

INFO 3150 S11

Project Proposal

**WE CONTRIBUTED EQUALLY ON THIS
PROPOSAL**

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Chrome History Manager Proposal

Objective

The primary objective of this project is to design, develop, and deploy a simple and efficient chrome browser extension that allows users to manage their browsing history. The core functionality of this extension is to allow users to input a keyword of their choice and upon submission, automatically delete all history entries that contain the keyword in the URL. This tool can serve as a targeted privacy tool, it can be an alternative to manually sifting and deleting large amounts of browsing data.

Inception

Privacy is a growing concern in today's digital landscape. There are many instances where users share devices with each other, use screen share software, or a software that monitors the browser. Manually deleting entries can be a tedious and time consuming task, especially when a user needs to quickly remove sensitive or private information. By using chrome's chrome.history API, this tool will provide a practical, user centric solution that gives individuals greater control over their privacy without the need of complex design or deep technical knowledge.

First Elaboration

The first iteration of this project will focus on developing a minimum viable product with the core functionality defined. This will include a straightforward popup window that will pop up when the user clicks the extension icon. The interface includes a textbox that allows the user to input keywords and a delete button. This will query chrome's chrome history api within a specific date range and match keywords against urls then delete such.

Timeline

The core features of this extension will be completed before the milestone report. Additional features can be added if time and technical skill permits. Final implementation and UI polish will be a week prior to presentation.

