

Automatically Generating Tasks from Meeting Minutes with Generative AI

This project aims to enhance task management efficiency within the organization by integrating Generative AI technology into a daily workflow of creating meeting minutes. The system is designed to automate the creation of tasks and action items from meeting minutes. This report provides an overview of the project's objectives, methodology, and outcomes.

1 Objectives:

1.1 Generative AI Integration:

As per the requirement, Open AI API(ChatGPT 3.5 Turbo) is integrated in the program for text processing and summarization.

This advanced chat-optimized model efficiently generates tasks from Meeting Minutes (MoM), ensuring precise and cost-effective task management. With a maximum token limit of 4,097 tokens, GPT-3.5 Turbo enhances productivity and decision-making.

The below seen UI is created using Django, to accept the meeting minutes either as file or direct text

Tasks from Meeting Minutes

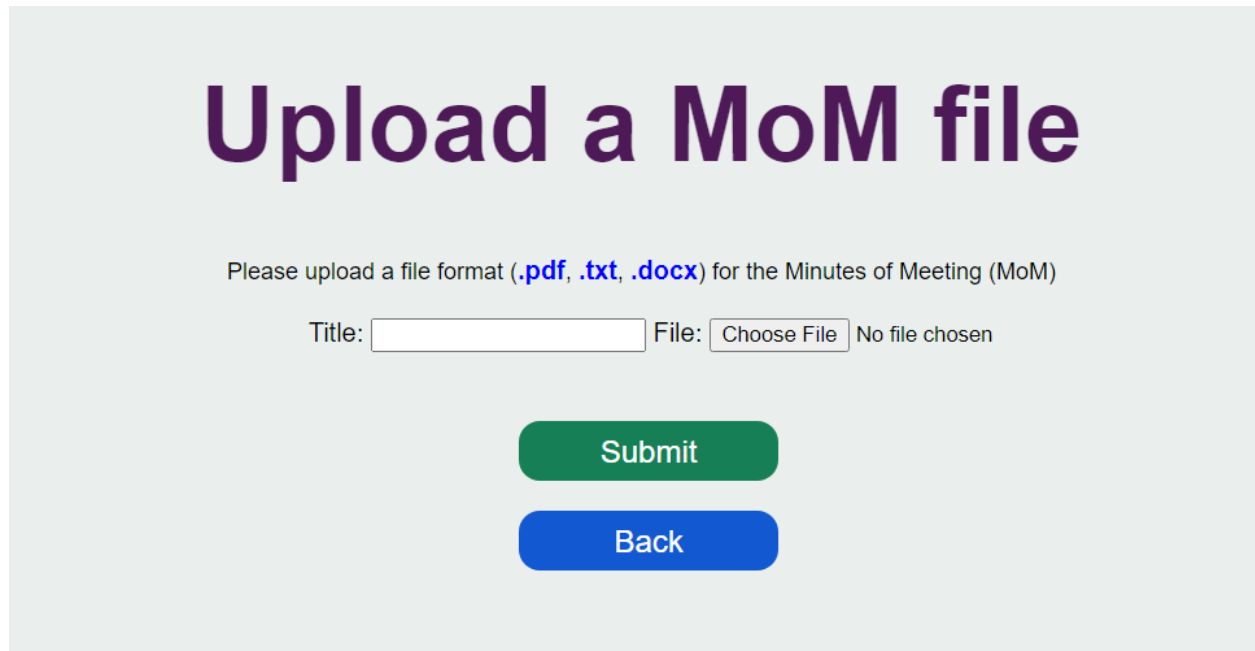
This Website is integrated with a Generative AI model capable of processing and understanding text data. You can input the meeting minutes in a text format, either by uploading a file or entering text directly.

Upload File

Create MoM

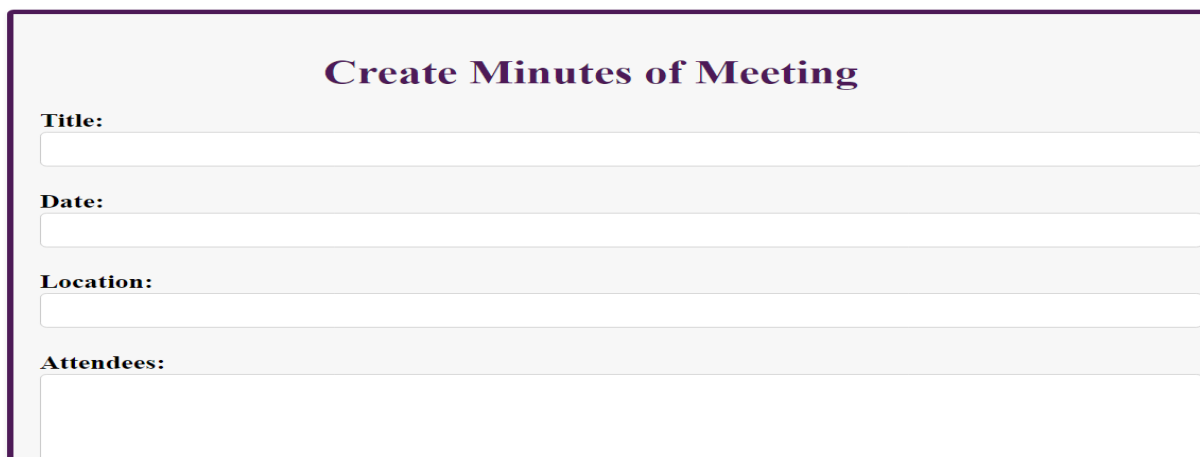
1.2 Meeting Minutes Input:

