

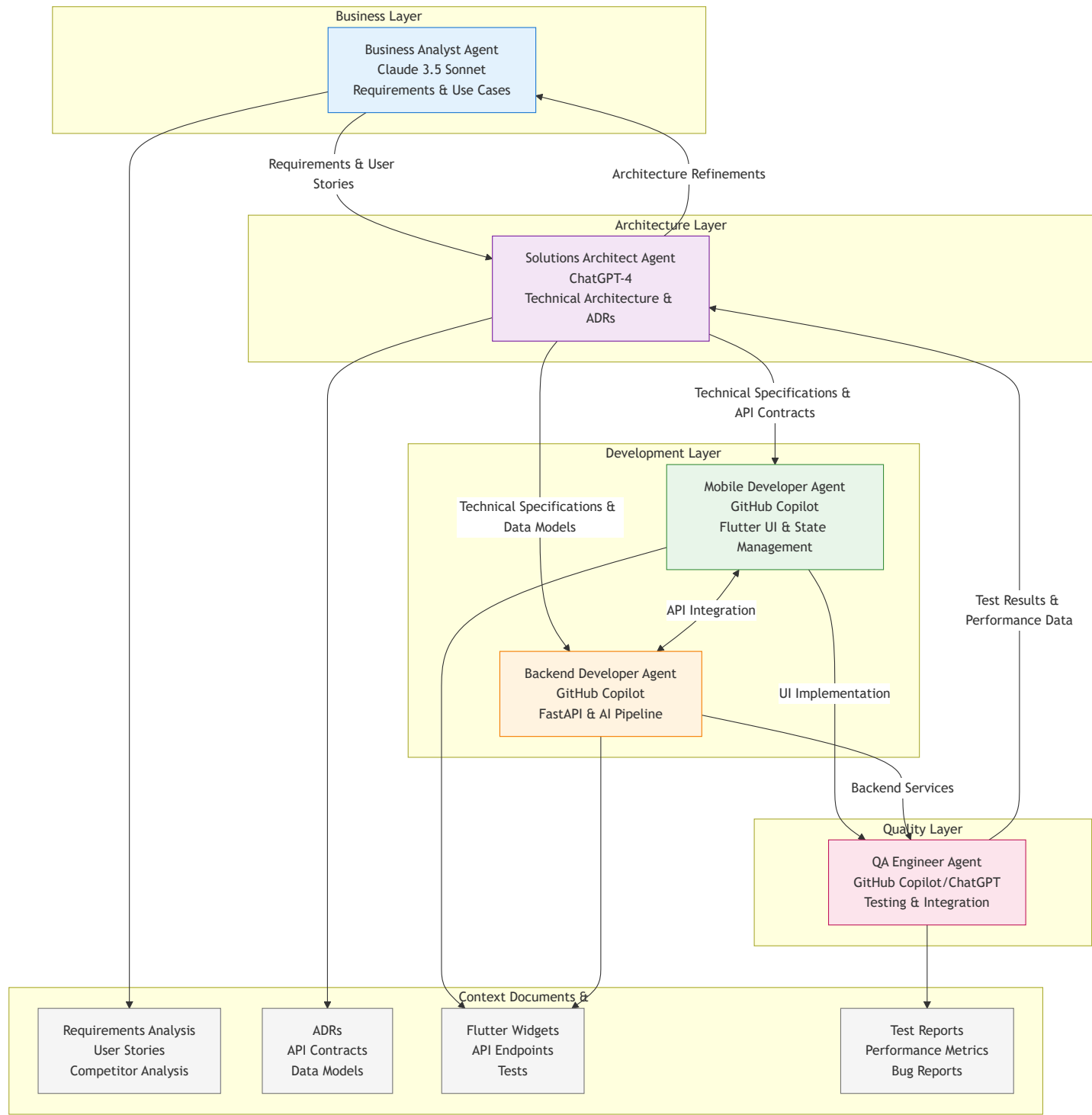
Updated Agent Coordination Diagram

JobWise Multi-Agent Development System

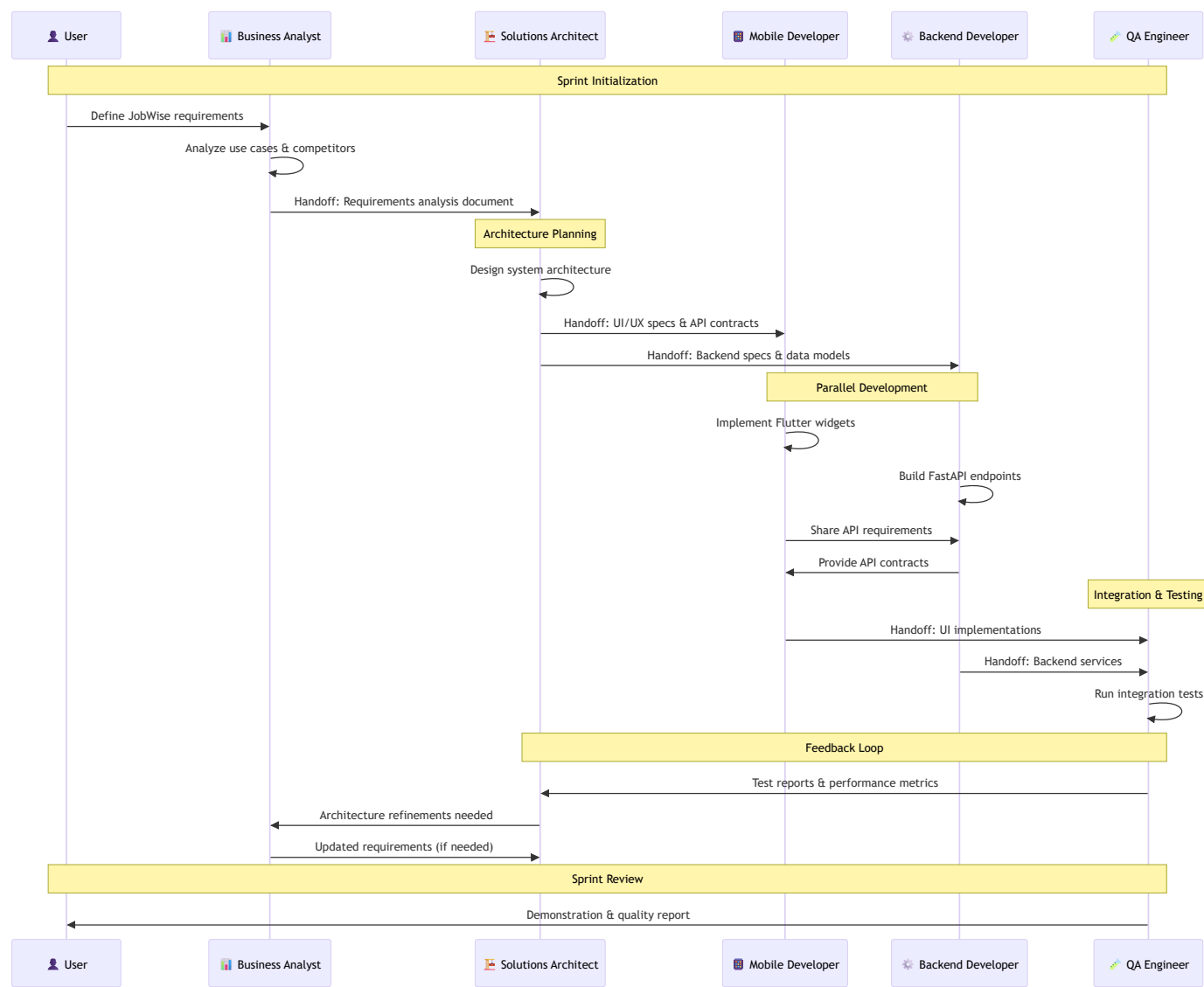
Updated: October 13, 2025

Sprint 1 Implementation: 5 Specialized AI Agents with Industry Roles

Agent Coordination Flow Diagram



Agent Interaction Sequence



Context Handoff Protocols

1. Business Analyst → Solutions Architect

Artifacts Passed:

- Requirements Analysis Document (docs/requirements-analysis.md)
- User Stories Collection (docs/user-stories.md)
- Functional Requirements Specification (docs/functional-requirements.md)

Handoff Protocol:

