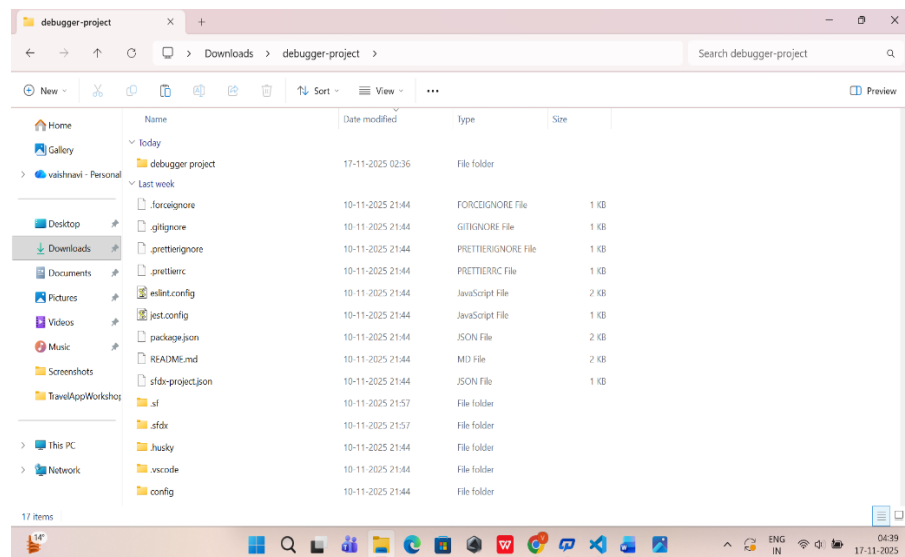


## Phase 6: User Interface Development

### Debug Log Analysis and Bug Fixing in Salesforce Apex

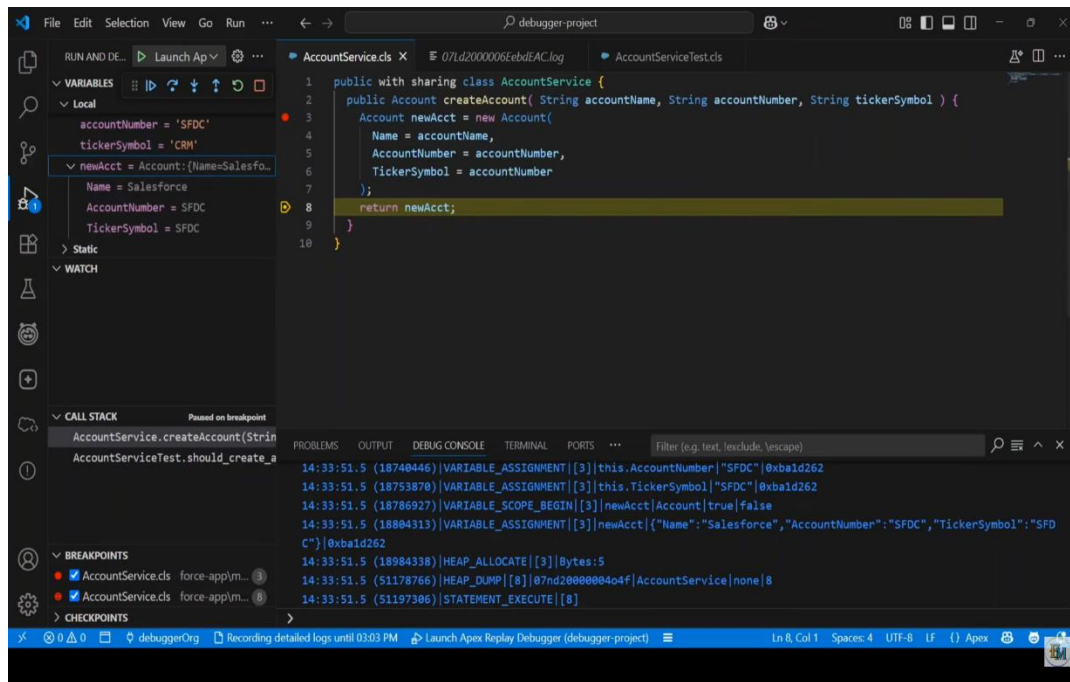
#### 1. Designing a Developer Console-Style UI

- Create a Lightning App Page or LWC (Lightning Web Component) layout for viewing Apex logs.
- Provide sections such as:
  - *Upload Log File*
  - *Select Existing Log*
  - *Run Replay Debugger*
  - *View Debug Timeline & Events*



#### 2. Developing

- Build components for:
  - **Log Upload Component** – allows users to upload .log files generated by Salesforce.
  - **Log List Viewer** – displays stored logs with date/time and type.
  - **Debugger Action Panel** – provides buttons such as *Replay*, *Step Over*, *Step Into*, *Step Out* (simulated for demo purposes).
  - **Debug Result Viewer** – shows output like variable values and execution steps.



### 3. Connecting UI With Backend Apex

- LWC components call Apex methods to:
  - Store log files in a custom object.
  - Process log content and extract debug events.
  - Return step-by-step debug information back to the UI.

### 4. UI for Data Visualization

- Display debugging steps in structured formats like:
  - Tables (execution order)
  - Highlighted code segments
  - Error-focused sections (if any)

### 5. Ensuring Ease of Use

- Clear labels and simple instructions for developers.
- Intuitive navigation so users can easily:
  - Upload → Run → Analyze logs.