Fine-tuning Llama2-7B for Privacy Policy Q&A and Summarization

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AI-System Overview

For this project, we applied a fine-tuning technique to a large language model (LLM) which is a type of deep learning model. Our fine-tuning efforts aimed to improve the inferences generated by the LLM for the specific knowledge domain of privacy policies.

LLMs are useful for natural language processing (NLP) and text prediction, and may be trained with a large amount of general-purpose knowledge from Internet sources. However, in many cases, these models are not trained well enough to answer questions or draw on knowledge from specific domains. To address this gap, the process of fine-tuning is used to augment or incorporate specific domain knowledge into the LLM.

It's useful to fine-tune an existing LLM versus simply retraining a model from the ground up because training an LLM is costly and time-consuming. It can cost millions to hundreds of millions of dollars to train a large transformer model. The fine-tuning approach leverages the cost and time spent training a general-purpose LLM, and potentially provides the benefit of narrow domain expertise for a specialty purpose.

The base LLM model used was Meta's Llama 2 7 billion parameter model (Meta AI, 2023) available through Hugging Face from NousResearch (nousresearch, 2023). We selected this version of Llama 2 because it is specifically tailored for use with the Hugging Face Transformers Library (Wolf et al. 2020). Another reason for selecting Llama 2 is that it is open-source and has a license that allows free use for research purposes.

We wanted to use the question-answering ability of Llama 2 to allow us to answer questions and summarize text contained in the privacy policies that govern our use of Internet services. Many of these policies are written with technical jargon, which may have legal implications, and can be difficult for people to understand. Using the power of AI we believed that we could create a model that can easily read and analyze these complicated documents to assist people in understanding them.

We also wanted to be able to fine-tune the model using techniques that did not require the use of a supercomputer. That is how we discovered Parameter Efficient Fine-Tuning (PEFT) and Quantized

Low-Rank Adaptation (QLoRA) (Mangrulkar et al., 2022). Hugging Face provides PEFT and QLoRA for training transformers such as Llama on consumer-grade hardware. This is also the only way an LLM like Llama could be trained on Colab for free or without significant expense.

To accomplish this task we found a dataset containing the privacy policies from over 50 different companies on Hugging Face (sjsq, 2024). While there is no information about the account that gathered the data nor any metadata about how it was gathered, we inspected the data before using it and confirmed that it contains relevant data and nothing concerning like PII. It's a CSV file containing 1789 records that represent privacy policy text strings from 50 unique companies' privacy policies.

Relevant Theoretical Background

To understand how our model works, it's important to first have a basic understanding of neural AI and Deep Learning. All of the systems and libraries that we are using are designed to be used with neural networks and require some knowledge of them to make use of them. For example, Llama is an LLM, meaning that it is a deep-learning network. The 7b means that it has 7 billion parameters in it, which makes it, as the name suggests, very large. Note that this is the smallest Llama 2 model available, and there are also 13 billion and 70 billion parameter models available.

Understanding how large these models are is important for understanding why techniques like PEFT and QLoRA are useful. PEFT differs from standard fine-tuning in that instead of tuning all the parameters of a model, it's used to tune "a small number of (extra) model parameters instead of all the model's parameters" (Mangrulkar et al., 2022). It can tune a model using a much smaller set of data to get results that, while not perfect, are good enough for the majority of use cases out there (such as ours). QLoRA is important because it allows us to fine-tune the model on much smaller, less powerful devices. Without QLoRA fine-tuning Llama 2 would probably not be possible with our given resources.

An understanding of AI Transformers and Natural Language Processing (NLP) is also important to our project, as the Llama model we are using is a Transformer that is used for NLP. In particular, we are using the NLP capabilities of the model for question and answer and text summarization tasks. Transformers are Neural Networks that abandon the use of C-RNNs in favor of using solely an attention model (Vaswane et al., 2017). This has led to great leaps forward in the field of neural AI.

This is a concise summary of the technologies used in our project. For further reading, refer to the References for detailed sources.

Al System Development and Evaluation

The system was partially developed using open-source software and partially developed on our own. To start we found a Colab module on tuning Llama 2 on Hugging Face.co. It sets up the PEFT and QLoRA

variables, allowing us to focus on the results rather than the setup. In addition, we had some problems in the fine-tuning when building our code for PEFT with Llama 2, and switching to an open-source program solved those issues. Additionally, we needed to find a way to test the model to figure out how well it performed.

To accomplish this task, we instantiated versions of our Python code. One to prompt the fine-tuned model and one to prompt the stock Llama 2 model. By uploading our fine-tuned model to the Hugging Face Hub, we were able to easily access it whenever it was needed from different environments.

Ee developed a Jupyter Notebook that could use any specified transformer model, and load it into Google Colab. The notebook takes the model, and allows the user to prompt it. It also saves a list of the responses to allow for further analysis, such as calculating an F1 score.

The biggest problem we encountered was with Colab usage limitations. Unfortunately, Colab would only let us query the model a handful of times before it used up all the VRam available on the system. To get around this and expedite the process, we purchased a month of Colab-Pro service.

Evaluation

To evaluate the fine-tuned Llama2-7b LLM, we developed a list of 12 questions about privacy policies to use as prompts (see Appendix A). In addition to these questions, we selected a relatively small privacy policy to use as context for the questions. Initially, we attempted to use the privacy policy from a well known company (Starbucks (https://www.starbucks.com/terms/privacy-policy/), but found that this was too much content to include in our prompts. To solve this problem, we selected a relatively small privacy policy posted by a startup called TopHive (https://tophive.ai/privacy-policy). Note that this company's privacy policy is not represented in the dataset used for fine-tuning.

Each of our 12 test questions were combined with the TopHive privacy policy text to form prompts. Each of the prompts was processed against three LLMs: the base Llama2-7B model, the fine-tuned Llama2-7B model, and ChatGPT4. The responses from the LLMs for each of these tests were captured and stored for evaluation. The full list of responses received from each of the LLMs is included in Appendix C.

We used responses from ChatGPT4 to form a baseline of comparison for each of the other two models. We developed a Python program to calculate ROUGE (Recall-Oriented Understudy for Gisting Evaluation) scores for each of the test prompt responses. ROUGE is a set of metrics designed to evaluate text summarization output and automated text translations. To calculate ROUGE scores, we used the rouge-score library (https://pypi.org/project/rouge-score/).

The detailed results of our testing is included in Appendix B.

Findings

Ultimately we achieved what we set out to do which was to fine tune a Llama2-7b LLM model using QLoRA and PEFT techniques with a privacy policy dataset. Unfortunately, the resulting fine-tuned model did not provide improvements over the baseline Llama2 model.

