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## ▮ Tools to be built

### 1. Summarizer Tool

**Goal:** Summarize a long passage or conversation history. **Why it fits:** Mistral performs well with compression and rephrasing tasks.

**Command Examples:**

```
summarize The meeting discussed cloud migration, database cleanup, and scaling.
```

**Expected Output:**

```
Agent: The meeting focused on migration, cleanup, and scaling strategies.
```

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### 2. Sentiment Analyzer Tool

**Goal:** Detect emotional tone in user text (positive, neutral, negative). **Why it fits:** Encourages structured reasoning and interpretation.

**Command Examples:**

```
analyze I feel frustrated about work today.
```

**Expected Output:**

```
Agent: The sentiment is negative – frustration or stress detected.
```

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### 3. NoteKeeper Tool

**Goal:** Store and retrieve personal notes in memory. **Why it fits:** Demonstrates use of conversation memory + tool-based persistence.

**Command Examples:**

```
note Remember to email the project report tomorrow.  
get notes
```

**Expected Output:**

```
Agent: Noted: "email the project report tomorrow."  
Agent: You currently have 1 note: "email the project report tomorrow."
```

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### 4. Text Improver Tool

**Goal:** Rewrite text to make it clearer or more professional. **Why it fits:** Uses LLM's rephrasing ability with concise prompt templates.

**Command Examples:**

```
improve This report is kind of messy and confusing.
```

**Expected Output:**

Agent: The report lacks structure and clarity. Suggested rewrite: "This report needs better organization and clear explanations."

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## 5. Task Priority Classifier

**Goal:** Categorize tasks into high / medium / low priority based on keywords. **Why it fits:** Great example of rule-based + LLM hybrid logic.

**Command Examples:**

```
priority Submit proposal by tonight
priority Buy snacks for office
```

**Expected Output:**

```
Agent: Task "Submit proposal by tonight" marked as HIGH priority.
Agent: Task "Buy snacks for office" marked as LOW priority.
```

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## "AI Productivity Assistant"

You can combine any 3-4 of the above tools into a **single interactive agent**:

### Example Feature Set

- `summarize` → summarizes input text or memory
- `analyze` → detects emotional tone
- `note` / `get notes` → manages notes
- `improve` → rewrites or edits text
- `priority` → classifies urgency of tasks

### Technical Goals

- Implement custom functions (like tools)
- Add `ConversationBufferMemory` for persistent context
- Decide intelligently when to use tools vs. direct Mistral responses
- Keep everything command-line-based (no API calls beyond OpenRouter)