

Query-to-Response Flow

1. User submits query within project context
2. Query Perception Agent captures raw query text
3. Project Context Agent identifies which project the query relates to
4. Query Analysis Agent parses query into key concepts and project-specific intent
5. Meta-Cognitive Agent evaluates system capability to answer within project scope
6. Memory Interface Agent initiates parallel search across project-specific memory levels
7. Semantic Memory nodes matching query concepts within project are activated
8. Working Memory loads recently processed project-related information
9. Episodic Memory checks for previous similar queries within project history
10. Procedural Memory provides optimized search patterns for this project query type
11. Confidence/Doubt Scoring Agent evaluates reliability of found project information
12. Knowledge Graph Traversal Agent follows connections within project knowledge graph
13. Novel Connection Agent identifies potential new relationships between project concepts
14. Project Knowledge Gap Agent identifies missing information needed for project goals
15. Autonomous Learning Agent initiates micro-searches to fill critical project knowledge gaps
16. Project-Focused Synthesis Agent generates new connections based on project patterns
17. Response Assembly Agent collects high-confidence information from project memory
18. Confidence Filtering Agent prioritizes information by confidence/doubt scores
19. Project Alignment Agent ensures response meets specific project objectives
20. Response Structure Agent organizes information into project-appropriate structure
21. Response Generation Agent creates natural language response with project context
22. Confidence Marking Agent adds confidence indicators to response elements
23. Project Visualization Agent updates project knowledge graph to show activated paths
24. Response Delivery Agent presents final answer to user within project interface
25. Memory Reinforcement Agent strengthens project-specific connections for successful answers
26. Project Progress Agent tracks how response advances project goals
27. Self-Improvement Agent updates project-specific procedures based on query success
28. Episodic Memory Agent records interaction in project history
29. Project Milestone Agent associates response with project timeline and deliverables
30. Project Recommendation Agent suggests next steps based on query and response
31. Value System Agent confirms response adheres to project requirements and constraints