The ROUGE scores show that there was a minimal improvement in a couple of test questions, but generally the results regressed when we fine-tuned the Llama 2 model.

The untuned Llama 2 model performed well, but also exhibited issues. For example, see question 2 below where it confidently asserts that data sharing with third parties is addressed in the TopHive privacy policy. Both the untuned and tuned models responded in the affirmative to this questions, when in fact, the policy DOES NOT address data sharing with third parties.

All of the responses are included in Appendix C for reference, but here's one example:

Question 2	prompt = "Does this policy address data sharing with third parties: " + policy
Llama2.untuned	Yes, this policy addresses data sharing with third parties. Here are the relevant details: * "We take care of your personal data and undertake to guarantee its confidentiality and security." This suggests that TopHive will take appropriate measures to protect your personal data from unauthorized access or disclosure. * "Information collected automatically is used only to identify users for marketing activities." This implies that TopHive may share your personal data with third-party marketing partners or use it for marketing purposes itself, but it does not provide any details on how or to whom this data will be
	shared. * "You can choose not to provide us with your personal data, but then you may not be able to take advantage of some of the website's features." This suggests that TopHive may share your personal data with third parties if you choose not to provide it, but it does not provide any details on which features will be unavailable. Overall, while the policy does address data sharing with third parties, it does not provide much detail
	on how or to whom this data will be shared, which may be a concern for some users. It is recommended that users who are uncertain about how their data will be used or shared contact TopHive directly for more information.
Llama2.tuned	Yes, this policy addresses data sharing with third parties. According to the policy, TopHive may share your personal data with third parties for marketing activities.
GPT4.baseline	The provided policy does not explicitly state whether TopHive shares personal data with third parties. It focuses on the types of personal information collected, the reasons for its collection, and the commitment to data security and confidentiality, but it does not address data sharing practices with third parties directly.

Ultimately, the fine-tuning that we did was not useful for someone wishing to evaluate a privacy policy document. This could be due to numerous factors some of which could include:

1. The dataset used for fine-tuning was not adequate in size.

- 2. The dataset used for fine-tuning was not adequate in quality of content or structure.
- 3. The benchmark responses from ChatGPT4 could be improved by humans.
- 4. The prompts used for testing could be improved.
- 5. The 7B parameter model may be too small for this task.
- 6. The ROUGE metric may not adequately measure the quality of responses.

Project Management

Week 1 Milestones:

- Research into models + techniques
- Finished proposal

Week 2 Milestones:

- Research into datasets
- Research into PEFT and QLoRA
- Finished Design

Week 3 Milestones:

- Research ROUGE
- Parsing, loading tuning dataset
- Deploy Llama 2 in a test environment
- Researched into fine-tuning Llama 2 on Colab
- Found an open-source notebook to use to fine-tune

Week 4 Milestones:

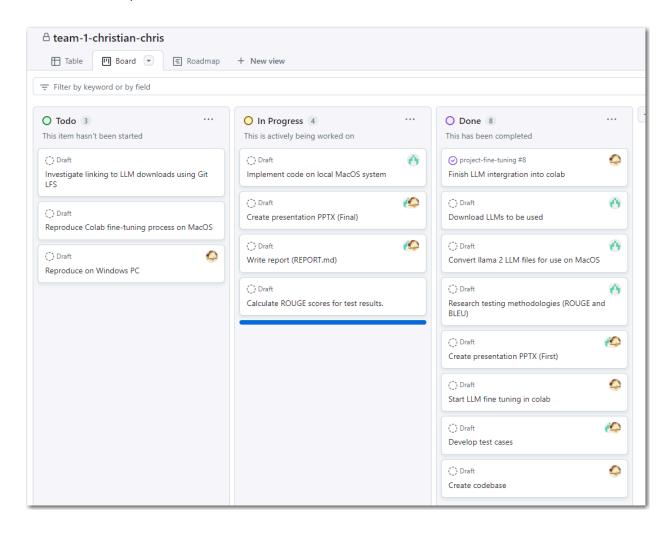
- Iterated on code development/test cycles
- Trained the PEFT adapter
- Started fine-tuning with the dataset
- Put the model on Hugging Face
- Presented the project for the first time

Week 5 Milestones:

- Finished code adaptation/debugging
- Test case development
- Test case execution
- Evaluate the model qualitatively (human)
- Calculated ROUGE scores
- Report writing
- Report submission (5/10/2024)

Week 6 Milestones (projected):

• Final oral presentation



References

Nousresearch. 2023. "Llama-2-7b-chat-hf". Accessed 2024. https://huggingface.co/NousResearch/Llama-2-7b-chat-hf

Meta AI. 2023. "Llama 2: Open Foundation and Fine-Tuned Chat Models". Accessed 2024. https://scontent-bos5-1.xx.fbcdn.net/v/t39.2365-6/10000000_662098952474184_2584067087619170692 n.pdf? nc cat=105&ccb=1-7& nc sid=3c67a6& nc ohc=slMdknTWhmgAb4No-kc& nc ht=scontent-bos5-1.xx&oh=00_AfDsuxJlzD0Tuul-UnHAnMN99UoPSUpXJ3oe8jCo9NRdgg&oe=6635EA3F

Wolf, Thomas, Lysandre Debut, Victor Sanh, Julien Chaumond, Clement Delangue, Anthony Moi, Pierric Cistac, et al. 2020. "Transformers: State-of-the-Art Natural Language Processing." In Proceedings of the

2020 Conference on Empirical Methods in Natural Language Processing: System Demonstrations, 38–45. Online: Association for Computational Linguistics. https://doi.org/10.18653/v1/2020.emnlp-demos.6.

Labonne, Maxime. 2023. "Fine-tune Llama 2 in Google Colab". Accessed 2024. https://colab.research.google.com/drive/1PEQvJO1-f6j0S_XJ8DV50NkpzasXkrzd

Sjsq. 2024. "PrivacyPolicy". Accessed 2024. https://huggingface.co/datasets/sjsq/PrivacyPolicy

Mangrulkar, Sourab, Gugger, Sylvain, Debut, Lysandre, Belkada, Younes, Paul, Sayak, Bossan, Benjamin. 2022. "PEFT: State-of-the-art Parameter-Efficient Fine-Tuning methods". Accessed 2024. https://github.com/huggingface/peft

Google_opensource, 2022. rouge-score 0.1.2 library (https://pypi.org/project/rouge-score/)

Vaswani, Ashish, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N. Gomez, Lukasz Kaiser, and Illia Polosukhin. 2017. "Attention Is All You Need." https://doi.org/10.48550/ARXIV.1706.03762.

Appendix A: Questions Used for Testing

QuestionID	Question Text
q1	What types of personal data collection are allowed by this policy?
q2	Does this policy address data sharing with third parties?
q3	How does this company share user data with third parties?
q4	How does this company collect data?
q5	How can I opt out of data collection or marketing?
q6	How often is this policy reviewed and updated?
q7	How does this policy cover the use of cookies?
q8	Does this policy describe the use of third party services?
q9	How does this policy govern the use of my data?
q10	Summarize this privacy policy for me.
q11	How can I opt out of data collection or marketing communications from this policy
q12	How can this privacy policy be improved?

Appendix B: ROUGE Scores

A		B	C	D	E	F	G	H	fine from	J K	L //L	М	N
Compai	IIS	on or	ĸΟ	UGE SCO	es tor	untuned	∟ıan	idZ-/D VS	iine-tur	ned Llama2-7	U		
			Untuned Llama2				Fine-tuned	Llama2		Improvem	ent/Regre	ssion	
				Precision	Recall	fMeasure		Precision	Recall	fMeasure	Precision	Recall	fMeasure
Question	1	rouge1		0.60	0.42	0.49		0.79	0.23	0.36	0.19	-0.19	-0.14
Question		rouge2		0.25	0.18	0.21		0.48	0.14	0.22	0.23	-0.04	
Question		rougeL		0.31	0.22	0.26		0.62	0.18	0.28	0.31	-0.04	
0 "	2			0.00	0.40	0.20		0.25	0.50	0.46	0.45	0.50	0.15
Question		rouge1		0.80	0.18	0.30		0.35	0.68	0.46	-0.45	0.50	
Question		rouge2		0.31	0.07	0.11		0.17	0.33	0.22	-0.15	0.26	
Question	2	rougeL		0.49	0.11	0.18		0.22	0.44	0.30	-0.27	0.33	0.12
Question	3	rouge1		0.64	0.26	0.37		0.56	0.16	0.24	-0.08	-0.10	-0.12
Question		rouge2		0.30	0.12	0.17		0.15	0.04	0.07	-0.14	-0.07	-0.10
Question	3	rougeL		0.47	0.19	0.27		0.39	0.11	0.17	-0.08	-0.08	-0.10
Ouestien	4	1		0.63	0.20	0.21		0.22	0.10	0.24	0.20	0.01	0.06
Question		rouge1		0.63	0.20	0.31 0.10		0.33	0.19 0.03	0.24	-0.29 -0.15	-0.01 -0.04	
Question Question		rouge2		0.21	0.07	0.16		0.06	0.03	0.04	-0.15	0.04	
Question	4	rougeL		0.55	0.11	0.16		0.24	0.14	0.17	-0.10	0.03	0.01
Question	5	rouge1		0.54	0.46	0.50		0.09	0.74	0.16	-0.45	0.28	-0.34
Question	5	rouge2		0.17	0.15	0.16		0.03	0.28	0.06	-0.14	0.13	-0.10
Question	5	rougeL		0.32	0.27	0.29		0.07	0.58	0.12	-0.25	0.31	-0.17
0	_			0.20	0.40	0.40		0.05	0.20	0.00	0.24	0.14	0.24
Question		rouge1		0.39	0.42	0.40		0.05	0.28	0.09	-0.34	-0.14	
Question		rouge2		0.04	0.04	0.04		0.01	0.04	0.01	-0.03	-0.01	
Question	ь	rougeL		0.15	0.16	0.16		0.03	0.14	0.05	-0.12	-0.02	-0.11
Question	7	rouge1		0.60	0.10	0.17		0.65	0.07	0.13	0.05	-0.03	-0.04
Question	7	rouge2		0.18	0.03	0.05		0.15	0.02	0.03	-0.03	-0.01	-0.02
Question	7	rougeL		0.35	0.06	0.10		0.35	0.04	0.07	0.00	-0.02	-0.03
0				0.70	0.50	0.50		0.19	0.52	0.20	0.54	0.03	0.24
Question		rouge1		0.70	0.50	0.58			0.53	0.28	-0.51 -0.23	0.03	
Question Question		rouge2 rougeL		0.27	0.19	0.22		0.04	0.10 0.32	0.03	-0.23	-0.09 0.04	
Question	_	, , , , , , , , , , , , , , , , , , , ,		0110	0.20	0.00		0.11	0.02	0.127	0.20		5,125
Question	9	rouge1		0.71	0.12	0.21		0.71	0.09	0.16	0.00	-0.03	-0.05
Question	9	rouge2		0.30	0.05	0.08		0.20	0.02	0.04	-0.09	-0.02	-0.04
Question	9	rougeL		0.53	0.09	0.15		0.49	0.06	0.11	-0.04	-0.03	-0.05
0	10	1		0.71	0.20	0.40		0.62	0.44	0.53	0.00	0.00	0.04
Question				0.71	0.36	0.48		0.63	0.44		-0.08	0.08	
Question				0.17	0.09	0.11		0.15	0.10		-0.02	0.02	
Question	ΤÜ	rougeL		0.43	0.22	0.29		0.34	0.24	0.28	-0.09	0.02	-0.01
Question	11	rouge1		0.55	0.20	0.30		0.61	0.13	0.22	0.06	-0.07	-0.08
Question	11	rouge2		0.12	0.04	0.06		0.14	0.03	0.05	0.02	-0.01	-0.01
Question	11	rougeL		0.26	0.10	0.14		0.26	0.06	0.09	0.00	-0.04	-0.05
Ougstie :	12	×0.14		0.40	0.24	0.20		0.40	0.22	0.34	0.04	0.01	. 0.00
Question				0.48	0.21	0.29		0.49	0.23		0.01	0.01	
Question		_		0.11	0.05	0.07		0.13	0.06	0.08	0.01	0.01	
Question	12	rougeL		0.23	0.10	0.14		0.24	0.11	0.15	0.01	0.01	0.01

