This diagram highlights the end-to-end process from the initial job page interaction to the final proposal submission on Upwork.

1. Authentication and Initialization (FR-009)

- The workflow begins when a freelancer opens an Upwork job page and clicks the extension icon.
- The system checks if a session is valid (**FR-009**); if not, it prompts the user through a login screen to enter credentials and post login data.

2. Automated Data Extraction and Analysis (FR-001, FR-002, FR-003)

- Once authenticated, the extension automatically scrapes the job DOM (**FR-001**) to extract client metadata such as hire rate, spend, and feedback.
- This metadata is sent to the Backend Server, which processes it in parallel:
    - **FR-002**: Calculates a Client Reliability Score.
    - **FR-003**: Checks logic gates (e.g., suggesting a "Skip" if there are more than 50 applicants and the hire rate is below 30%).
- The extension then renders a dashboard overlay to display the calculated score and the recommendation badge to the user.

3. Intelligent Proposal Generation (FR-004, FR-006, FR-007)

- The user selects a desired tone (**FR-007**) and triggers the AI proposal generation.
- The backend retrieves the user's skills and bio (**FR-006**) and the highest-ranked proposal template (**FR-004**) to engineer a customized AI prompt.
- The prompt is sent to an External AI Service for processing.

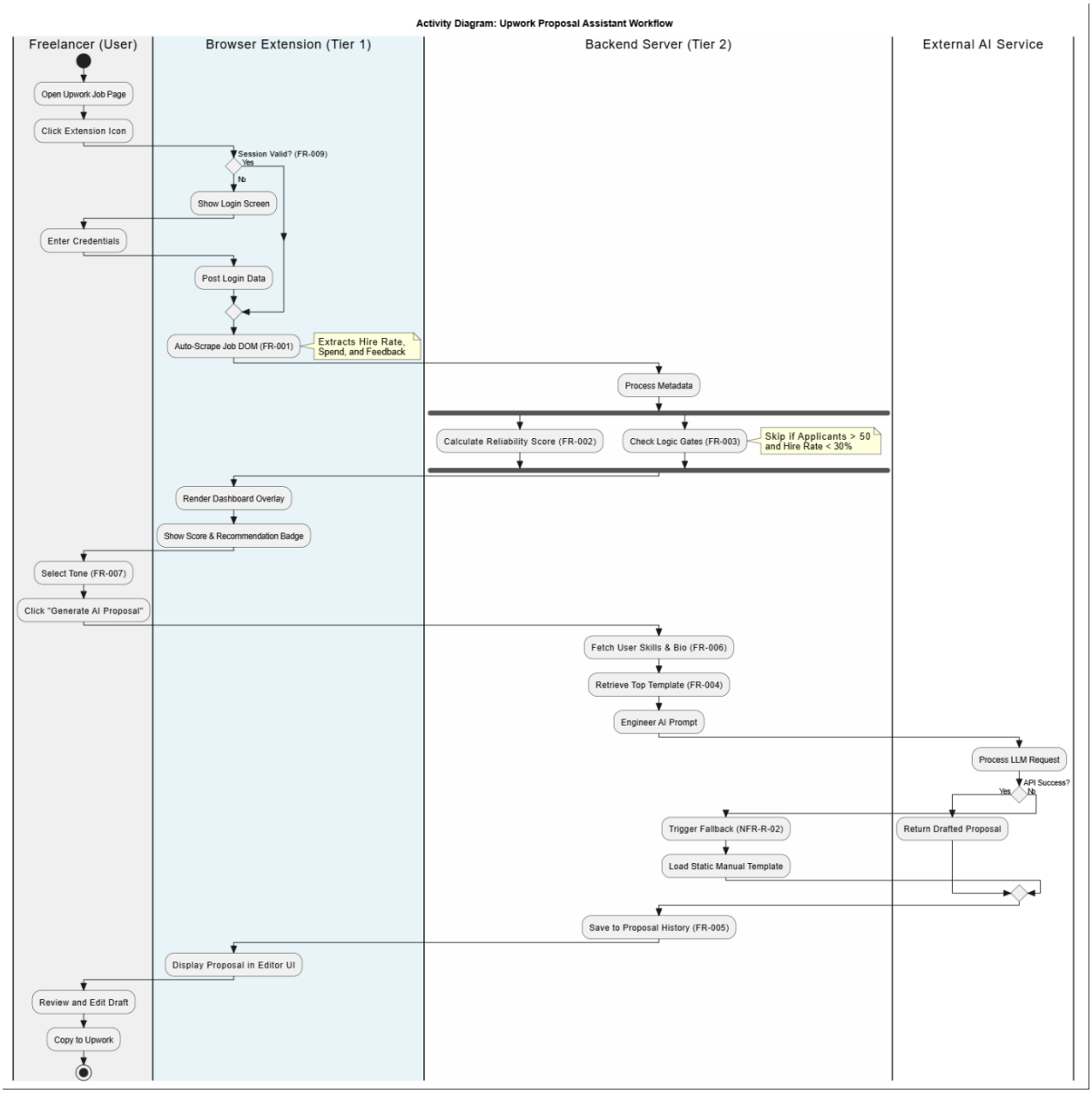
4. Reliability and Fallback (NFR-R-02)

- If the AI service succeeds, it returns a drafted proposal.
- In the event of an API failure, the system triggers a fallback (**NFR-R-02**) by loading a static manual template to ensure the user's workflow is not interrupted.

5. Finalization and Persistence (FR-005)

- The resulting proposal is saved to the user's proposal history (**FR-005**) and displayed in the editor UI.
- The freelancer reviews, edits, and finally copies the proposal to Upwork to complete the activity.

Screenshot:


Activity Diagram: Upwork Proposal Assistant Workflow
Freelancer (User)
Browser Extension (Tier 1)
Backend Server (Tier 2)
External AI Service
Open Upwork Job Page
Click Extension Icon
Session Valid? (FR-009)
Yes
No
Show Login Screen
Enter Credentials
Post Login Data
Auto-Scrape Job DOM (FR-001)
Extracts Hire Rate, Spend, and Feedback
Process Metadata
Calculate Reliability Score (FR-002)
Check Logic Gates (FR-003)
Skip if Applicants > 50 and Hire Rate < 30%
Render Dashboard Overlay
Show Score & Recommendation Badge
Select Tone (FR-007)
Click "Generate AI Proposal"
Fetch User Skills & Bio (FR-006)
Retrieve Top Template (FR-004)
Engineer AI Prompt
Process LLM Request
API Success?
Yes
No
Trigger Fallback (NFR-R-02)
Return Drafted Proposal
Load Static Manual Template
Save to Proposal History (FR-005)
Display Proposal in Editor UI
Review and Edit Draft
Copy to Upwork