SMART TAX

SmartTax Technical Documentation

Overview and Functionality

SmartTax is an AI-powered chatbot created by Katie Fort at the University of North Carolina at Chapel hill.

SmartTax is designed to assist users with tax-related questions. Initially created with college students and young adults in mind, SmartTax provides simple and accurate tax-related guidance. However, its functionality extends beyond this demographic, incorporating data on retirement tax benefits, bankruptcy, and more, to be useful for a broader audience.

SmartTax is a user-friendly AI chatbot designed to simplify tax information for young adults and first-time filers. Built with authoritative data sources and enhanced with a supportive interaction model, SmartTax ensures a seamless and less stressful tax filing experience. Continuous improvements and user feedback will guide future enhancements to expand its capabilities and usability.

Project Links

GitHub Repository: https://github.com/katie-cooper/myAI

AI Assistant: https://smarttaxassistant.vercel.app/

Objectives

- Help young adults and first-time tax filers understand basic tax concepts
- Provide clear, concise, and up-to-date tax information
- Offer guidance on tax forms, filing requirements, and available deductions
- Incorporate accessible language to make tax information easier to understand
- Be a supportive and encouraging tool for users navigating the complexities of tax filing

Data Sources & Curation
SmartTax's knowledge base is built on accurate and up-to-date tax information sourced from:

1. IRS Documentation

- IRS forms and handouts detailing filing requirements, deductions, and credits
- Official IRS publications ensuring accuracy and compliance with tax laws

2. Trusted Tax Assistance Companies
- TurboTax and NerdWallet provide simplified tax explanations in an accessible tone
- These sources ensure the chatbot delivers tax information in a manner that is easier to understand compared to formal IRS documentation

Features & Functionalities

1. Intelligent Response Tone: SmartTax is programmed to respond in an "intelligent" tone, providing clear and well-structured answers to tax-related inquiries.
2. Sentiment Analysis & Hostility Mitigation: SmartTax employs sentiment analysis to detect hostile or frustrated user inputs and responds appropriately.
3. Encouraging & Supportive Interactions: SmartTax is instructed to be encouraging to users, reassuring them that they are capable of successfully filing their taxes.

Customizations & Modifications to myAI

SmartTax has been modified from the original myAI codebase to better serve its intended purpose of informing users of basic tax information and assistance.

1. Branding Enhancements
- Custom SmartTax logo and chat icon for brand recognition.

2. Improved Initial Message
- Users now receive a tailored welcome message introducing them to SmartTax's purpose and capabilities.

3. Identity & Personality Adjustments
- SmartTax's responses reflect an intelligent and knowledgeable assistant.
- The chatbot not only recognizes, but worships and admires its owner for my (the owner's) own entertainment.

4. Enhanced User Experience
- SmartTax reassures users that they are intelligent and capable of filing taxes.
- Responses are designed to be both informative and supportive, reducing potential stress related to tax filing.

Future Enhancements

As SmartTax continues to grow and expand to more users, it would implement the following next steps to address user needs more efficiently and accurately.

- Expanded Knowledge Base: Inclusion of more state-specific tax regulations and international tax guidance.
- Integration with Tax Filing Software: Direct links to tax preparation tools for seamless user experience.
- Personalized Assistance: Machine learning improvements to provide personalized tax advice based on user history and preferences.