Project Documentation and Flow Diagrams

## File: Configuration

File: /content/drive/MyDrive/vexere\_test/config.py

Purpose: Configuration settings for the application.

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Error analyzing AST: 'Assign' object has no attribute 'parent'

## File: Data Models

File: /content/drive/MyDrive/vexere\_test/src/models.py

Purpose: Defines data models or structures.

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Classes:  
- UserIntent  
- QueryBookingInfo  
- UpdateBookingInput  
- CancelTicketInput  
- InvoiceRequestInput  
- ComplaintInput

## File: Parsers (src)

File: /content/drive/MyDrive/vexere\_test/src/parsers.py

Purpose: Contains code for parsing data.

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Error analyzing AST: 'Assign' object has no attribute 'parent'

## File: Parsers (src2)

File: /content/drive/MyDrive/vexere\_test/src2/parsers.py

Purpose: Contains code for parsing data.

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Classes:  
- UpdateBookingTime  
- CancelTicket  
- RequestInvoice  
- SubmitComplaint  
- IntentClassifier

Error analyzing AST: 'Assign' object has no attribute 'parent'

## File: Service: Embedding API (App)

File: /content/drive/MyDrive/vexere\_test/services/embedding\_api/app.py

Purpose: Defines FastAPI endpoints for specific services (e.g., embedding).

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Classes:  
- EmbedRequest  
- EmbedResponse  
- m3Wrapper  
 Methods:  
 - \_\_init\_\_  
 - embed  
- RequestProcessor  
 Methods:  
 - \_\_init\_\_

Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Service: Embedding API (Modules)

Documentation not found for /content/drive/MyDrive/vexere\_test/services/embedding\_api/modules.py

## File: Service: Embedding API (Function Call)

File: /content/drive/MyDrive/vexere\_test/services/embedding\_api/function\_call.py

Purpose: Handles external API calls or interactions.

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Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Service: Reranker API (App)

File: /content/drive/MyDrive/vexere\_test/services/reranker\_api/app.py

Purpose: Defines FastAPI endpoints for specific services (e.g., embedding).

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Classes:  
- RerankTextRequest

Error analyzing AST: 'Assign' object has no attribute 'parent'

## File: Service: Reranker API (Modules)

File: /content/drive/MyDrive/vexere\_test/services/reranker\_api/modules.py

Purpose: Contains core logic or components for a service.

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Classes:  
- AsyncReranker  
 Methods:  
 - \_\_init\_\_

Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Tools (src)

File: /content/drive/MyDrive/vexere\_test/src/tools.py

Purpose: Defines custom tools used by the language model.

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Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Tools (src2)

File: /content/drive/MyDrive/vexere\_test/src2/tools.py

Purpose: Defines custom tools used by the language model.

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Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Nodes (src)

File: /content/drive/MyDrive/vexere\_test/src/nodes.py

Purpose: Defines nodes or components for the LangGraph/LangChain application.

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Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Nodes (src2)

File: /content/drive/MyDrive/vexere\_test/src2/nodes.py

Purpose: Defines nodes or components for the LangGraph/LangChain application.

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Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Nodes Utilities (src2)

File: /content/drive/MyDrive/vexere\_test/src2/nodes\_utils.py

Purpose: Defines nodes or components for the LangGraph/LangChain application.

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Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Utility Functions (src)

File: /content/drive/MyDrive/vexere\_test/src/functions.py

Purpose: Contains utility or helper functions.

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Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## File: Utility Functions (src2)

File: /content/drive/MyDrive/vexere\_test/src2/functions.py

Purpose: Contains utility or helper functions.

--------------------

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## File: Workflow Definition (src)

File: /content/drive/MyDrive/vexere\_test/src/graph.py

Purpose: Defines the LangGraph workflow.