User has the flexibility to input meeting minutes in various text formats, such as uploading existing documents in .txt, .pdf, or .docx formats.



The screenshot shows a web form titled "Upload a MoM file" in a large, bold, purple font. Below the title, a message in a smaller purple font reads: "Please upload a file format (.pdf, .txt, .docx) for the Minutes of Meeting (MoM)". The form includes a "Title:" label followed by a white text input field. To the right of the input field is a "File:" label, a "Choose File" button, and the text "No file chosen". Below these fields are two buttons: a green "Submit" button and a blue "Back" button, both with white text.

Additionally, the inclusion of a Meeting Minutes (MoM) template in the form streamlines the process, ensuring consistency and standardization in recording crucial meeting details.











The screenshot shows a form titled "Create Minutes of Meeting" in a bold, purple font. The form is structured with four sections, each with a label in bold purple text and a corresponding input field: "Title:" with a white text input field, "Date:" with a white text input field, "Location:" with a white text input field, and "Attendees:" with a white text input field. The form is enclosed in a purple border.

1.3Text Understanding:

Incorporating ChatGPT 3.5 Turbo for **chat completion** enhances our system's ability to understand and interpret meeting minutes. This AI model excels in natural language understanding, extracting key insights from the content and context of meeting minutes. It identifies action items, deadlines, and the meeting's significance, facilitating informed decision-making.

1.4Action Item Generation:

Using GPT-3.5 Turbo's chat completion, the program efficiently captures action items from meeting minutes. By providing accurate prompts we are able to extract and structure the MoM tasks as seen below.

Task Table					
Name	Position	Task	Task Description	Deadline	
David Brown	Project Manager	Share detailed project schedule	David Brown will share a detailed project schedule by September 20, 2023.	September 20, 2023	 
Emily Davis	Web Developer 1	Set up development environment	Emily Davis will set up the development environment by September 22, 2023.	September 22, 2023	 
Michael White	Web Developer 2	Set up development environment	Michael White will set up the development environment by September 22, 2023.	September 22, 2023	 
Lisa Green	Designer	Start working on initial design	Lisa Green will start working on initial design concepts and share them by September 25, 2023.	September 25, 2023	 

Back

Regenerate

Add Row

Download

1.5 Task Assignment:

Using GPT-3.5 Turbo's text understanding abilities, the program can smartly suggest responsible team members for each task generated as shown above. By analyzing the content and context, it identifies individuals and their positions.

1.6 Task Description:

GPT-3.5 Turbo excels at generating task descriptions that are clear and contextually relevant, drawing from the information within meeting minutes. By comprehending the content and context, it produces precise and meaningful task descriptions, ensuring that action items are well-defined and directly aligned with the meeting's discussions. This capability enhances the efficiency of task management and aids in better understanding and execution of responsibilities within the organization.









1.7 Due Date Suggestion:

The system, equipped with natural language understanding, offers due date suggestions for tasks by considering time-sensitive information from meeting minutes. By analyzing the content, it identifies deadlines and recommends appropriate due dates, ensuring tasks align with the urgency discussed during meetings, thereby promoting efficient task management.

1.8 User Review and Confirmation:

we've harnessed the power of **Django**, **Python scripting**, and **regular expressions** to structure the AI-generated text into organized tables. User has the capability to edit ,add, delete and regenerate tasks. And also, conformation and downloading option is integrated

