Arklex Screening Test

# Overview

This screening test focuses on customizing an agent using the **Arklex** Agent First Organization framework, optimized for customer facing AI agents. This framework simplifies the creation of **task-oriented dialogue agents** that can effectively handle complex and ambiguous tasks through user interactions, leveraging domain-specific knowledge.

The test consists of four main parts:

1. **Compose a Config File:**The Config file is a structured JSON document that forms the foundation of your TaskGraph. It defines the chatbot’s role, objectives, domain, and resources, enabling tailored task generation and seamless integration with Agents for efficient task management. Detailed descriptions of the fields can be found in the [README](https://github.com/ArticulateAI/Agent-First-Organization/tree/v0.0.1).
2. **Customize Tool/Worker:**Depending on the role of the Agent you want to build, you can customize the Worker framework using LangGraph or integrating multiple Tools (e.g APIs provided by different platforms, customized functions). A customized Worker is like a group of tools formed in a subgraph, which can integrate various plugins, tool-calling APIs, and database schemas to align with the role of your Agent.
3. **Build the Interactive Agent:**After preparing the Config file and required documentation, you can generate the TaskGraph (used to guide conversations) and run the system as outlined in the [README](https://github.com/ArticulateAI/Agent-First-Organization/tree/v0.0.1).
4. **Evaluation:**To evaluate the performance of your chatbot, we will simulate user interactions. The user simulator generates diverse inputs to test your chatbot’s capabilities in different scenarios.

# Getting Started

You can access the Github repository [here](https://github.com/arklexai/Agent-First-Organization), then follow the README and documentation to start building your Agent.

**Quick start:**

pip install arklex

**Hint:** If you're unsure about what type of Agent to create, here are some sample ideas ranging from simple to more challenging:

1. **Customer Service Q&A**Create an Agent capable of answering questions in various domains, such as Government, Healthcare, Telecom, Wiki, or Research. This requires preparing source documentation to be used by the RAG module.
2. **Customer Support with Database Interaction**Develop an Agent for domains like Travel Agencies or Retail, requiring interaction with a database. This involves designing a database schema and creating a simulation environment for testing.
3. **Data Analyst**Build an Agent to analyze data from a database. This project involves customizing the Worker framework to perform specialized data analysis tasks.

**Important Notice:**To use some features in the framework, you may need accounts for **LangChain**, **OpenAI**, or **Tavily** if you don’t already have them.

# Submission

Please fill in the survey [here](https://forms.gle/CA9qK9pYeamUdcgRA)! This survey will help us understand your experience, challenges, and suggestions for improving the framework. **You are also encouraged to submit your CV and attach your GitHub link in the survey for the job application.**

If you meet any problems, feel free to contact us directly at [hr@arklex.ai](mailto:hr@arklex.ai). But the best way is to ask in the discord channel.