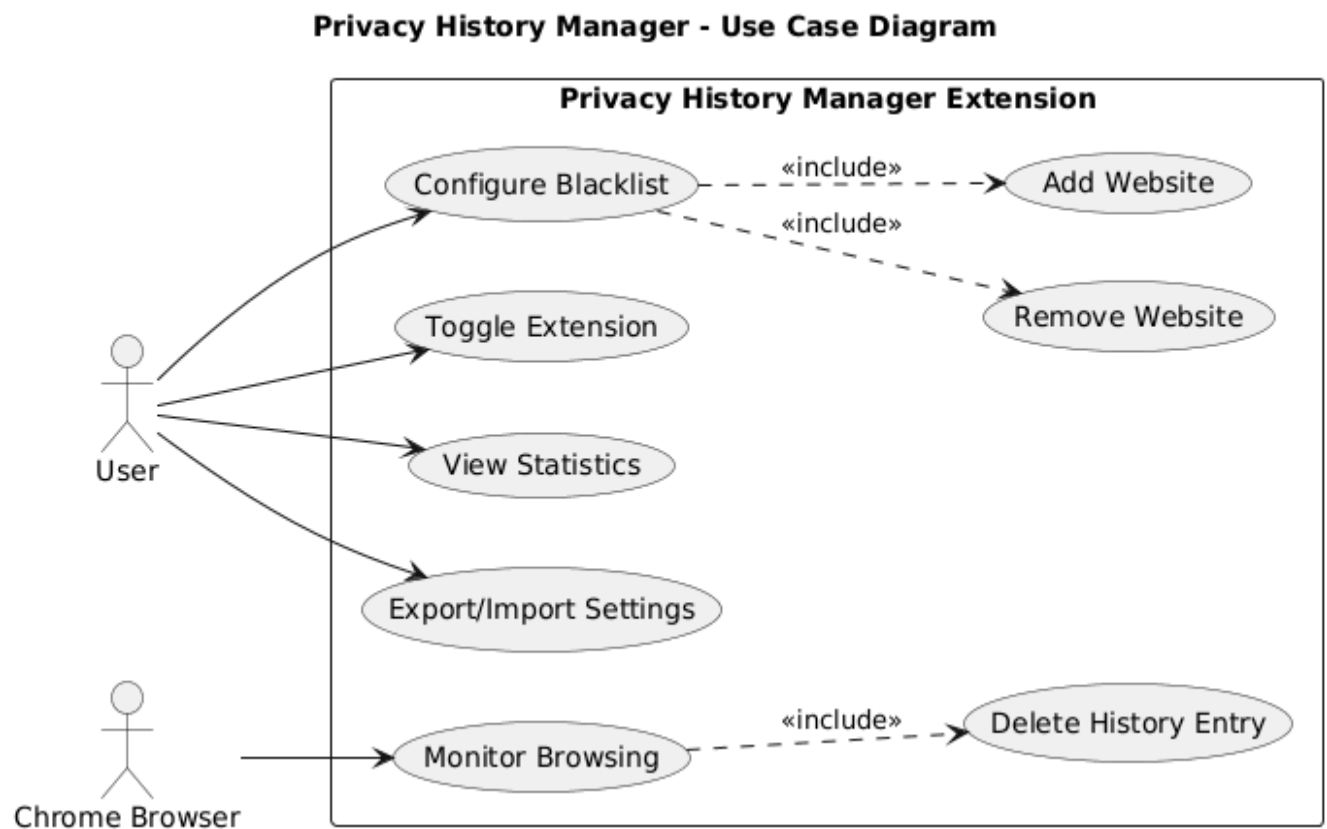
Budget

The budget of this project will include personal devices and software at \$0. APIs will be chrome's built in extension and testing will be done manually.

NON-FUNCTIONAL REQUIREMENTS

- **Performance:** History deletion < 100ms per entry
- **Reliability:** 99.9% uptime during browser session
- **Security:** No external data transmission
- **Usability:** Setup in < 2 minutes

USE CASE DIAGRAM



WRITTEN USE CASES

UC1: Configure Blacklist

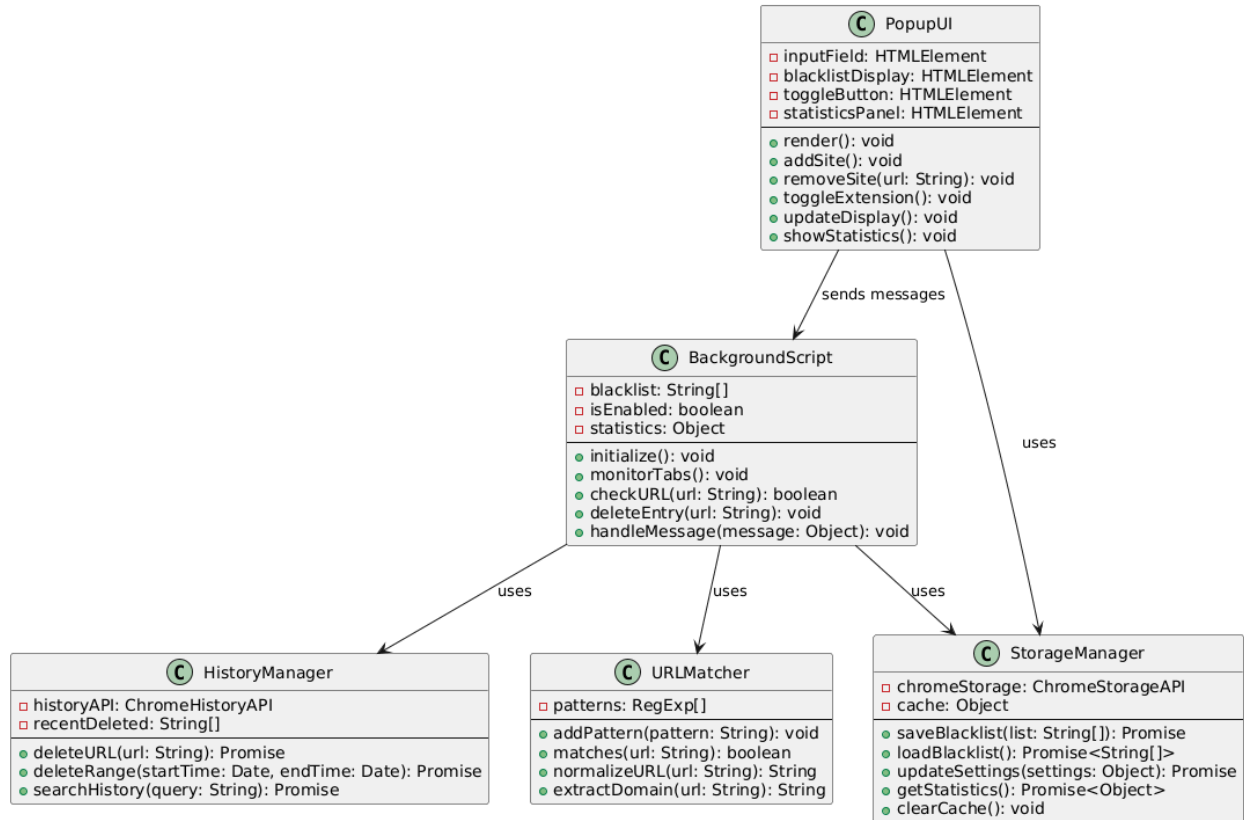
- **Actor:** User
- **Precondition:** Extension installed
- **Flow:**
 1. User clicks extension icon
 2. Opens a pop-up interface
 3. Adds/removes websites
 4. Saves to Chrome Storage
- **Postcondition:** Blocklist updated