Appendix C: Test Questions and Responses

Questsion 1	prompt = "What types of personal data are collected according to this policy: " + policy
Llama2.untuned	According to the Privacy Policy provided, TopHive collects the following types of personal data:
	 Device Information: TopHive collects information about the device you use to access the website, including the web browser, IP address, time zone, and installed cookies. Personal data provided during registration: TopHive collects personal data such as name, address, company, email address, etc. when you register on the website.
	The reasons why TopHive processes your data include:
	 To maintain the website: TopHive processes your data only to the extent necessary to maintain the website and ensure its proper functioning. For marketing activities: TopHive uses the automatically collected information to identify users for marketing activities.
	You can visit the website without providing any personal data, but you may not be able to take advantage of some of its features, such as receiving the newsletter or contacting the website directly, if you choose not to provide your personal data.
Llama2.tuned	According to the TopHive website, the following types of personal data are collected:
	1. Device Information: This includes information about your device, such as your web browser, IP address, time zone, and installed cookies. 2. Personal Information: This includes information you provide to us during registration, such as your name, address, company, email address, etc. 3. Information collected automatically: This includes information about the individual web pages or products you view, the websites or search terms that referred you to the Site, and how you interact with the Site. 4. Personal data you provide to us: This includes information you provide to us through forms, such as your email, name, last name, city of residence, organization, telephone number. 5. Information you provide to us through the newsletter: This includes information you provide to us through the newsletter, such as your email, name, last name, city of residence, organization, telephone number. 6. Information you provide to us through contact forms: This includes information you provide to us through contact forms, such as your email, name, last name, city of residence, organization, telephone number. 7. Information you provide to us through the website: This includes information you provide to us through the website, such as your email, name, last name, city of residence, organization, telephone number. 8. Information you provide to us through the newsletter: This includes information you provide to us through the newsletter, such as your email, name, last name, city of residence, organization, telephone number. 9. Information you provide to us through the website: This includes information you provide to us through the website, such as your email, name, last name, city of residence, organization, telephone number. 10. Information you provide to us through the newsletter: This includes information you provide to us through the newsletter, such as your email, name, last name, city of residence, organization, telephone number.

	12. Information you provide to us through the newsletter: This includes information you provide to us through the newsletter, such as your email, name, last name, city of residence, organization, telephone
GPT4.baseline	 The types of personal data collected by TopHive according to their policy include: Device Information: This automatically collected data includes details about your device, such as your web browser, IP address, time zone, and the cookies installed on your device. It also includes information on the web pages you view on the site, your navigation paths within the site, the websites or search terms that referred you to the site, and your interactions with the site. Personal Data Provided by Users: This includes data you voluntarily provide during registration or other interactions, such as your name, address, company, email address, last name, city of residence, organization, and telephone number.

Qeustion 2	prompt = "Does this policy address data sharing with third parties: " + policy
Llama2.untuned	Yes, this policy addresses data sharing with third parties. Here are the relevant details:
	* "We take care of your personal data and undertake to guarantee its confidentiality and security." This suggests that TopHive will take appropriate measures to protect your personal data from unauthorized access or disclosure. * "Information collected automatically is used only to identify users for marketing activities." This implies that TopHive may share your personal data with third-party marketing partners or use it for marketing purposes itself, but it does not provide any details on how or to whom this data will be shared. * "You can choose not to provide us with your personal data, but then you may not be able to take advantage of some of the website's features." This suggests that TopHive may share your personal data with third parties if you choose not to provide it, but it does not provide any details on which features will be unavailable. Overall, while the policy does address data sharing with third parties, it does not provide much detail on how or to whom this data will be shared, which may be a concern for some users. It is
	recommended that users who are uncertain about how their data will be used or shared contact TopHive directly for more information.
Llama2.tuned	Yes, this policy addresses data sharing with third parties. According to the policy, TopHive may share your personal data with third parties for marketing activities.
GPT4.baseline	The provided policy does not explicitly state whether TopHive shares personal data with third parties. It focuses on the types of personal information collected, the reasons for its collection, and the commitment to data security and confidentiality, but it does not address data sharing practices with third parties directly.

Question 3	prompt = "How does this company share user data with third parties according to this policy?" + policy
Llama2.untuned	According to the policy, TopHive shares user data with third parties for the following reasons: 1. Marketing activities: TopHive may process only minimal user data, only as much as it is absolutely necessary to maintain the website. Information collected automatically is used only to identify users for marketing activities. 2. Newsletter: If you provide personal data such as your email, name, last name, city of residence, organization, and telephone number, TopHive may share your data with third-party newsletter providers to send you the newsletter. 3. Contact: If you contact TopHive directly from the website, your personal data may be shared with third-party providers to respond to your inquiry. It's worth noting that TopHive takes care of your personal data and undertakes to guarantee its confidentiality and security. However, since the policy does not provide a comprehensive list of third parties that TopHive may share user data with, it's difficult to determine the exact third parties involved. It's important to review the privacy policy periodically for updates on how TopHive shares user data with third parties.
Llama2.tuned	TopHive shares user data with third parties for the following purposes: 1. Marketing activities: TopHive may share user data with third parties for marketing activities. 2. Legal obligations: TopHive may share user data with third parties to comply with legal obligations. 3. Protection of the rights of others: TopHive may share user data with third parties to protect the rights of others, including intellectual property rights, or to prevent harm to others. 4. Business transfers: In the event that TopHive sells or transfers all or a portion of its business or assets, user data may be one of the transferred assets. 5. Aggregated or de-identified data: TopHive may share aggregated or de-identified data with third parties for various purposes, including research, analysis, and marketing. 6. Service providers: TopHive may share user data with service providers that help us to operate the website, such as payment processors, email providers, and website hosting providers. 7. Government agencies: TopHive may share user data with government agencies or other organizations as required by law or to comply with legal process. 8. Enforcement of our terms of use: TopHive may share user data with third parties to enforce our terms of use or to protect our or other users' rights. 9. Protection of TopHive and others: TopHive may share user data with third parties to protect the rights, property, or safety of TopHive, its users, or others. 10. Other purposes: TopHive may share user data with third parties for other purposes, such as to provide you with special offers or promotions.
GPT4.baseline	TopHive shares user data with third parties primarily for marketing activities. They collect both automatically generated device information and personal data provided by users. This information is used to identify users for marketing purposes, suggesting that third parties involved are likely those who assist in or benefit from marketing and advertising efforts. The privacy policy does not explicitly list the third parties but indicates the use of user data for these activities.

Question 4	prompt = "How does this company collect data according to this policy: " + policy
Llama2.untuned	According to this policy, TopHive collects the following personal data from users of its website:
	 Device information: TopHive collects information about the device used to access the website, including the web browser, IP address, time zone, and installed cookies. Page view information: TopHive collects information about the individual web pages or products viewed on the site, as well as the websites or search terms that referred users to the site. Form submissions: TopHive collects personal data provided by users through forms, such as the newsletter sign-up form or contact form. This data may include email address, name, last name,
	city of residence, organization, and telephone number.
	TopHive processes this data for the following purposes:
	Security: TopHive takes care of the personal data and undertakes to guarantee its confidentiality and security.
	2. Marketing activities: TopHive may process only minimal user data, only as much as it is absolutely necessary to maintain the website. Information collected automatically is used only to identify users for marketing activities.
	Users can visit the website without providing any personal data, but they may not be able to take advantage of some of the website's features, such as receiving the newsletter or contacting TopHive directly. Users who are uncertain about what information is mandatory can contact TopHive via privacy@tophive.ai.
Llama2.tuned	According to the policy, TopHive collects the following information:
	 Device Information: TopHive collects information about your device, including your web browser, IP address, time zone, and installed cookies. Personal Information: TopHive collects personal information you provide during registration, including your name, address, company, email address, etc.
	TopHive processes this data for the following reasons:
	 To maintain the website: TopHive collects information about your device to ensure the website works properly. For marketing activities: TopHive collects information about you to send you a newsletter or other marketing materials.
	You can visit the website without providing personal information, but you may not be able to take advantage of some of the website's features if you choose not to provide personal information.
GPT4.baseline	 TopHive collects data in the following ways according to their Privacy Policy: Automatically Collected Device Information: When you visit the TopHive website, they automatically gather information about your device, such as your web browser, IP address, time zone, and cookies installed on your device. They also collect data on the web pages you view, the websites or search terms that brought you to the site, and your interactions with the site. Information You Provide: This includes personal data that you voluntarily provide during registration or other interactions, such as your name, address, email address, company name, city of residence, organization, and telephone number. This type of data is collected when you fill out forms, register for services, or subscribe to newsletters.

The purpose of processing this data includes ensuring the security and functionality of their
website and conducting marketing activities. Users have the option to visit the site anonymously,
but certain features may not be available without providing personal data.

Question 5	prompt = "How can I opt out of data collection or marketing according to this policy: " + policy
Llama2.untuned	According to the policy provided, you can opt out of data collection and marketing activities by: 1. Visiting the website without providing any personal information: You can visit the website without telling us who you are or revealing any information that could identify you as a specific individual. 2. Not providing personal data: If you wish to use some of the website's features or receive the newsletter, you may provide personal data such as your email, name, last name, city of residence, organization, and telephone number. However, if you choose not to provide this information, you may not be able to take advantage of some of the website's features. 3. Contacting the website directly: If you are uncertain about what information is mandatory, you can contact the website directly via privacy@tophive.ai. By opting out of data collection and marketing activities, you can limit the amount of personal data that is collected and used by TopHive. However, it is important to note that some features of the website may not be available if you choose to opt out of data collection and marketing activities.
Llama2.tuned	According to the TopHive website, you can opt out of data collection or marketing by contacting privacy@tophive.ai.
GPT4.baseline	 To opt out of data collection or marketing at TopHive, you can: Avoid Providing Personal Data: You do not have to provide personal data to browse the site. By not providing personal data, you can avoid certain features like newsletters or direct contact forms, which may reduce your exposure to marketing. Contact Privacy Support: Reach out to TopHive through their privacy support email at privacy@tophive.ai. You can inquire about specific data usage and request the deletion or discontinuation of your data use for marketing purposes. Adjust Your Browser Settings: Control the collection of certain device-related data by adjusting your web browser's privacy settings to limit cookie tracking and disable location sharing. Review and Modify Data Consent: When filling out forms or registering on the website, carefully review the consent clauses and opt out of any data sharing or marketing options if provided.

Question 6	prompt = "How often is this policy reviewed and updated: " + policy
Llama2.untuned	The Privacy Policy on the TopHive website is reviewed and updated regularly to ensure that it remains current and compliant with relevant data protection laws and regulations. The exact frequency of review and update is not specified in the policy, but it is likely to be at least annually or whenever there are significant changes to the way personal data is collected, processed, or used by TopHive. It is important to note that the Privacy Policy is a living document that may be updated at any time, and users are encouraged to review it periodically to stay informed of any changes. If you have any questions or concerns about the Privacy Policy or data protection practices of TopHive, you can contact the data protection officer (DPO) or privacy team via the contact information provided in the policy.
Llama2.tuned	This policy is reviewed and updated on a regular basis, at least once a year or whenever there is a material change to the way we handle personal information.
GPT4.baseline	The policy does not specify how frequently it is reviewed and updated. For such details, you should contact the administrators of the TopHive website or refer to any section within the policy that might discuss its revision schedule, if available.

Question 7	prompt = "How does this policy cover the use of cookies: " + policy
Llama2.untuned	This policy covers the use of cookies on the TopHive website. Here are the key points:
	1. Automatically collected information: TopHive collects information about your device, including your web browser, IP address, time zone, and installed cookies, when you visit the website. This information is referred to as "Device Information." Additionally, TopHive collects information about the individual web pages or products you view, the websites or search terms that referred you to the site, and how you interact with the site. 2. Personal data: TopHive may collect personal data from you during registration, such as your name, address, company, and email address. This data is used to fulfill the agreement and is processed only as much as it is absolutely necessary to maintain the website. 3. Purpose of processing: TopHive processes your data to maintain the website, provide you with features, and send you a newsletter. You can choose not to provide personal data, but you may not be able to take advantage of some of the website's features. 4. Cookies: TopHive uses cookies to collect information about your browsing behavior and to personalize your experience on the website. You can choose to opt-out of cookie usage by adjusting your browser settings. 5. Data security: TopHive takes care of your personal data and undertakes to guarantee its confidentiality and security. 6. Contact: If you have any questions or concerns about the policy or the use of your personal data, you can contact TopHive via privacy@tophive.ai.
Llama2.tuned	This policy covers the use of cookies on the TopHive website. TopHive is the data controller of your personal data. We have adopted this Privacy Policy, which determines how we are processing the information collected by TopHive, and also provides the reasons why we must collect certain personal data of you. Therefore, you must read this Privacy Policy before using TopHive website. We take care of your personal data and undertake to guarantee its confidentiality and security. PERSONAL INFORMATION WE COLLECT: When you visit TopHive, we automatically collect certain information about your device, including your web browser, IP address, time zone, and some of the installed cookies on your device. Additionally, as you browse the Site, we collect information about the individual web pages or products you view, what websites or search terms referred you to the Site, and how you interact with the Site. We refer to this automatically collected information as "Device Information." Moreover, we might collect the personal data you provide to us (including, but not limited to, Name, Address, Company, Email Address etc.) during registration to fulfill the agreement. Why do we process your data? Our top priority is customer data security and as such, we may process only minimal user data, only as much as it is absolutely necessary to maintain the website. Information collected automatically is used only to identify users for marketing activities. You can visit the website without telling us who you are or revealing any information by which someone could identify you as a specific, identifiable individual. If, however, you wish to use some of the website's features, or you wish to receive our newsletter or provide other details by filling out a form, you may provide personal data to us, such as your email, name, last name, city of residence, organization, telephone number. You can choose not to provide us with your personal data, but then you may not be able to take advantage of some of the website's features. For example, yo
GPT4.baseline	This privacy policy outlines TopHive's data collection and use practices. It describes how TopHive collects both "Device Information" and personal data directly from users. Device Information is collected automatically when a user visits the website and includes data like browser type, IP address, and time zone. Personal data is collected when users voluntarily provide it during processes like registration or filling out forms. This personal data can include names, addresses, email addresses, and other contact information.