Task Table

Name	Position	Task	Task Description	Deadline	
David Brown	Project Manager	Share detailed project schedule	David Brown will share a detailed project schedule by September 20, 2023.	September 20, 2023	 
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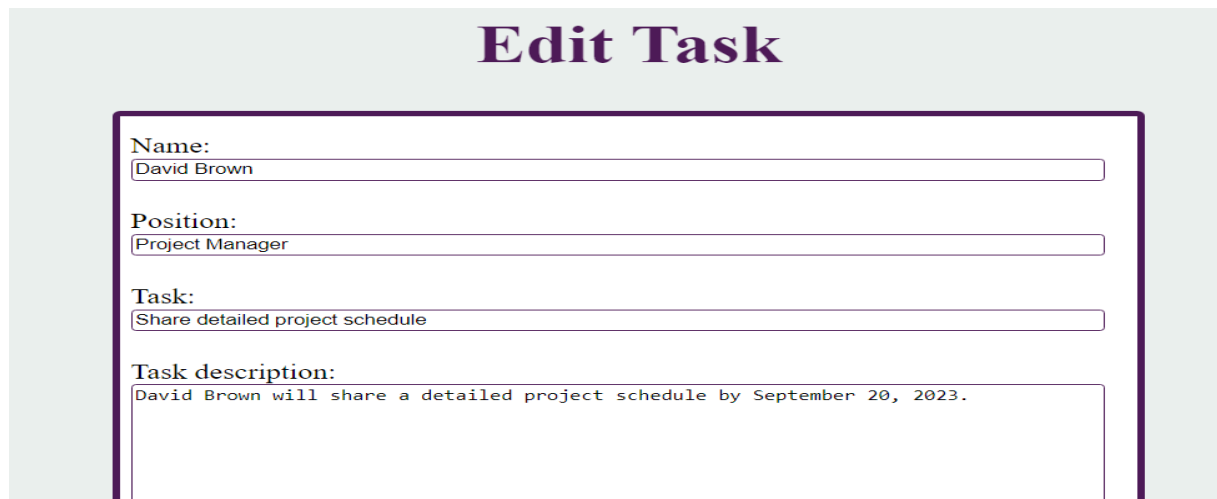
[Back](#)[Regenerate](#)[Add Row](#)[Download](#)

1.9 Ability to modify task details:

As per the requirement users possess the capability to adjust task details, assignees, and deadlines as necessary, ensuring flexibility in task management.

1.9.1 Edit task:

The **Django form** allows for effortless editing of existing tasks, enhancing task management flexibility and user productivity.



The screenshot displays a web form titled "Edit Task" in a large, bold, purple font at the top center. Below the title, the form is enclosed in a white box with a purple border. It contains four input fields, each with a label in bold purple text: "Name:" with the value "David Brown", "Position:" with the value "Project Manager", "Task:" with the value "Share detailed project schedule", and "Task description:" with the value "David Brown will share a detailed project schedule by September 20, 2023.".

1.9.2 Add task:

The **Django form** also facilitates the seamless addition of new tasks. Users can easily input task details, assignees, and deadlines.

Add Task

Name:

Position:

Task:

Task description:

1.9.3 Delete task:

Users can effortlessly delete tasks using a delete icon incorporated into the system's interface. This feature simplifies task removal and enhances task management efficiency

Name	Position	Task	Task Description	Deadline	
David Brown	Project Manager	Share detailed project schedule	David Brown will share a detailed project schedule by September 20, 2023.	September 20, 2023	<div><div></div><div></div></div>
Emily Davis	Web Developer 1	Set up development environment	Emily Davis will set up the development environment by September 22, 2023.	September 22, 2023	<div><div></div><div></div></div>









1.9.4 Regenerate task

Users can effortlessly regenerate tasks using a regenerating button incorporated into the system's interface. This feature simplifies task modification and enhances task management efficiency

1.10 Task Creation:

Using **Django models** and **Pandas**, our system allows users to create tasks in **Excel** (XLSX) format with a simple confirmation. This streamlined process provides users with a convenient download option, enhancing accessibility to task data for analysis and sharing.

The screenshot shows a web browser window with the address bar displaying '127.0.0.1:8000/table/'. The page title is 'Task Table'. A 'Downloads' dropdown menu is open, showing 'tasks (12).xlsx' with an 'Open file' link. The main content area features a table with the following data:

Name	Position	Task	Task Description	Deadline	
David Brown	Project Manager	Share detailed project schedule	David Brown will share a detailed project schedule by September 20, 2023.	September 20, 2023	 
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Below the table are four buttons: 'Back' (blue), 'Regenerate' (green), 'Add Row' (blue), and 'Download' (green).

The screenshot shows an Excel spreadsheet titled 'tasks (12) - Excel'. The spreadsheet contains the same data as the table in the previous screenshot:

	A	B	C	D	E	F	G
	Name	Position	Task	Task Description	Deadline		
1	David Brown	Project Manager	Share detailed project schedule	David Brown will share a detailed project schedule by September 20, 2023.	September 20, 2023		
2	Emily Davis	Web Developer 1	Set up development environment	Emily Davis will set up the development environment by September 22, 2023.	September 22, 2023		
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2 Conclusion:

This program, seamlessly integrates **GPT-3.5 Turbo**, **Django**, and **Pandas**, and satisfies the basic requirements for an automated task creation system. By leveraging a large language model API for intelligent task generation, offering due date suggestions, and enabling effortless task editing and deletion, I have explored the possibilities of Generative AI. You can find the project on GitHub for a closer look at the implementation: [GitHub Link](#).

The technical design document goes [here](#)