BA → SA Handoff Checklist

- [] Requirements validated against project constraints
- [] User personas and journey maps completed
- [] Business rules documented
- [] Acceptance criteria defined for each feature
- [] Technical feasibility considerations noted

2. Solutions Architect → Development Agents

Artifacts Passed:

- Architecture Decision Records (docs/adrs/)
- API Specifications (docs/api-contracts/)
- Data Models & Database Schemas (docs/data-models/)
- Technical Specifications (docs/technical-specs/)

Handoff Protocol:

SA → Dev Agents Handoff Checklist

- [] ADR published with technical approach
- [] API contracts defined with request/response examples
- [] Data models specified with validation rules
- [] Performance targets established
- [] Error handling strategies documented

3. Development Agents → QA Engineer

Artifacts Passed:

- Flutter Implementation (mobile_app/lib/)
- Backend Services (backend/)
- API Documentation (docs/backend-services.md)
- Implementation Summaries

Handoff Protocol:

Dev → QA Handoff Checklist

- [] Feature implementation completed
- [] Unit tests written and passing
- [] API integration verified
- [] Code reviewed and documented
- [] Performance characteristics measured

4. QA Engineer → Solutions Architect (Feedback Loop)

Artifacts Passed:

- Test Reports (docs/test-reports/)
- Performance Metrics (docs/performance-reports/)
- Bug Reports (docs/bug-reports/)
- Quality Metrics (docs/quality-metrics.md)

Handoff Protocol:

QA → SA Feedback Checklist

- [] Test coverage metrics provided
- [] Performance vs. targets analyzed
- [] Integration issues documented
- [] Optimization recommendations listed
- [] Next sprint priorities suggested

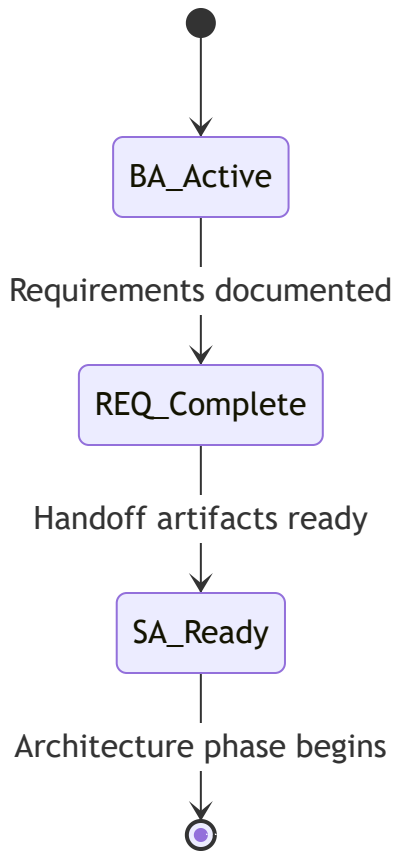
Decision Matrix: When to Consult Which Agent

Scenario	Primary Agent	Secondary Agent	Escalation
New feature request	Business Analyst	Solutions Architect	User feedback
Technical architecture decision	Solutions Architect	QA Engineer	Architecture review
UI/UX implementation	Mobile Developer	Business Analyst	Design review

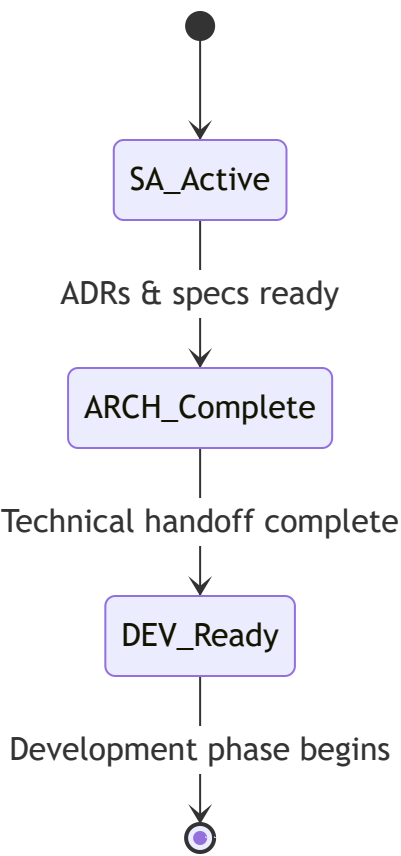
Scenario	Primary Agent	Secondary Agent	Escalation
API design & implementation	Backend Developer	Solutions Architect	API review
Performance optimization	QA Engineer	Solutions Architect	Technical review
Integration issues	QA Engineer	Both Dev Agents	Technical escalation
Requirements clarification	Business Analyst	Solutions Architect	Stakeholder review
Testing strategy	QA Engineer	Solutions Architect	Quality review

Coordination Workflow States

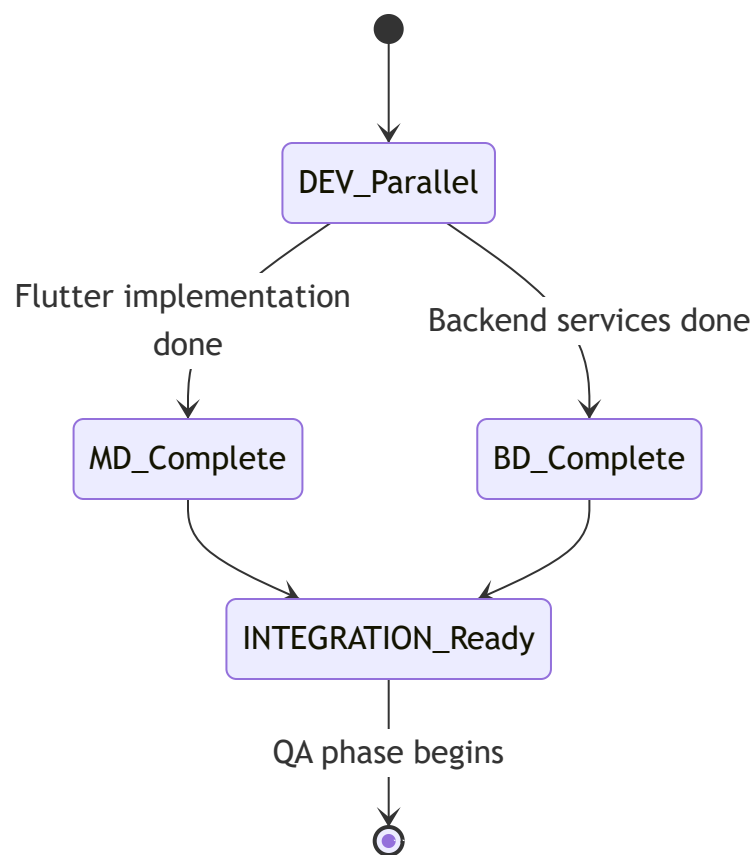
State 1: Requirements Phase



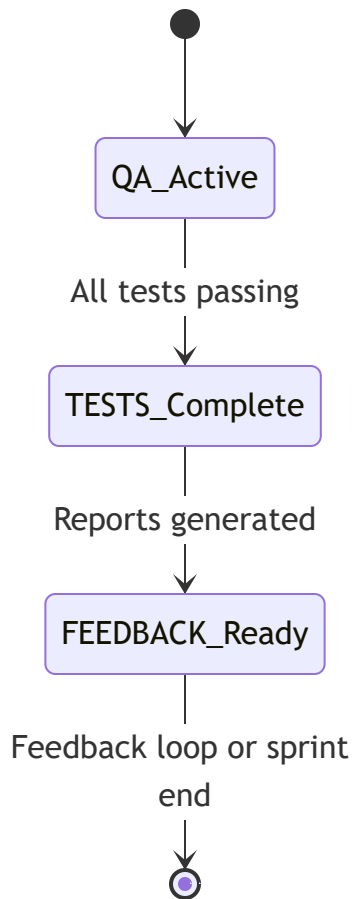
State 2: Architecture Phase



State 3: Development Phase



State 4: Testing & Integration Phase



Agent Communication Channels

Primary Communication: Context Documents

- **Requirements:** docs/requirements-analysis.md
- **Architecture:** docs/adrs/ directory
- **Implementation:** Code repositories with documentation
- **Testing:** docs/test-reports/ directory