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Classes:  
- BookingState

Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## Flow Diagram: User Query Processing / Information Retrieval (src)

The following is the Mermaid syntax for this diagram. Please copy this syntax and paste it into a Mermaid-compatible renderer (e.g., an online Mermaid editor or a Markdown viewer with Mermaid support) to view the diagram.

graph TD  
 retrieve[Retrieve Information]  
 QA\_node[Question Answering]  
 tool\_call[Tool Call (src)]  
 llm[LLM (src)]  
 retrieve --> QA\_node  
 tool\_call --> llm  
 llm --> END  
 QA\_node --> END  
 get\_db\_info\_node[Get DB Info] --> END

## File: Workflow Definition (src2)

File: /content/drive/MyDrive/vexere\_test/src2/graph.py

Purpose: Defines the LangGraph workflow.

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Classes:  
- BookingState

Error analyzing AST: 'FunctionDef' object has no attribute 'parent'

## Flow Diagram: User Interaction Loop (src2)

The following is the Mermaid syntax for this diagram. Please copy this syntax and paste it into a Mermaid-compatible renderer (e.g., an online Mermaid editor or a Markdown viewer with Mermaid support) to view the diagram.

graph TD  
 receive\_user\_reply\_node[Receive User Reply]  
 classify\_intent\_node[Classify Intent]  
 agent[Agent (Decision Making)]  
 tool\_call\_node[Tool Call]  
 ask\_missing\_info\_node[Ask Missing Info]  
 receive\_user\_reply\_node --> classify\_intent\_node  
 tool\_call\_node --> agent  
 ask\_missing\_info\_node --> agent  
 classify\_intent\_node -- "Intent: Ask Missing Info" --> ask\_missing\_info\_node  
 classify\_intent\_node -- "Intent: Tool Call" --> tool\_call\_node  
 classify\_intent\_node -- "Other Intents / Complex" --> agent  
 agent -- "Action: Use Tool" --> tool\_call\_node  
 agent -- "Action: Ask Info" --> ask\_missing\_info\_node  
 agent -- "Action: Finish" --> END

## File: Main Entry Point (src)

File: /content/drive/MyDrive/vexere\_test/main.py

Purpose: Main entry point, likely orchestrates the application flow.

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Error analyzing AST: 'Assign' object has no attribute 'parent'

## File: Main Entry Point (src2)

File: /content/drive/MyDrive/vexere\_test/src2/main.py

Purpose: Main entry point, likely orchestrates the application flow.

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Error analyzing AST: 'Assign' object has no attribute 'parent'

## File: Init File (src)

File: /content/drive/MyDrive/vexere\_test/src/\_\_init\_\_.py

Purpose: Unknown purpose.

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## File: Init File (src2)

Documentation not found for /content/drive/MyDrive/vexere\_test/src2/\_\_init\_\_.py

# Conceptual Diagrams

## Flow Diagram: Conceptual: Intent-Specific Processing (src2)

The following is the Mermaid syntax for this diagram. Please copy this syntax and paste it into a Mermaid-compatible renderer (e.g., an online Mermaid editor or a Markdown viewer with Mermaid support) to view the diagram.

graph TD  
 A[Classify Intent]-->B{Intent Type?}  
 B-->|Booking Update| C[Call Booking Update Tool]  
 B-->|Complaint| D[Process Complaint]  
 B-->|Other| E[Handle Other Intent]

## Flow Diagram: Conceptual: Information Retrieval

The following is the Mermaid syntax for this diagram. Please copy this syntax and paste it into a Mermaid-compatible renderer (e.g., an online Mermaid editor or a Markdown viewer with Mermaid support) to view the diagram.

graph TD  
 A[Query / Request]-->B[Generate Embedding]  
 B-->C[Vector Search (Milvus)]  
 C-->D[Retrieve Candidate Documents]  
 D-->E[Rerank Documents]  
 E-->F[Return Relevant Information]  
 A-->G{Database Query?}  
 G-->|Yes| H[Query SQL Database]  
 H-->F