

HACKSODA

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T & C D I G E S T

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# CODERS101

We are a team of passionate problem-solvers from a mix of technical backgrounds, united to build solutions that simplify complex information for everyday users.

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# INTRODUCTION

**Welcome to Coders101's submission for Hacksoda24 in the Online Safety and Transparency track. Our project, the Terms, and Conditions Summarizer Chrome Extension, simplifies complex legal documents like terms and conditions. By automatically scanning, summarizing key points, and highlighting critical clauses (e.g., data sharing, user rights), our extension empowers users to make informed online decisions without wading through lengthy, complex text.**

**Our aim: to enhance user awareness and promote a safer, more transparent online experience.**



# PROBLEM STATEMENT

- In today's digital world, users frequently face the daunting task of agreeing to lengthy and intricate terms and conditions just to use services.
- Unfortunately, these documents are often filled with complicated legal jargon, making it incredibly challenging for users to grasp what they are consenting to—particularly concerning data sharing, privacy, and their rights. This opacity can result in significant privacy risks, uninformed consent, and even data misuse.
- To tackle this issue, we are developing a Chrome extension designed to scan, summarize, and highlight essential information within terms and conditions.
- This innovative tool empowers users to quickly comprehend crucial details, enabling them to make informed choices about their online privacy and security.



# PROPOSED SOLUTION

Imagine navigating the endless sea of terms and conditions without feeling overwhelmed or lost in legal jargon. Our Chrome extension, T&C Digest, turns this daunting task into a smooth and intuitive experience. With just a click, users receive concise, easy-to-understand summaries of lengthy agreements, highlighting the essential points they need to know—like data collection, sharing practices, and user rights. Gone are the days of scrolling through pages of small print; our tool empowers users to make informed decisions confidently and quickly, bringing clarity and transparency to online agreements.



# Why Choose Our Solution

## **AUTOMATED TEXT EXTRACTION**

No more endless scrolling! Our extension swiftly scans websites to capture crucial terms and conditions, saving you time and effort

## **NLP SUMMARIZATION**

With our advanced NLP model, we distill the important points into digestible summaries. Say goodbye to legal jargon and hello to clarity, focusing on what truly matters: data usage, third-party sharing, and your rights.

## **CLEAR PRESENTATION**

Our summaries aren't just informative; they're designed to highlight potential risks clearly. Empower yourself to make informed decisions quickly and confidently.

## **RISK INDICATORS**

Important sections, like data sharing, are highlighted to ensure users understand privacy implications.



# WORKFLOW OF THE PROJECT



## Activate & Extract

User clicks the extension icon, triggering JavaScript to scan the webpage and extract terms and conditions sections.

## Summarization

Extracted content is sent to a backend server where an NLP model processes the text, focusing on key aspects like data usage, sharing, and user rights.

## Display Summary

The server returns a concise summary to the extension, which displays it in a popup window with critical points and optional risk indicators.

## User Review

User reads the summary, enabling them to quickly understand important terms and make informed decisions.



# TECHNICAL ARCHITECTURE

## Frontend (Chrome Extension):

User Interface: Popup window with a simple, user-friendly design displaying summarized terms and conditions.

Content Script: JavaScript code runs in the browser, extracting text from terms and conditions when detected.

Message Passing: Sends the extracted text to the backend API for summarization.



# TECHNICAL ARCHITECTURE

## Backend (FastAPI Server):

- Text Summarization Model: Utilizes an NLP model (such as BERT or GPT) hosted on a FastAPI server to process and summarize the extracted text.
- API Endpoint: Provides a /summarize endpoint that receives the text, processes it, and returns the summarized content to the extension.
- Summarization Pipeline:

## Text Processing:

- The NLP model takes the raw text and summarizes key points, focusing on critical clauses like "data sharing," "privacy," and "user rights."
- Risk Identification: Keywords and high-risk phrases are flagged for clarity and emphasis.



# TECHNICAL ARCHITECTURE

## Data Flow:

- Step 1: The Chrome extension extracts terms and conditions from the webpage.
- Step 2: The extracted text is sent to the Flask server's summarization endpoint.
- Step 3: The backend processes the text with the NLP model(GPT4) and returns a summarized version.
- Step 4: The Chrome extension receives the summarized content and displays it to the user in the popup.

This architecture ensures a seamless flow from text extraction to summarization, giving users a quick and accessible summary of terms and conditions.



# FINAL REFLECTIONS AND FUTURE STEPS

## **Legal Jargon Simplification**

To further enhance accessibility, we plan to integrate an advanced natural language processing (NLP) feature that automatically translates complex legal terminology into straightforward, user-friendly language. This feature would analyze terms and clauses in real-time, highlighting and explaining challenging legal phrases such as “indemnification,” “waiver of liability,” or “third-party disclosures” in a simplified manner.

By breaking down dense legal language into plain English, this feature would empower users to fully grasp the implications of each clause, fostering informed decision-making and promoting transparency in online agreements.



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# THANK YOU

FOR YOUR ATTENTION

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