Coordination Log: docs/ai-coordination-log.md

Interaction Log Entry Template

****Date****: [timestamp]
****Agent****: [agent name]
****Task****: [specific task performed]
****Input Context****: [documents/artifacts used]
****Output****: [artifacts generated]
****Next Agent****: [who receives the handoff]
****Status****: [completed/blocked/in-progress]

Escalation Protocol

1. **Technical Conflicts**: Solutions Architect makes final decision
2. **Requirements Conflicts**: Business Analyst consults user/stakeholders
3. **Quality Issues**: QA Engineer has veto power on releases
4. **Integration Failures**: All agents coordinate for resolution
5. **Timeline Issues**: Solutions Architect adjusts scope with Business Analyst

Success Metrics for Agent Coordination

Handoff Quality Metrics

- **Requirements Clarity**: % of dev tasks completed without clarification requests
- **Architecture Completeness**: % of implementations matching ADR specifications
- **Integration Success**: % of features passing QA on first attempt
- **Feedback Loop Efficiency**: Time from QA report to architecture adjustments

Communication Effectiveness

- **Context Preservation**: Consistency of artifacts across agent handoffs
- **Decision Traceability**: Ability to trace decisions back to requirements
- **Knowledge Transfer**: Quality of implementation summaries and documentation

Overall Coordination Success

- **Sprint Goal Achievement**: Features delivered matching acceptance criteria

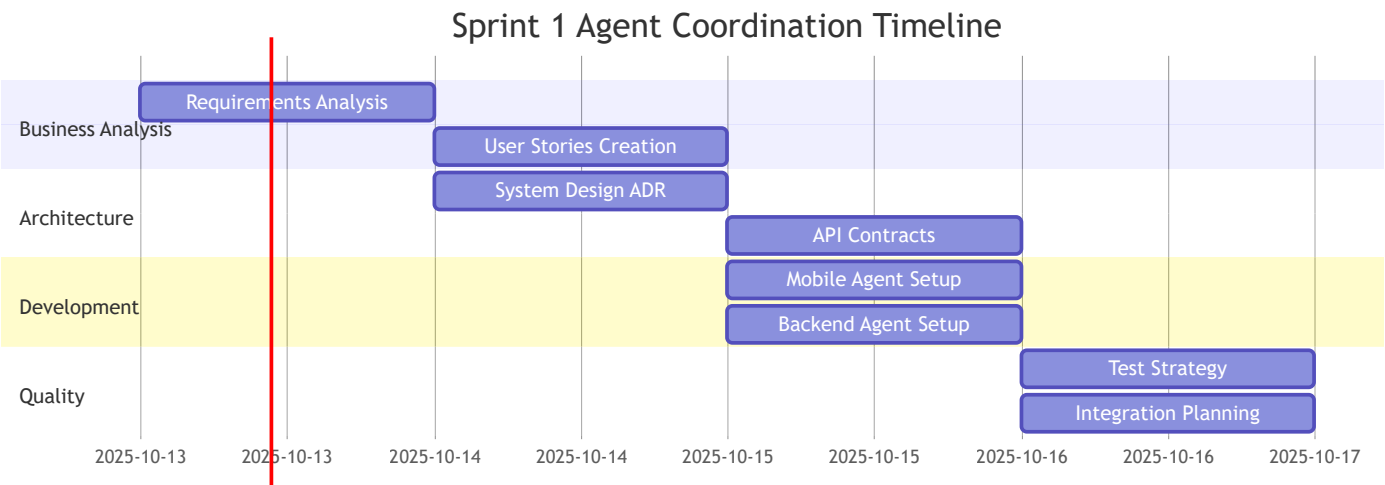
- **Technical Debt:** Minimal rework needed between sprints
- **Quality Maintenance:** Consistent test coverage and performance targets
- **Agent Utilization:** Balanced workload across all agents

Implementation Timeline for Sprint 1

Week 9 Daily Agent Coordination

- **Monday:** Business Analyst → Requirements analysis
- **Tuesday:** Solutions Architect → System architecture ADR
- **Wednesday:** Mobile + Backend Developers → Project structure setup
- **Thursday:** QA Engineer → Test strategy documentation
- **Friday:** All Agents → Coordination workflow refinement

Context Handoff Schedule



This updated coordination diagram reflects the realistic Sprint 1 scope focusing on planning, documentation, and agent infrastructure setup rather than feature implementation.