UC2: Automatic History Deletion

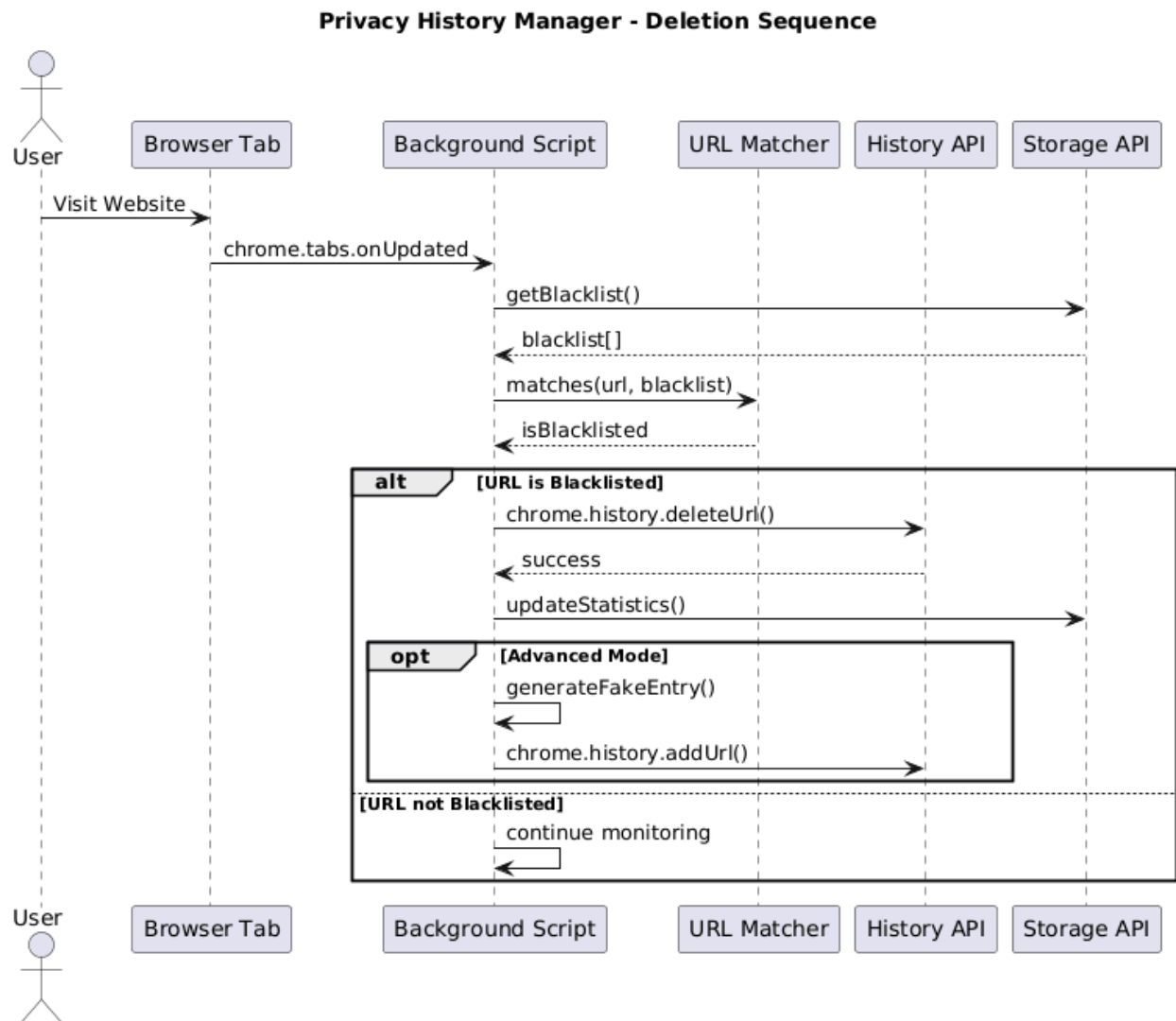
- **Actor:** System (Background Script)
- **Trigger:** Page visit detected
- **Flow:**
 1. Detect URL visit
 2. Check against the blocklist
 3. Delete if match found
 4. Log action (optional)

