Hackathon Problem Summary & Team Task Distribution

1. What is the Problem?

The organization participating in the hackathon works in the wires and cables manufacturing domain. They frequently receive large, complex B2B **Requests for Proposals** (RFPs) involving technical requirements, product specifications, pricing, and compliance details. Responding to these RFPs is time-consuming because:

- RFPs arrive through multiple external sources and are manually monitored.
- Technical teams manually interpret specifications and match them to product SKUs.
- Pricing teams depend on technical outputs, causing sequential delays.
- Missing or delaying responses reduces win rates significantly.

The company needs an automated AI-based solution to detect RFPs, extract details, match specifications to SKUs, estimate pricing, and generate a complete RFP response efficiently.

2. What Does the Hackathon Organization Want from Us?

The hackathon organizers want the team to build an Agentic AI system that can:

1. Automatically scan predefined RFP URLs or sources.
2. Identify RFPs with deadlines within the next three months.
3. Summarize the technical and commercial scope of the RFP.
4. Match RFP requirements with the company's internal product SKUs.
5. Recommend top-matching SKUs with a 'spec-match percentage'.
6. Estimate pricing using a dummy pricing model.
7. Consolidate all information into a final RFP response.

They expect a working prototype using Agentic AI—specifically multi-agent collaboration through tools such as CrewAI.

3. Team Task Distribution

Person 1 — Sales Agent Lead (RFP Detection & Summarization)

Responsibilities:

- Build the Sales Agent using CrewAI.
- Create web scraping tools to scan predefined RFP URLs.
- Extract due dates, RFP titles, and high-level requirements.
- Identify RFPs suitable for processing.

Deliverables:

- Sales Agent module
- RFP discovery and summarization tool
- Structured JSON output for Technical Agent

Person 2 — Technical Agent Lead (Specs & Stock Keeping Unit [SKU] Matching)

Responsibilities:

• Build the Technical Agent in CrewAI.
• Parse technical sections of the RFP.
• Create SKU matching logic using embeddings (FAISS / Chroma / LlamaIndex).
• Generate top-3 recommended SKUs with match percentages.

Deliverables:

• Technical Agent module
• SKU database + embedding index
• Comparison table of RFP specs vs. matched SKUs

Person 3 — Pricing Agent Lead (Cost Estimation)

Responsibilities:

• Build the Pricing Agent in CrewAI.
• Create a dummy pricing model (material + service + testing costs).
• Pull SKU recommendations from the Technical Agent.
• Generate a final pricing table.

Deliverables:

• Pricing Agent module
• Pricing table CSV
• Final pricing summary for the Orchestrator Agent

Person 4 — Main Orchestrator Lead (Integration & Presentation)

Responsibilities:

• Build the Main Orchestrator Agent using CrewAI.
• Connect Sales, Technical, and Pricing Agents into a single workflow.
• Generate the final consolidated RFP response.
• Prepare system architecture documentation and hackathon presentation.

Deliverables:

• Main AI workflow script
• Final RFP response document
• Architecture diagram + pitch deck

4. Summary of Task Allocation

• **Person 1: RFP scraping and initial summarization**
• **Person 2: Technical analysis and SKU matching**
• **Person 3: Pricing model and cost generation**
• **Person 4: Integration & final output + presentation**