



# Global Academy of Technology

## Department of Information Science & Engineering

### MINI PROJECT – 21MPT68

#### Even Semester 2024-25



### SYNOPSIS

<b>Title</b>	<b>“ Food Seeker AI-Chat Using Python and Flask”</b>
<b>Domain</b>	<b>AI-Powered Food Recommendation Systems</b>

The project, titled "Food Seeker AI Chat Using Python and Flask," involves developing an AI-driven chatbot capable of providing users with food recommendations. This chatbot is built using Python and Flask, leveraging natural language processing to understand user queries and offer relevant food suggestions. The chatbot can handle a variety of user inputs related to greetings, personal queries, and specific food recommendations, enhancing user engagement and providing a personalized experience.

In the background of this project, the increasing use of AI in everyday applications highlights the importance of developing intuitive and interactive systems. The food recommendation domain is particularly significant due to its vast market size and the growing demand for personalized culinary suggestions. Existing solutions often lack interactivity or fail to provide contextually relevant recommendations. This project addresses these gaps by using Flask for the web framework and integrating various Python libraries for natural language processing. The chatbot's functionality encompasses responding to greetings, basic queries, and providing specific food recommendations, making it a versatile assistant.

The primary objectives of this project were to design and implement a user-friendly chatbot capable of understanding and processing natural language queries related to food recommendations. The scope included developing a responsive web interface, implementing a robust backend to handle user inputs, and integrating APIs or static responses for food suggestions. The methodology involved using Flask to create the web application, with HTML, CSS, and JavaScript for the frontend. The chatbot's responses were crafted to be engaging and informative, ensuring a smooth user experience. Key tools used include Flask for backend development, Speech Synthesis API for text-to-speech functionality. The project followed a structured approach, starting from initial design and prototyping, followed by iterative development and testing phases.

The key findings of the project demonstrate that the "Food Seeker AI Chat" successfully provides accurate and contextually appropriate food recommendations based on user queries. User interactions with the chatbot showed high satisfaction rates, and the system's ability to handle diverse inputs was validated through extensive testing. The outcome indicates that the developed chatbot can serve as a reliable digital assistant for food recommendations, with potential applications in various customer service and culinary advice platforms. The

project's efficiency in delivering personalized recommendations highlights its practical utility and potential for further enhancements, such as integrating real-time data sources for dynamic responses.

In summary, the "Food Seeker AI Chat Using Python and Flask" project provides a comprehensive, interactive solution for food recommendations, combining robust backend architecture with a user-friendly interface.

Team No.	USN	NAME	SIGNATURE	SECTION
	1GA21IS150	SHIVALINGU K G		6B
	1GA21IS188	VISHWAS S		6B

Name of Guide:

Signature of Guide: