

# CS798H

# HUMAN-COMPUTER INTERACTION

## FINAL PRESENTATION

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# ABOUT OUR PROJECT

**Tool/Software to be improved:**  
Google Chrome Browser (Desktop Version)

Google Chrome, developed by Google, is one of the most popular web browsers used by people in today's world. Although it is known for its fast and personalized browsing experience, yet from the user reviews and ratings we found out certain issues that people are facing. In response, we've diligently addressed these concerns to enhance user satisfaction and ensure an unparalleled browsing experience.

# DATA GATHERING

## ■ Method Used:

- Used Content Analysis Method, which is an indirect data-gathering method. Because we gathered data from the user reviews.
- Scrapped data from SoftwareAdvice and Reddit

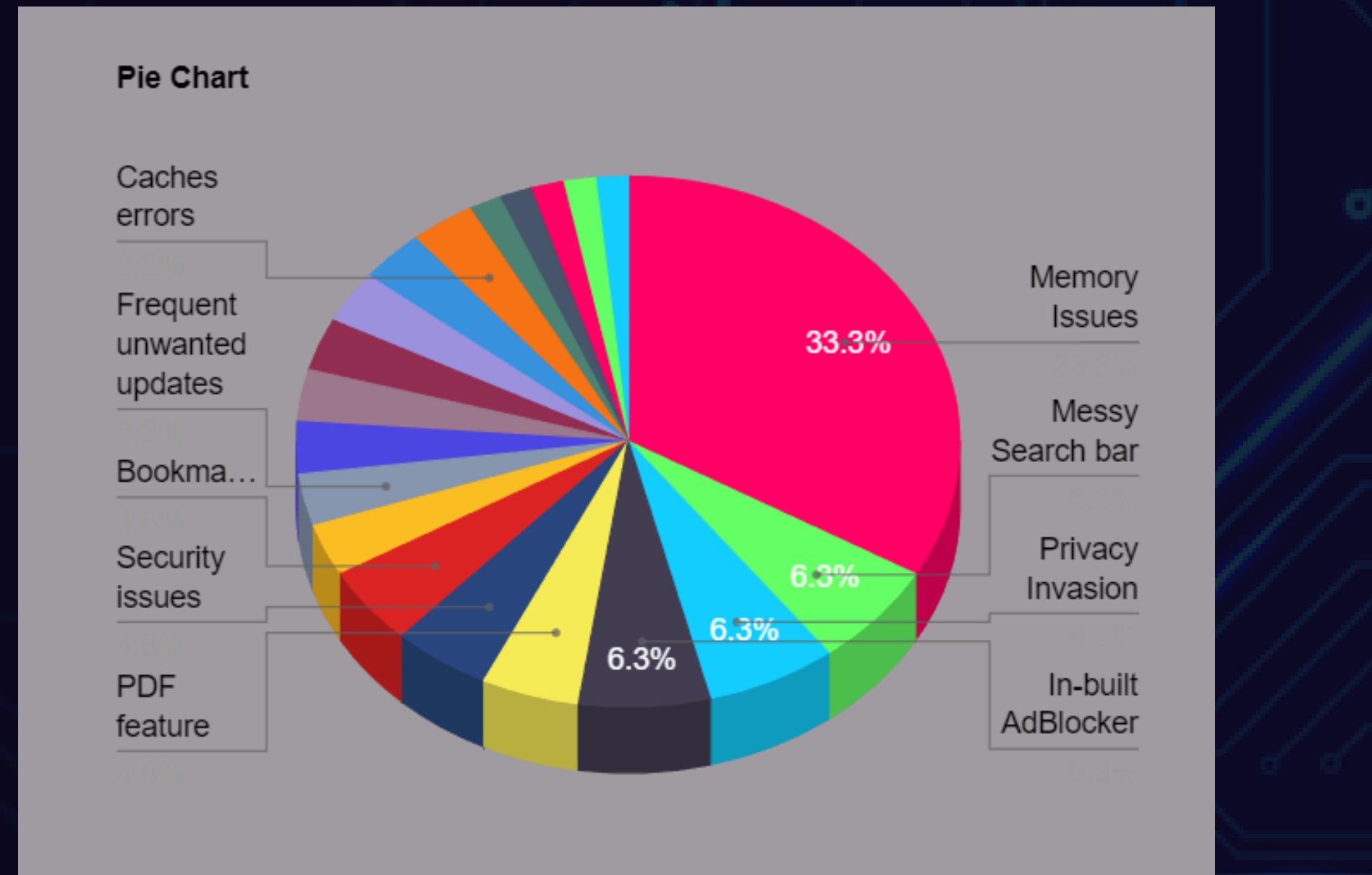
## ■ Filters Used:

- Taking into account the pros and cons outlined in each user review, we carefully analyzed all the drawbacks highlighted.
- Considered 62 reviews including the 1-star, 2-star, 3-star and 4-star reviews.

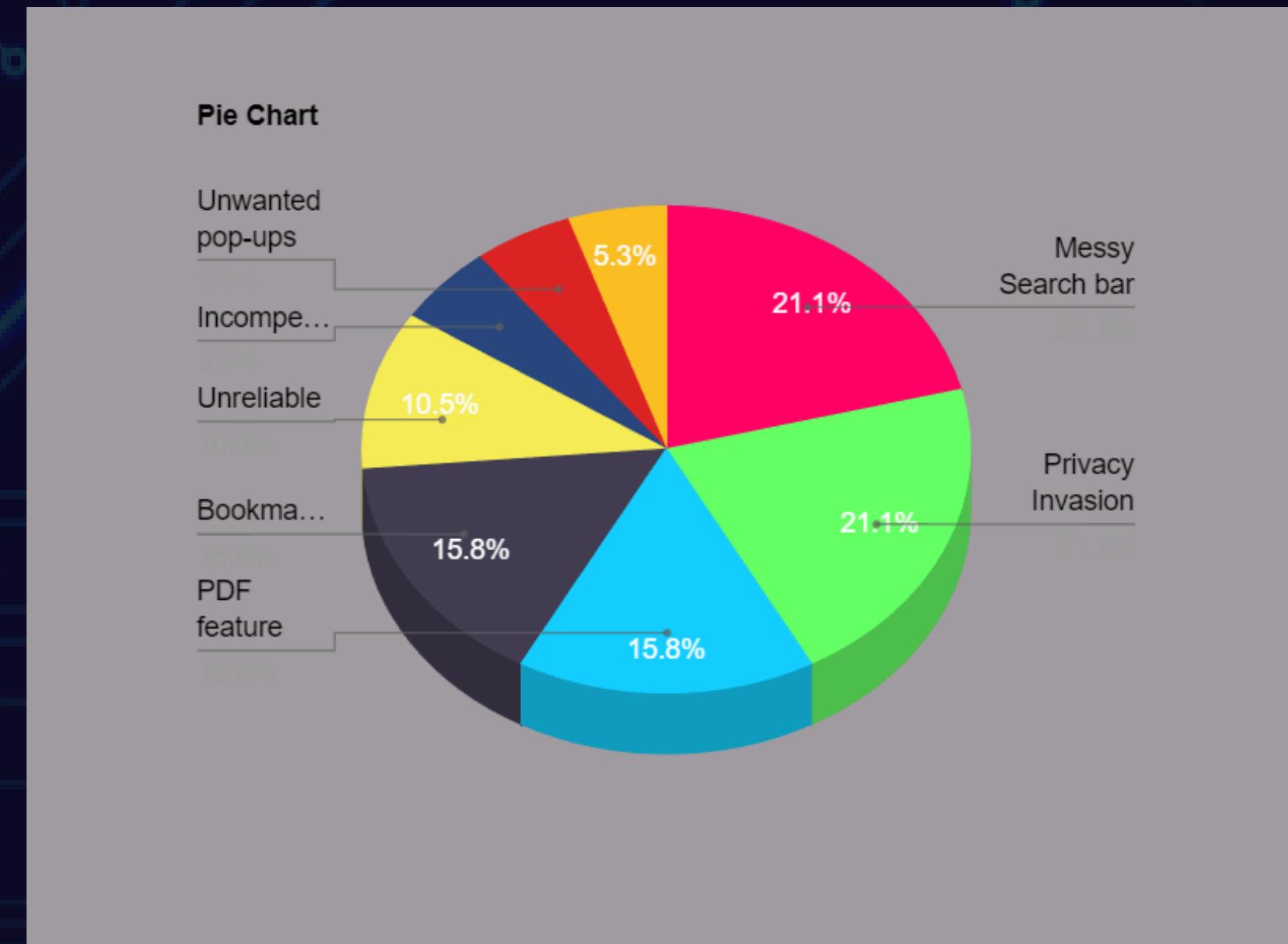
## ■ Data Analysis:

- Thematic Analysis was conducted on all the reviews
- Sorted them based on the decreasing order of frequency of issues faced by users
- Categorized the themes by color according to the solvability of the issue, specifically with regard to the user interface (UI).

# KEY PROBLEMS FOUND



# PROBLEMS SOLVED BY UI



We prioritized our problems based on the problems that can be solved by UI

# PRIORITIZED PROBLEMS

## PDF Feature:

According to the reviews, the users highlighted that Chrome only offers feature for opening PDFs in a new tab instead of choosing Adobe or the user's preferred PDF reader.

Solution: Introduced an option within the downloads dropdown menu, enabling users to select their preferred platform for viewing downloaded PDF files.

## Messy Search and Menu Bar:

Users expressed concerns about the cluttered appearance of the icons, such as bookmarks, extensions, passcodes, and downloads, located near the search bar when enabled. They emphasized the necessity for a more organized and streamlined arrangement.

Solution: Streamlined the search bar by decluttering it and organized the various features into a toggle menu adjacent to the search bar. This consolidated approach provides users with easy access to all features in one location without any confusion or chaos.

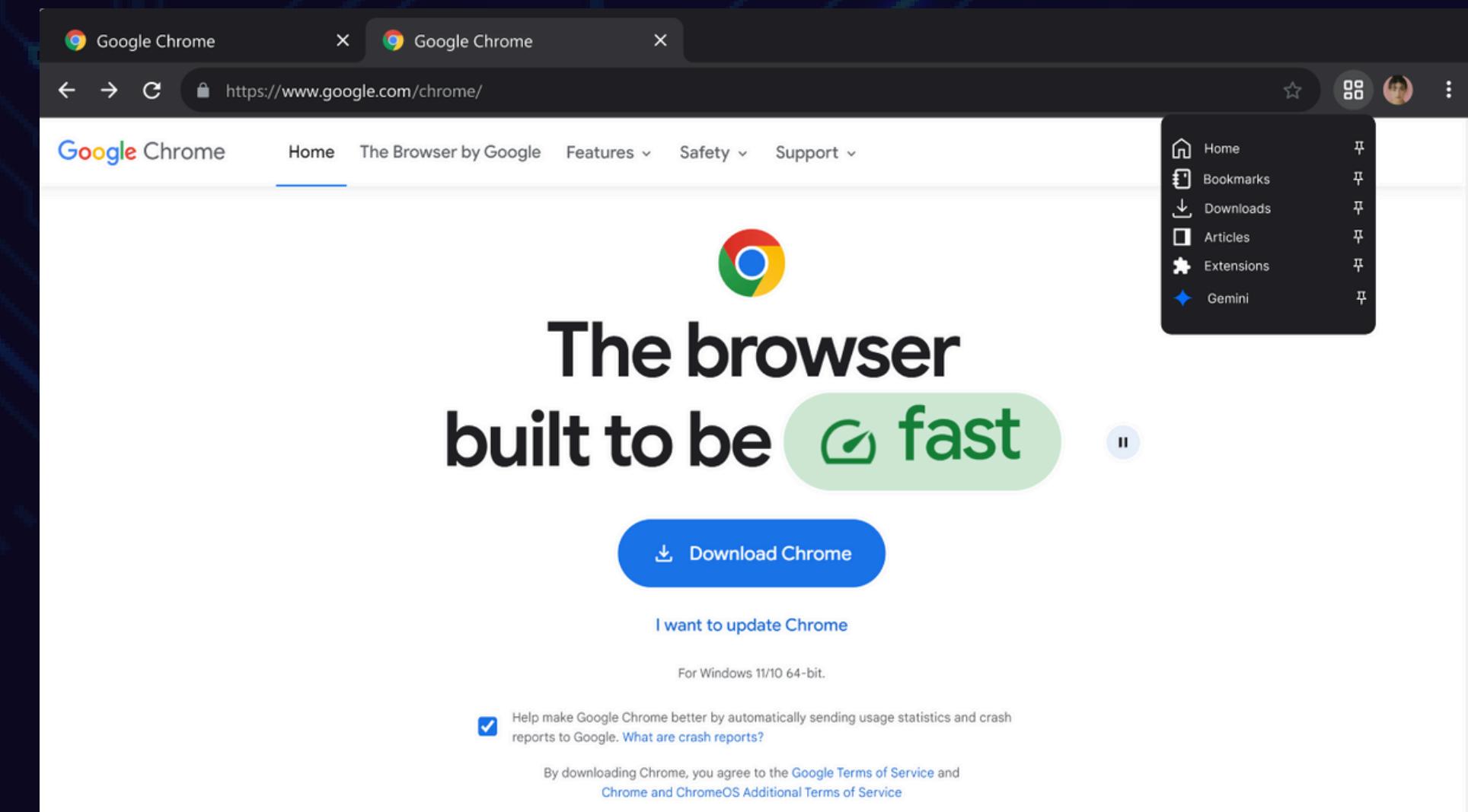
## ➤ Gemini AI:

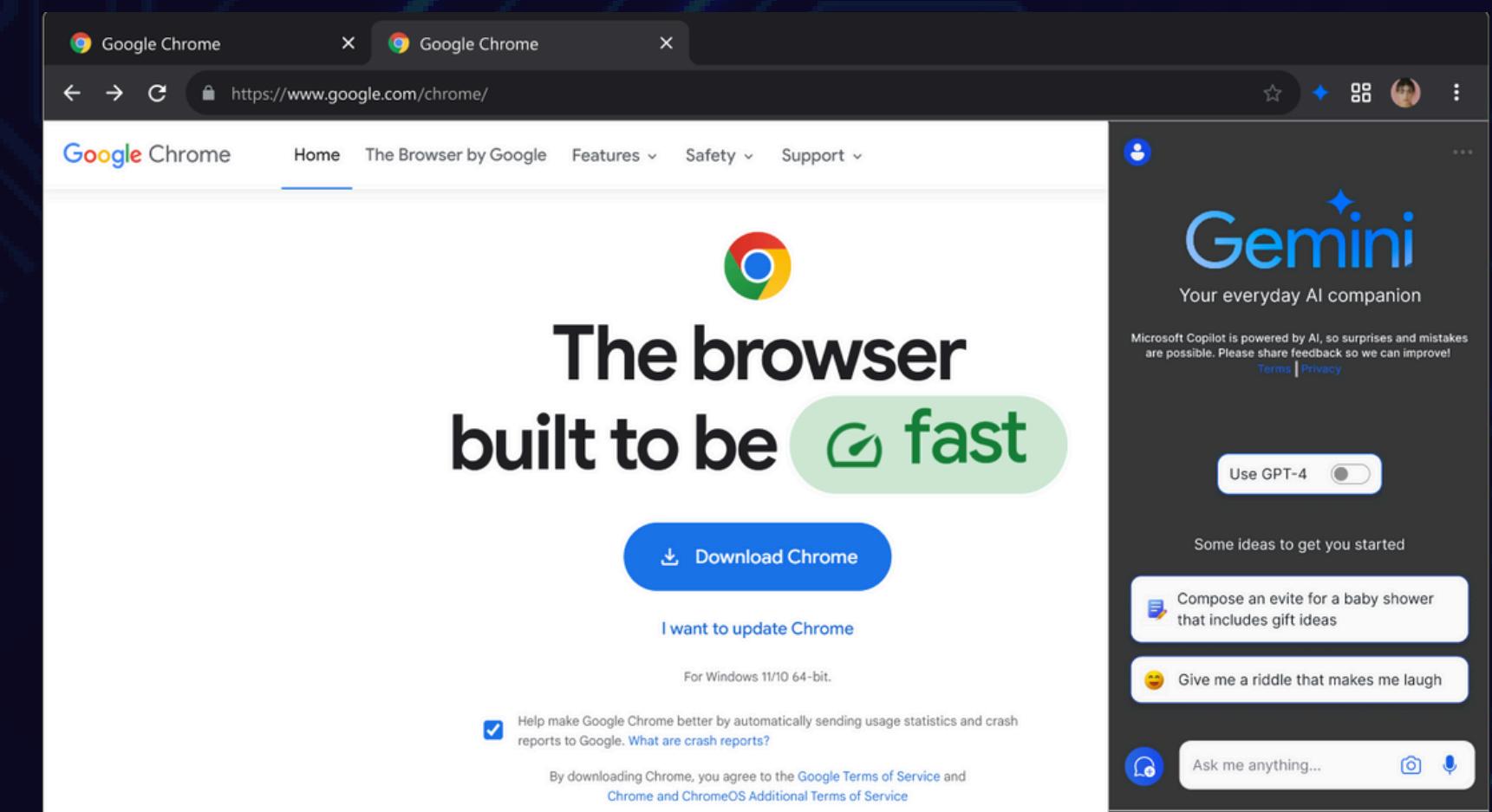
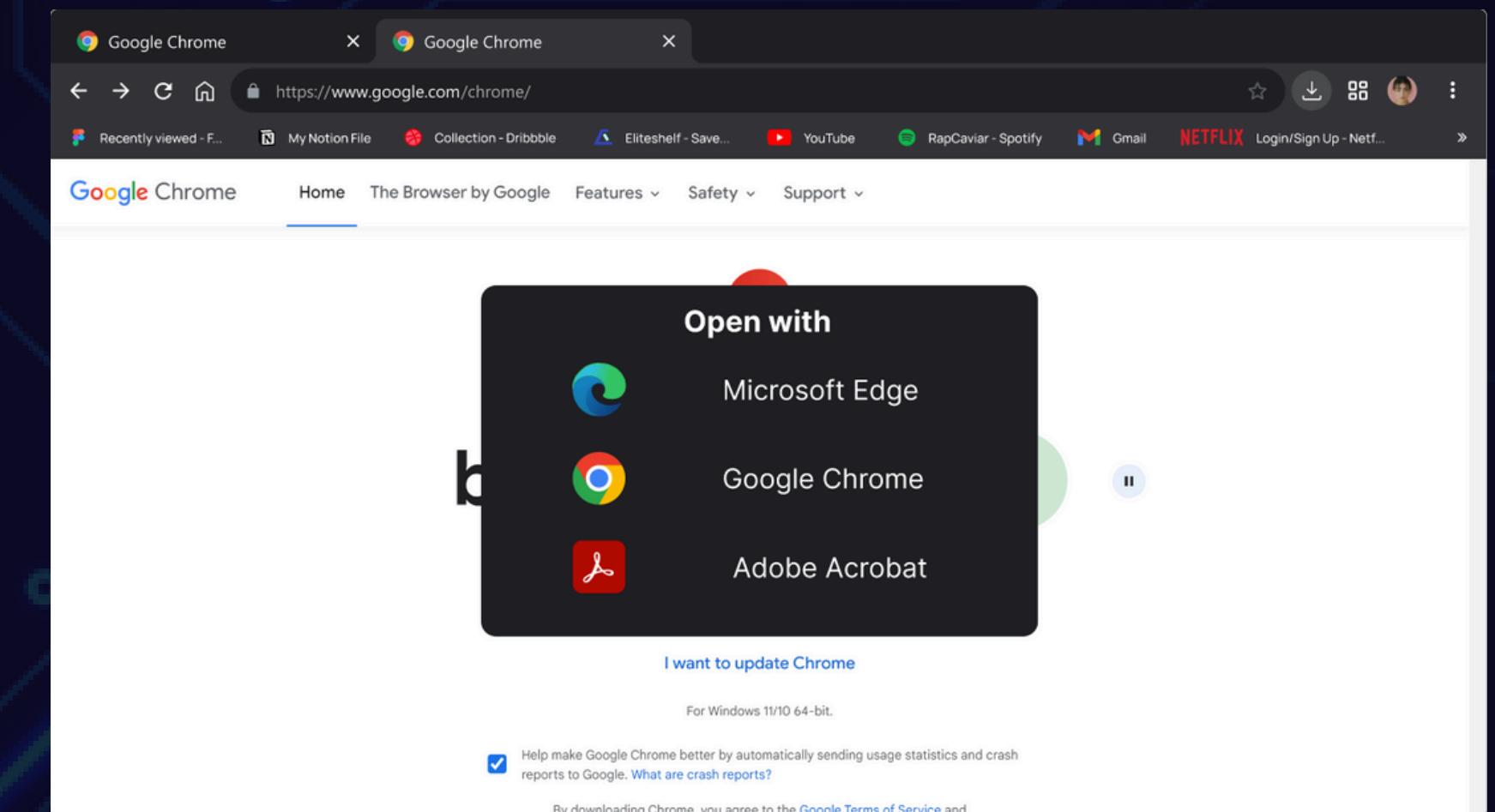
