AI Agent

Core Expectations

1. **Smart Voyage Planning & Optimization**
   - Suggest **optimal routes** considering weather, currents, piracy zones, canal fees, and fuel consumption.
   - Run **"what-if" scenarios** (e.g., slow steaming vs. higher speed, bunker price changes).

2. **Cargo & Tonnage Matching Assistant**
   - Proactively suggest **best cargo-ship pairings** based on vessel specs, laycan, and cargo requirements.
   - Give **profitability estimates** for each match.
   - Track **open vessels** and **available cargoes** in real time, like a digital chartering assistant.

3. **Market & Commercial Insights**
   - Provide **market trend analysis** (freight rates, bunker prices, demand/supply imbalance).
   - Benchmark my voyage against **market averages**.

4. **Port & Cargo Intelligence**

   Suggest the **cheapest/fastest bunker ports** en route.

5. **Automated PDA & Cost Management**
   - Auto-calculate **PDA estimates** (port charges, canal fees, agency costs).
   - Track **actual vs. estimated costs** after the voyage.

◆ AI Assistant Behaviors

- **Conversational Querying**: Instead of filling 10 forms, I just type:
  "Plan a voyage for a Panamax from Santos to Qingdao with a 15-day laycan, compare via Suez vs Cape, give bunker costs at current VLSFO prices."
- **Proactive Alerts**:
  - "Storm forecast in Bay of Biscay may delay your vessel ETA by 36 hrs."
  - "Baltic Dry Index up 5% today – consider fixing sooner."
- **Integration & Automation**:
  - Pull data directly from AIS, bunker indices, weather feeds.
  - Generate **ready-to-share reports** for management or charterers.
- **Decision Support**:
  - Show me **best options ranked by TCE (Time Charter Equivalent), fuel cost**
  - Explain trade-offs clearly: "Route A saves $120k fuel but adds 3 days. Route B is faster but 25% more emissions."

Develop an AI agent that can:

• **Answer queries related to laytime, weather, distances, or CP clauses**

• **Retrieve and summarize uploaded documents**

• **Suggest actions or documents required for specific voyage stages**

• **Offer voice or chat-based interaction**