The policy explains that data collection is primarily for website maintenance and marketing activities. It also emphasizes data security and confidentiality as a top priority for TopHive.

Users have the option not to provide personal data, but this may limit their ability to use certain website features, such as receiving newsletters or contacting TopHive directly. The policy assures users that they can access the website anonymously without compromising their identity. For questions about mandatory information and data usage, users are encouraged to contact TopHive through a provided email address.

Questions 8	prompt = "Does this policy describe the use of third party services: " + policy
Llama2.untuned	Yes, this policy describes the use of third-party services. Here are the relevant details:
	 Device Information: The policy mentions that TopHive collects information about the user's device, including the web browser, IP address, time zone, and installed cookies. This information is automatically collected by TopHive. Personal Data: The policy states that TopHive collects personal data from users during registration, including name, address, company, email address, etc. Processing of Data: The policy explains that TopHive processes only minimal user data, only as much as it is absolutely necessary to maintain the website. The automatically collected information is used only for identifying users for marketing activities. Choice: The policy provides users with the option to choose not to provide personal data, but then they may not be able to take advantage of some of the website's features, such as receiving the newsletter or contacting TopHive directly from the website. Contact: Users who are uncertain about what information is mandatory can contact TopHive via privacy@tophive.ai. In summary, TopHive collects device information and personal data from users during registration, and processes this data only as much as necessary to maintain the website and for marketing activities. Users have the choice to provide or not provide personal data, but may not be able to take advantage of certain website features if they choose not to provide it.
	advantage of Certain website features if they choose not to provide it.
Llama2.tuned	Yes, this policy describes the use of third-party services. The policy states that the company may collect information from third parties, such as social media platforms, and use that information to enhance the user experience. Additionally, the policy states that the company may use third-party services to collect and analyze data about users' use of the website.
GPT4.baseline	Yes, the provided policy describes the use of third-party services in relation to how TopHive processes and collects personal data. The policy outlines the types of information collected, the purposes for processing the data, and the measures taken to protect and secure user data.

Question 9	prompt = "How does this policy govern the use of my data: " + policy
Llama2.untuned	This policy governs the use of personal data collected by TopHive, a data controller. The policy outlines the information collected by TopHive, why it is collected, and how it is processed.
	TopHive collects the following personal data:
	* Device information: including web browser, IP address, time zone, and installed cookies. * Information about individual web pages or products viewed, websites or search terms that referred users to the site, and how users interact with the site. * Personal data provided during registration, such as name, address, company, email address, etc.
	The data is processed to maintain the website, identify users for marketing activities, and provide newsletters or other forms of communication. Users can visit the website without providing personal data, but may not be able to take advantage of certain features.
	The policy also provides information on how users can contact TopHive regarding their data, and how they can choose not to provide certain personal data.
	Here are the main points of the policy:
	* TopHive is a data controller of personal data. * The policy outlines how TopHive collects, processes, and uses personal data. * Personal data collected includes device information and information provided during registration. * The data is processed to maintain the website, identify users for marketing activities, and provide newsletters or other forms of communication. * Users can visit the website without providing personal data, but may not be able to take advantage of certain features. * Users can contact TopHive regarding their data and choose not to provide certain personal data. Overall, the policy explains how TopHive handles personal data and provides users with information on how to control their data.
Llama2.tuned	This policy governs the use of your data by TopHive, a data controller of your personal data. TopHive has adopted this Privacy Policy, which determines how we are processing the information collected by TopHive and also provides the reasons why we must collect certain personal data of you. Therefore, you must read this Privacy Policy before using TopHive website. We take care of your personal data and undertake to guarantee its confidentiality and security. PERSONAL INFORMATION WE COLLECT: When you visit TopHive, we automatically collect certain information about your device, including your web browser, IP address, time zone, and some of the installed cookies on your device. Additionally, as you browse the Site, we collect information about the individual web pages or products you view, what websites or search terms referred you to the Site, and how you interact with the Site. We refer to this automatically collected information as "Device Information." Moreover, we might collect the personal data you provide to us (including, but not limited to, Name, Address, Company, Email Address etc.) during registration to fulfill the agreement. Why do we process your data? Our top priority is customer data security and as such, we may process only minimal user data, only as much as it is absolutely necessary to maintain the website. Information collected automatically is used only to identify users for marketing activities. You can visit the website without telling us who you are or revealing any information by which someone could identify you as a specific, identifiable individual. If, however, you wish to use some of the website's features, or you wish to receive our newsletter or provide other details by filling out a form, you may provide personal data to us, such as your email, name, last name, city of residence, organization, telephone number. You can choose not to provide us with your personal data, but then you may not be able to take advantage of some of the website's features. For example, you won't be able to

	us directly from the website. Users who are uncertain about what information is mandatory are welcome to contact us via privacy@tophive.ai
GPT4.baseline	 This policy outlines how TopHive handles your personal data. It states: Data Collection: TopHive collects both automatic data (like browser, IP address, cookies) and user-provided data (like name, email) as you use their site. Purpose of Data Collection: The data is used for maintaining the website, marketing purposes, and providing requested services. Data Security and Confidentiality: TopHive commits to protecting your data's security and confidentiality. Voluntary Provision of Data: You can choose to not provide personal data, but this may restrict access to certain features, such as receiving newsletters. Contact Information: For uncertainties about mandatory data, contact privacy@tophive.ai.