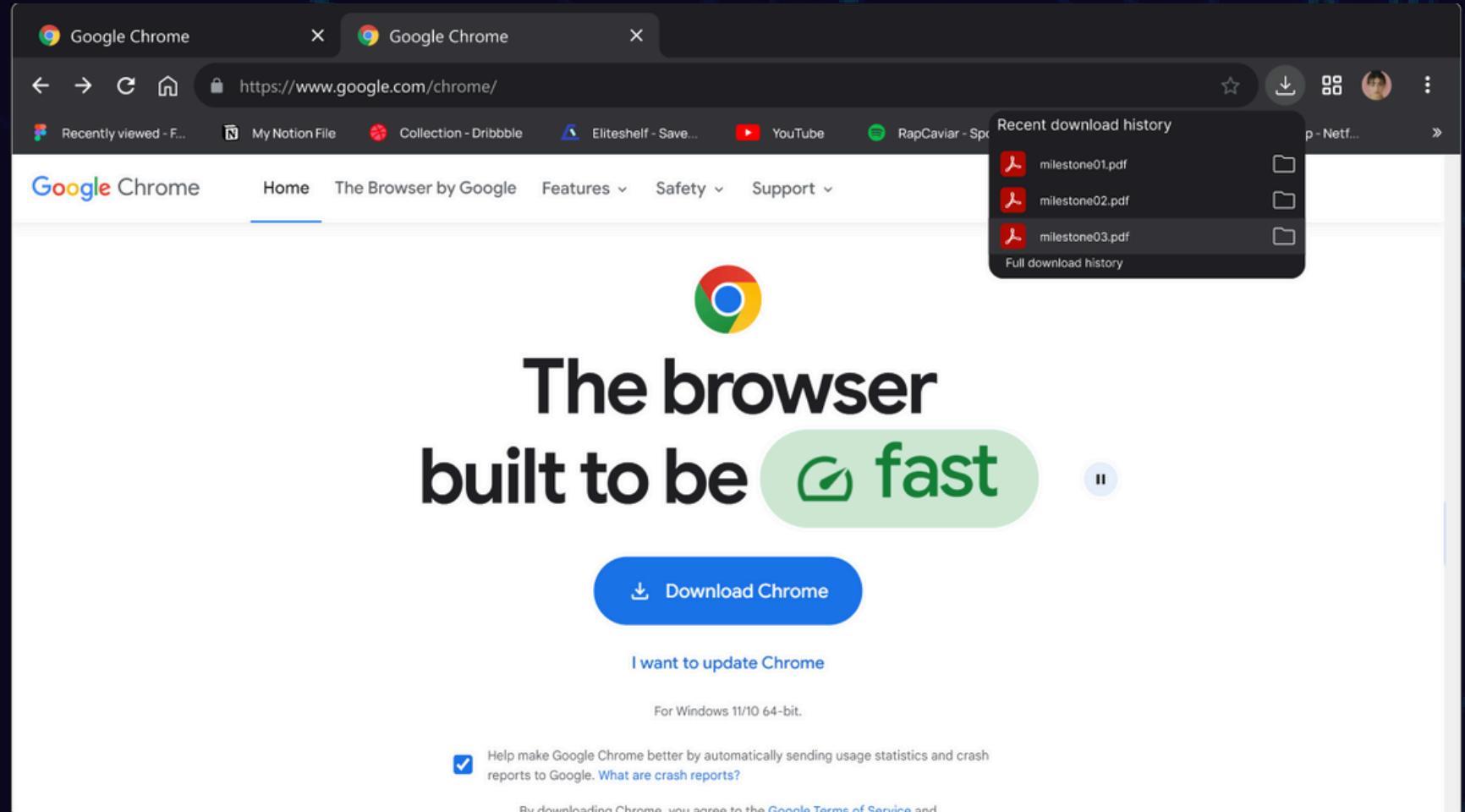
Chrome Browser currently lacks the functionality to open Gemini AI while browsing various websites and engage with it during browsing sessions.

