

Phase 10:- Final Presentation and demo

Debug Log Analysis and Bug Fixing in Salesforce Apex

1. Introduction

- Briefly explain project objective: debugging Apex code using Salesforce DX and Apex Replay Debugger.

2. Show Salesforce DX Project Setup

- Explain project structure (force-app/main/default/classes, sfdx-project.json).
- Highlight the deployed Apex classes (AccountService.cls, AccountServiceTest.cls).

3. Run Apex Test and Generate Debug Logs

- Execute the test class via VS Code or Salesforce CLI.
- Highlight failing test due to the intentional bug.

4. Use Apex Replay Debugger

- Show breakpoints and checkpoints in the code.
- Replay debug logs to locate the bug.
- Inspect variable values and heap dumps.

5. Fix the Bug

- Correct the TickerSymbol assignment in AccountService.cls.
- Redeploy the class and rerun the test.
- Show that the test now passes and logs are correct.

6. UI Interaction (Optional)

- Demonstrate creating an Account using the LWC or Quick Action.
- Verify that the Apex method works and debug logs are generated.

7. Reports & Dashboards

- Display test execution summary, passed vs failed tests.
- Highlight improvements after the bug fix.

8. Conclusion

- Summarize key learnings: Apex debugging, Salesforce DX usage, Replay Debugger functionality.
- Emphasize practical application for real-world Apex development.

4. Tips for a Successful Demo

- Ensure all breakpoints and checkpoints are **set before running tests**.

- Keep **test data consistent** to avoid confusion.
- Explain each step clearly while showing the tool usage.
- Highlight how the **debugger helped identify and fix the bug**.
- Use **screenshots or live VS Code session** for clarity if live demo fails.

5. Expected Outcome

After the demo:

- The audience understands the **Apex Replay Debugger workflow**.
- Shows the **complete debugging lifecycle**: code → test → log → replay → fix → verify.
- Demonstrates how **Salesforce DX simplifies project management and deployment**.
- Highlights the use of **reports and dashboards** to track test results and code quality.