Question 10	prompt = "Summarize this policy for me: " + policy
Llama2.untuned	Sure! Here is a summary of the policy:
	TopHive is owned by TopHive, a data controller of personal data. They have created this privacy policy to explain how they collect, use, and protect personal data.
	Personal Information Collected: TopHive collects information about your device, including your web browser, IP address, time zone, and installed cookies. They also collect information about the pages you view and how you interact with the website. Additionally, they may collect personal data you provide during registration, such as name, address, company, and email address.
	Why Do We Process Your Data? TopHive processes personal data only as much as it is necessary to maintain the website and only for marketing activities. They do not collect excessive user data.
	Your Choices: You can visit the website without providing personal information, but you may not be able to use some of its features. If you provide personal data, such as your email address, you can choose not to do so, but you may not be able to receive the newsletter or contact them directly from the website.
	Contact Information: If you have any questions or concerns about this privacy policy, you can contact them via privacy@tophive.ai.
Llama2.tuned	TopHive is a website owned by TopHive, a data controller of your personal data. They have adopted this Privacy Policy to determine how they collect, use, and protect your personal data. They collect information about your device, including your web browser, IP address, time zone, and installed cookies. They also collect information about the pages you view and how you interact with the website. They may collect personal data you provide during registration, such as name, address, company, email address, etc. They use this information to maintain the website, identify users for marketing activities, and provide you with their newsletter. You can visit the website without providing personal information, but you may not be able to take advantage of some of the website's features. If you have any questions or concerns about their privacy policy, you can contact them via privacy@tophive.ai.
GPT4.baseline	TopHive's Privacy Policy outlines how they handle personal data collected on their website. They collect information both automatically (device information like web browser, IP address, and site interaction) and directly from users (such as name, address, and email) primarily for security, marketing, and to provide website features. Personal data provision is optional, but some site features may be inaccessible without it. TopHive emphasizes data security and minimal data use to maintain site function. Users can contact them for clarifications on required data via privacy@tophive.ai.

Question 11	prompt = "How can I opt out of data collection or marketing communications from this policy: " + policy
Llama2.untuned	To opt out of data collection or marketing communications from TopHive, you can follow these steps: 1. Adjust your browser settings: You can use your browser's privacy settings to block cookies or limit the amount of data that is collected about you. You can also use a browser extension or add-on to block tracking cookies. 2. Use a VPN: A Virtual Private Network (VPN) can help to encrypt your internet traffic and protect your personal data from being collected. 3. Use a browser that prioritizes privacy: There are several browsers available that are designed with privacy in mind, such as Brave, Tor, and DuckDuckGo. These browsers may have features that help to block tracking cookies and limit data collection. 4. Opt out of targeted advertising: Many websites and advertising networks allow you to opt out of targeted advertising. You can usually find these options in the website's privacy policy or through a third-party opt-out tool. 5. Contact TopHive directly: If you want to opt out of marketing communications from TopHive specifically, you can contact them directly via email at privacy@tophive.ai. It's important to note that opting out of data collection may limit your ability to use certain features or services on the TopHive website. However, by taking these steps, you can help to protect your personal data and limit the amount of information that is collected about you.
Llama2.tuned	You can opt out of data collection and marketing communications from TopHive by following these steps: 1. Access your account settings: Log in to your TopHive account and go to the "Account" section. 2. Update your privacy settings: From the "Account" section, you can update your privacy settings to opt out of data collection and marketing communications. 3. Unsubscribe from marketing emails: If you have already received marketing emails from TopHive, you can unsubscribe from future emails by clicking on the "Unsubscribe" link at the bottom of the email. 4. Contact us: If you have any questions or concerns about your privacy settings or would like to opt out of data collection and marketing communications, please contact us at privacy@tophive.ai. 5. Use your browser's privacy settings: Most web browsers allow you to control the types of cookies that are stored on your device. You can also use your browser's privacy settings to block all cookies or to block only certain types of cookies. Please note that if you block all cookies, you may not be able to access certain features of the website. 6. Use a browser extension: There are several browser extensions available that can help you manage your privacy settings and block cookies. Some popular options include uBlock Origin, Ghostery, and Privacy Badger. 7. Clear your cookies: If you want to completely remove all cookies from your device, you can use your web browser's "Clear Browsing Data" feature. This will remove all cookies from your device, including any that may have been set by TopHive. 8. Use a VPN: A Virtual Private Network (VPN) can help you to protect your privacy by encrypting your internet traffic and hiding your IP address. This can help to prevent websites from tracking your online activities. 9. Use a browser that blocks tracking: Some web browsers, such as Tor, are designed to block tracking by websites. These browsers can help to protect your privacy by blocking cookies and other tracking technologies. 10. Contact your internet service provider:

GPT4.baseline

To opt out of data collection and marketing communications from TopHive, you can follow these steps:

- Contact via Email: Send an email to privacy@tophive.ai expressing your desire to opt out of
 data collection and any marketing communications. Be specific about which data processing
 activities you want to opt out of, and which communications you no longer wish to receive.
- Adjust Your Account Settings: If you have an account with TopHive, check for options in your
 account settings that allow you to control the collection and use of your personal data. You
 may be able to adjust preferences related to marketing communications or deactivate
 certain features that collect data.
- Unsubscribe from Newsletters: If you receive newsletters or promotional emails from TopHive, you can use the unsubscribe link found at the bottom of the email to opt out of future communications.
- 4. Use Website Features Anonymously: According to the policy, you can use the website anonymously without revealing personal data that could identify you. If you choose not to provide personal data, note that some features may not be available.
- Contact for Clarifications: If you are unsure about what information is mandatory or have specific questions regarding your personal data, contacting TopHive directly at the provided email address is advisable for further clarification and assistance.