Solution: Introduced a feature that allows users to access Gemini alongside the search bar while browsing a website. When enabled, it appears as a side menu bar, seamlessly adjusting the screen's content accordingly.

# OUR PROTOTYPES

- We have made our prototype on Figma (a high-fidelity prototype).
- Here is the link for the figma prototype:  
<https://www.figma.com/proto/nlRzqKA54nWDJacnu7NIM9/HCI-project?type=design&node-id=15-279&t=iNinCcH2o6NK0IEn-1&scaling=min-zoom&page-id=0%3A1&starting-point-node-id=15%3A279&mode=design>





# EVALUATION METHOD

We used a **Heuristic approach** to evaluate our prototype.

From Jakob Nielsen's 10 general principles and Shneiderman's Eight Golden Rules, we analyzed the prototype on the below-mentioned set of principles:

1. Consistency and Standards
2. Help Users Recognize, Diagnose, and Recover from Errors
3. Visibility of System Status
4. Enable frequent users to use shortcuts

Link:

[https://docs.google.com/spreadsheets/d/1WbJtfxeJUbhCXXhQTw5PDN910gmuxKENnaE4t\\_uCEmM/edit#gid=1565749296](https://docs.google.com/spreadsheets/d/1WbJtfxeJUbhCXXhQTw5PDN910gmuxKENnaE4t_uCEmM/edit#gid=1565749296)

# Problems and Potential Fixes to our existing Prototype

## Problem

Our prototype lacks error-handling mechanisms. For instance, if a user's preferred document opener is unavailable or faces an error, there's no provision for informative error messages or guidance for issue resolution.

## Fix

When a user's preferred document opener is unavailable or encounters errors, our solution includes providing informative error messages and clear guidance on resolving the issue. This proactive approach ensures a smoother user experience by gracefully handling unexpected scenarios.

## Problem

Our prototype lacks customization options for the Gemini side tab. Users cannot adjust their appearance or behavior to match their preferences.

## Fix

By adding a settings menu accessible from the Gemini side tab. Users can find options in this menu to adjust the side tab's size, position, and layout. This can be done by leveraging front-end development frameworks.

## Problem

Our prototype cannot adapt to future feature additions in Chrome. As Google regularly introduces new functionalities and icons, users may need the option to include these in the toggle menu.

## Fix

Regularly syncing with Chrome's latest features, users can seamlessly incorporate new functionalities into their toggle menu, ensuring they stay up-to-date with the latest browser enhancements.

## Problem

In our prototype, part of the screen gets covered when we open the side tab from the Gemini button. This could make users lose some information and struggle to see what they want to search for.

## Fix

Adjusting the screen size so that all content shifts to one side would solve the issue. The Gemini tab should then open on the opposite side without covering the screen. To achieve this, we can adjust the layout of the user interface so that all content shifts to one side when the Gemini tab is activated.

# MEET OUR TEAM



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THANK YOU