



## Smart Chat, Better Business



### Motivation and Goals

- **Chatbot** for the Software **Zeiss Inspect**
- Zeiss Inspect: **Analytic Software** for 3D-Data
- Creates **Python script addons** for users of Software
- **Goal:** Evaluation if chatbot works with given documentation
- **Comprehensive Documentation:** Documenting development process, providing valuable insights for future improvements, troubleshooting & development



### Customer Value

- **Ease of Use:** Customers describe their problems or goals in natural language, chatbot simplifies process of script creation
- **Quick Solutions:** Customers receive instant solutions to their queries, improving overall experience with Zeiss inspect
- **Customization:** Customers can create highly customized solutions without needing extensive programming skills



Meet the Team  
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### Evaluation

- Comparing Large Language Models: **GPT-3.5 vs GPT-4 vs GPT-4o**
- Comprehensive vs. Partial documentation training
- **Fine-Tuning vs Retrieval Augmented Generation**

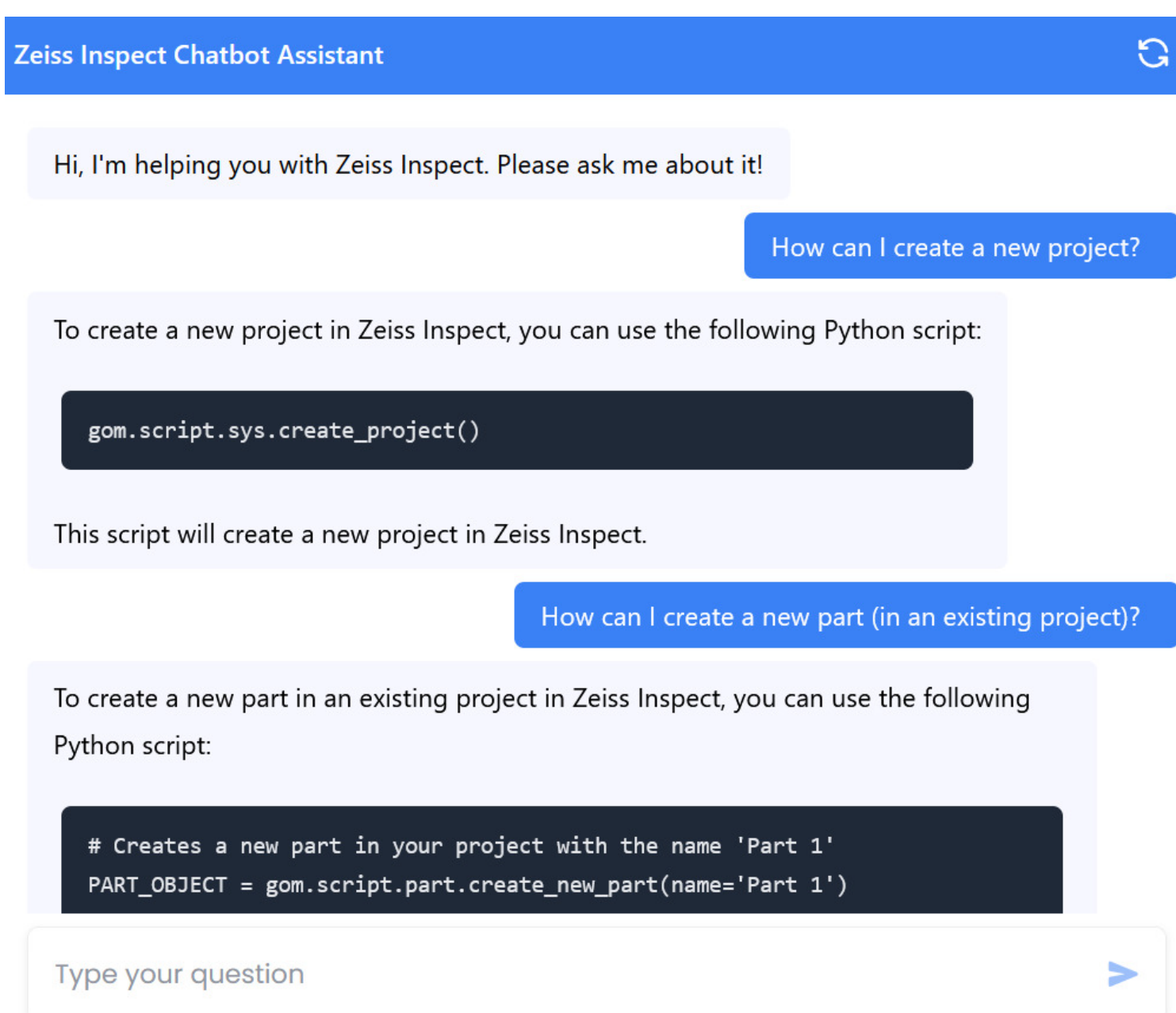


### Challenges

- Limited training data available
- LLM provides false answers

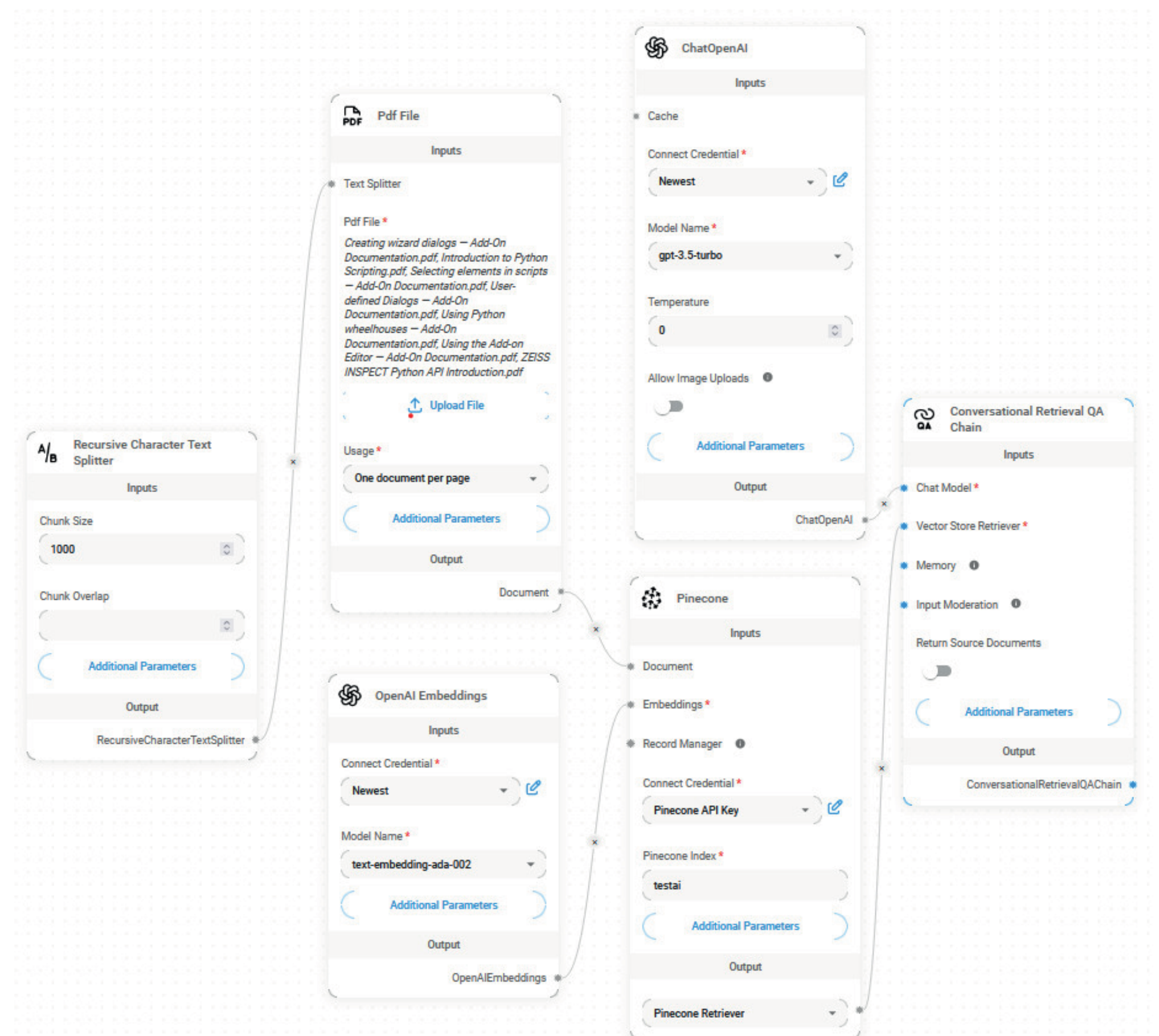
### Results

- Fine-Tuning is less suitable than RAG for this use case
- Chatbot built using the **Flowise Framework**
- **GPT4** and **GPT4o** performed better than GPT3.5
- More documentation **improves** performance



Chat with Model GPT-3.5 (RAG Approach)

### Architecture



Architecture Diagram in Flowise Framework