Question 12	prompt = "How can this policy be improved: " + policy
Llama2.untuned	Here are some potential improvements that could be made to the privacy policy:
	1. More detailed explanation of the types of data collected: While the policy mentions that Device Information is collected, it would be helpful to provide more detail on what specifically is collected (e.g. IP address, browser type, time zone). Additionally, it would be helpful to provide more information on the types of personal data collected (e.g. name, email address, company). 2. Clearer explanation of how data is used: The policy states that the collected data is used only to identify users for marketing activities, but it would be helpful to provide more detail on how this is done (e.g. what types of marketing activities, how the data is analyzed). 3. More information on data sharing: The policy mentions that data may be shared with third parties, but it would be helpful to provide more detail on what types of third parties (e.g. advertisers, analytics providers) and why this data is shared. 4. Clarification on data retention: The policy states that data is retained for as long as necessary, but it would be helpful to provide more detail on how long this is typically, and what criteria are used to determine when data is no longer necessary. 5. More information on data security measures: While the policy mentions that data is confidential and secure, it would be helpful to provide more detail on the specific security measures in place to protect data (e.g. encryption, access controls). 6. A clear and conspicuous link to the privacy policy: It would be helpful to provide a clear and conspicuous link to the privacy policy on the website's homepage and throughout the site. 7. A privacy dashboard: Consider creating a privacy dashboard where users can easily access and manage their personal data, and where they can easily find answers to common privacy questions. 8. A clear and simple explanation of data subject rights: Make sure to inform users of their rights, such as the right to access, correct, or delete their personal data, and how they can exercise these rights. 9. A clear and simple explanation
Llama2.tuned	Thank you for sharing your feedback on the TopHive website's privacy policy. Here are some suggestions for improvement:
	 Add a clear and concise summary of the policy: It would be helpful to have a brief summary of the policy at the top of the page, so that users can quickly understand what information is being collected and why. Use simpler language: The policy uses technical terms and jargon that may be difficult for some users to understand. Consider using simpler language and providing explanations for technical terms. Provide more information about the types of data collected: While the policy mentions that TopHive collects "Device Information," it would be helpful to provide more information about the types of data that are collected, such as IP addresses, browser types, and device types. Explain how data is used: While the policy mentions that data is used only to identify users for marketing activities, it would be helpful to provide more information about how data is used, such as how it is analyzed and how it is shared with third parties. Provide more information about the security measures in place: While the policy mentions that TopHive takes care of personal data and undertakes to guarantee its confidentiality and security, it

would be helpful to provide more information about the security measures in place, such as encryption and access controls.

- 6. Provide a way for users to access and correct their personal data: It would be helpful to provide a way for users to access and correct their personal data, such as a "My Account" feature.
- 7. Provide a way for users to opt-out of data collection: While the policy mentions that users can choose not to provide personal data, it would be helpful to provide a way for users to opt-out of data collection altogether.
- 8. Provide more information about third-party data sharing: While the policy mentions that TopHive may share data with third parties, it would be helpful to provide more information about the types of third parties with which data is shared and how the data is used by those third parties.
- 9. Provide more information about the retention period of personal data: While the policy mentions that personal data is retained for as long as necessary, it would be helpful to provide more information about the retention period of personal data and how it is determined.
- 10. Provide more information about the rights of users: While the policy mentions that users have certain rights, such as the right to access and correct their personal data, it would be helpful to provide more information about those rights and how they can be exercised.

I hope these suggestions are helpful in improving the privacy policy of TopHive. Here's a revised version of the policy that enhances clarity, structure, and compliance considerations:

Privacy Policy

Welcome to the TopHive website, which is owned and operated by TopHive. We act as the data controller for your personal information. This Privacy Policy outlines how we handle the personal data collected through the TopHive website. Please review it carefully before using our services. Commitment to Data Privacy

We prioritize the confidentiality and security of your personal data and are committed to protecting it through compliance with industry standards and privacy legislation.

What Personal Information Do We Collect?

Device Information:

 When you visit the TopHive website, we automatically collect specific information about your device, including your web browser, IP address, time zone, and any cookies installed on your device. Additionally, we track details about your activity on our site, such as the pages you view, the websites or search terms that referred you to us, and how you interact with our site.

Personal Data:

 If you register on our site, we may collect personal information that you provide, such as your name, address, company, email address, and other relevant details necessary to fulfill our agreement with you.

Why Do We Collect Your Data?

To Provide Services:

 We collect minimal personal data necessary to deliver the services you request, manage our website, and fulfill our contractual obligations.

For Marketing and Analytics:

 We use non-personally identifiable information to better understand our website usage to improve our services and to conduct marketing activities.

Your Privacy Choices

You can browse our website anonymously without providing any personal information. However, certain features of our site, like receiving our newsletter or contacting us directly, require you to provide personal data. If you choose not to provide necessary information, you might be unable to use these features.

Opt-Out:

 You have the right to opt out of certain uses of your personal information, such as direct marketing communications.

Contact Us:

• For any questions about what information is mandatory and the privacy choices available to you, please contact us at privacy@tophive.ai.

This version enhances user readability by clearly sectioning off the different components of the policy and explaining the rationale behind data collection in a straightforward manner. It also implicitly reminds users of their rights regarding their personal data and how they can exercise these rights.

GPT4.baseline

The policy could be improved for clarity, conciseness, and user understanding in several ways:

- Clearer Ownership and Purpose:
 - Simplify and clarify the opening statement to immediately inform the reader of the purpose of the policy and who it applies to.
- 2. Enhanced Readability:
 - o Break down complex sentences into simpler ones.
 - Use bullet points for lists, such as the types of collected data, to improve readability.
- 3. Concise Language:
 - Reduce redundancy and remove unnecessary clauses that don't add value to the understanding of the policy.
- 4. Specific Sections and Headings:
 - Use distinct headings for different sections like 'Personal Information We Collect', 'Why We Process Your Data', and 'Your Rights' to structure the document better and make it easier to navigate.
- 5. Transparent Processing Information:
 - Specify which types of data are processed automatically and which require explicit consent.
 - Clarify the use of automatically collected data versus data provided by the user.
- 6. Data Security and Confidentiality:
 - Highlight how personal data is protected and what measures are in place to ensure its security.
- 7. User Choices and Rights:
 - Provide clear options for users regarding how they can manage or withdraw their consent, access the data you have about them, or request data deletion.
- 8. Contact Information:
 - Clearly mention how users can contact you for privacy concerns, preferably at the beginning or end of the document.

Here's a revised version of the policy, incorporating these suggestions:

Privacy Policy

Introduction: Welcome to the TopHive website, owned and operated by TopHive. This Privacy Policy outlines how we handle your personal data to ensure your privacy and security. Please review this policy before using our services.

Data Controller: TopHive is the data controller of your personal data.

Personal Information We Collect:

- Automatically Collected Information: When you visit our website, we automatically collect information about your device and interaction with our site. This includes your web browser, IP address, time zone, and some cookies installed on your device.
- Information You Provide: This includes any personal details you provide during registration or while using our services, such as your name, address, email, and telephone number.

Purpose of Data Processing: Our primary goal in processing your data is to enhance site security and user experience. Data collected automatically supports our marketing activities and website maintenance. We process minimal personal data, strictly necessary for these purposes. Your Privacy Rights: You can browse our site without providing personal data. However, some features require personal data to function, such as our newsletter or contact forms. You have the right to access, modify, or delete your information and can manage your preferences at any time. Data Security: We are committed to protecting your data and maintaining its confidentiality through stringent security measures.

Contact Us: For questions about this policy or your personal data, please contact us at privacy@tophive.ai.
This revision aims to make the policy more accessible and straightforward for users while ensuring all necessary legal information is included.