Phase 7: Integration & External Access - Library Tracking Project

1. Named Credentials

Stores external API endpoints and authentication details securely. Use for ISBN lookup API or payment gateway without hard-coding credentials.

2. External Services

Connect to external REST APIs declaratively using OpenAPI/Swagger. Example: pull book details from Google Books API directly into Salesforce.

3. Web Services (REST/SOAP)

Expose Salesforce data to external apps or consume external services. Example: external student portal views Rental__c records via REST API.

4. Callouts

Apex HTTP requests to external services. Example: trigger calls payment gateway to charge late fees.

5. Platform Events

Publish/subscribe messaging. Example: when rental is created or returned, publish Rental_Event__e and external systems subscribe for notifications.

6. Change Data Capture (CDC)

Stream record changes in near real-time to external systems. Example: sync Student or Book status changes with external library website.

7. Salesforce Connect

Display external data via OData without copying. Example: show external SQL book inventory inside Salesforce.

8. API Limits

Understand org API usage limits. Monitor and optimize API calls from your Library app to avoid hitting limits.

9. OAuth & Authentication

Securely authorize external apps via connected apps. Example: external student portal accesses Salesforce data with OAuth tokens.

10. Remote Site Settings

Whitelist external URLs before Apex callouts. Example: add ISBN API or payment gateway URL to allow callouts.

Topic	Library App Example	Benefit
Named Credentials	Store ISBN API credentials securely	No hard-coded credentials
External Services	Pull book details from Google Books API	Declarative integration
Web Services (REST/SOAP)	Expose rental data to external portal	External access to Salesforce
Callouts	Charge late fees via payment gateway	Automated external action
Platform Events	Notify mobile app when rental created	Real-time notifications
Change Data Capture	Sync Student or Book changes externally	Live data sync
Salesforce Connect	Display external SQL inventory in Salesforce	No duplicate data storage
API Limits	Track API usage	Avoid hitting limits
OAuth & Authentication	Secure student portal access	Safe & controlled access
Remote Site Settings	Whitelist external URLs	Enable safe callouts