CLASS DIAGRAM

Privacy History Manager - Class Diagram

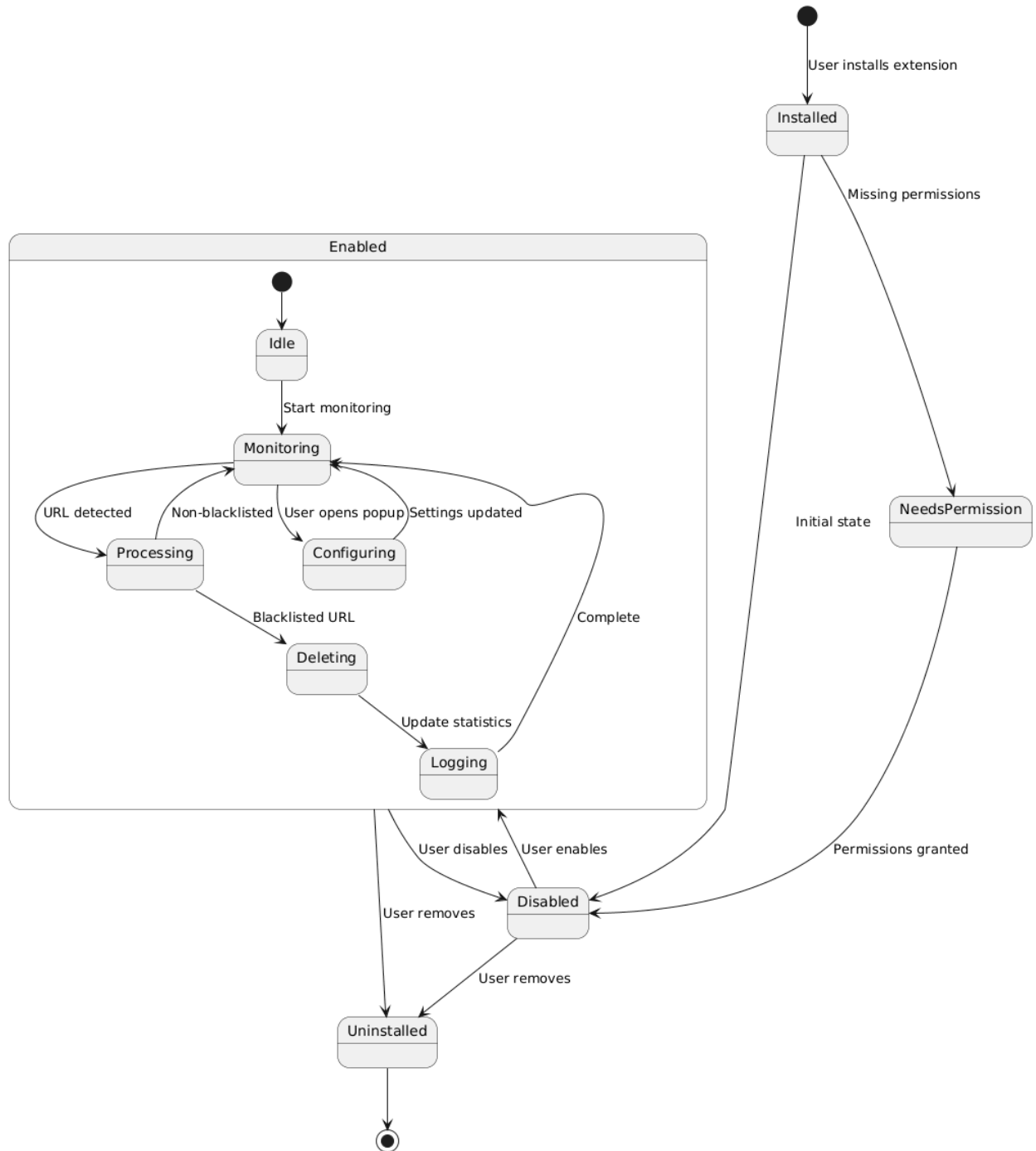


SEQUENCE DIAGRAM - Deletion Process



STATE DIAGRAM - Extension States

Privacy History Manager - Extension States



ACTIVITY DIAGRAM - Main Flow

Privacy History Manager - Main Activity Flow

