase 7: Integration & External Access

1. Named Credentials

- **Purpose:** Securely store authentication settings for external systems.

Use in AI Career Coach:

- Connect to external AI services without hardcoding credentials.
- Example: Store API key for resume analysis service or career recommendation engine.

Setup Steps:

3. Go to *Setup* → *Named Credentials*.
 4. Create a new credential: give a name, endpoint URL, and authentication type.
 5. Use it in Apex callouts with `@future` or `HttpRequest`.
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2. External Services

- **Purpose:** Import external REST API schemas into Salesforce and make them available as Apex actions or Flow actions.
 - **Use in AI Career Coach:**
 - Integrate a job recommendation API or skill assessment API.
 - Map API endpoints to Salesforce Flow for automated actions.
 - **Setup Steps:**
 1. Go to *Setup* → *External Services*.
 2. Register API schema (OpenAPI/Swagger JSON).
 3. Create Flow actions using the imported API.
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3. Web Services (REST/SOAP)

- **Purpose:** Expose Salesforce data externally or consume external data.
- **Use in AI Career Coach:**
 - Expose student progress or career paths via REST API.
 - Consume external services for AI recommendations.
- **Implementation:**

- **Apex REST:** Annotate class with `@RestResource(urlMapping='/CareerCoach/*')`.
 - **Apex SOAP:** Create webservice methods in Apex classes.
 - Example: `@HttpGet` method to return quiz results in JSON.
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4. Callouts

- **Purpose:** Salesforce making requests to external services.
 - **Use in AI Career Coach:**
 - Fetch real-time career suggestions, interview questions, or job openings.
 - **Steps:**
 1. Ensure endpoint is in *Remote Site Settings*.
 2. Write Apex `HttpRequest` and `HttpResponse` code.
 3. Use `Named Credentials` for authentication.
 - **Example:** Fetch AI-generated resume score.
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5. Platform Events

- **Purpose:** Real-time messaging inside Salesforce or with external systems.
 - **Use in AI Career Coach:**
 - Notify users when a career assessment is complete.
 - Trigger external system updates when a new student completes a quiz.
 - **Steps:**
 1. Create a Platform Event object (e.g., `Assessment_Completed__e`).
 2. Subscribe to events via Process Builder, Flow, or Apex Trigger.
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6. Change Data Capture (CDC)

- **Purpose:** Track and respond to changes in Salesforce records in real-time.
- **Use in AI Career Coach:**
 - Trigger external actions when a student record or quiz score is updated.
 - Keep external dashboard or analytics system in sync.

- **Setup Steps:**
 1. Enable CDC for objects (like `Student__c`, `Assessment__c`).
 2. Subscribe via CometD or Apex triggers.
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7. Salesforce Connect

- **Purpose:** Access external data in real-time without storing in Salesforce.
 - **Use in AI Career Coach:**
 - Connect to external HR databases or job portals.
 - Display external job openings inside Salesforce UI.
 - **Setup Steps:**
 1. Create External Data Source (OData/Other).
 2. Map external objects as Salesforce external objects.
 3. Use them in reports, dashboards, or Flows.
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8. API Limits

- **Purpose:** Salesforce enforces governor limits on API calls.
 - **Relevance:**
 - Monitor number of API calls for AI Career Coach integrations.
 - Optimize callouts using bulk processing or caching.
 - **Tools:** *Setup* → *System Overview* → *API Usage*.
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9. OAuth & Authentication

- **Purpose:** Secure integration with external systems using OAuth 2.0.
 - **Use in AI Career Coach:**
 - Authenticate external AI services.
 - Support Single Sign-On (SSO) for students or admins.
 - **Implementation Steps:**
 1. Register external app in Salesforce or provider.
 2. Use `Named Credentials` with OAuth 2.0.
 3. Use `Auth. Provider` for SSO scenarios.
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10. Remote Site Settings

- **Purpose:** Whitelist external endpoints for Salesforce callouts.
- **Use in AI Career Coach:**
 - Allow Salesforce to call AI recommendation or job listing APIs.

Setup Steps:

1. Go to *Setup* → *Remote Site Settings*.
2. Add new site with endpoint URL and optional descriptions.
3. Test callouts from Apex.