# Sprint 1: Chrome Extension MVP - Complete Task Breakdown

#### SPRINT OVERVIEW

- Sprint Duration: Week 1 (7 days)
- Sprint Goal: Capture entire chat context, generate summaries, show popup UI
- Total Story Points: 68 points
- **Team Capacity**: 60-70 points (recommended)

## **USER STORY 1: Full Chat Conversation Capture**

As a user, I want the extension to capture the full chat conversation, not just last prompt

#### Acceptance Criteria

- All user and Al messages captured in chronological order
- Handles lazy loading/infinite scrolling scenarios
- Data stored locally in structured JSON format
- Works across ChatGPT, Claude, and Gemini platforms
- Preserves message formatting (code blocks, lists, etc.)

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Dependencies
EXT- 001- T001	Setup Chrome Extension Project	Create manifest.json v3, folder structure, package.json, build config	3	Critical	Development	Backend Dev	-
EXT- 001- T002	Configure Extension Permissions	Add activeTab, storage, scripting, host permissions for chat sites	1	Critical	Development	Backend Dev	EXT-001-T001
EXT- 001- T003	Research ChatGPT DOM Structure	Analyze chat container selectors, message elements, pagination	2	Critical	Research	Frontend Dev	-
001- T004	Research Claude DOM Structure	Analyze chat container selectors, message elements,	2	Critical	Research	Frontend Dev	-

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Dependencies
		dynamic					
		loading					
		Analyze chat					
		container					
EXT-	Research	selectors,				Frontend	
001-	Gemini DOM	message	2	Critical	Research	Dev	-
T005	Structure	elements,				DCV	
		scroll					
		behavior					
EXT- 001- T006	Create Platform Detection System	URL pattern matching, platform- specific configuration loader	2	High	Development	Backend Dev	EXT-001-T001
EXT- 001- T007	Build DOM Selector Configuration	Platform- specific selectors with fallback strategies	2	High	Development	Frontend Dev	EXT-001-T003- T005
EXT-	Implement	Inject scripts	3	High	Development	Backend	EXT-001-T006-
001-	Content	based on				Dev	Т007
T008	Script Injector	detected platform,					
		piddoriii,					

Task	Task	Detailed	Story	Priority	Туре	Assignee	Dependencies
ID	Summary	Description	Points				
		handle CSP					
		issues					
		Extract text,					
	Create	detect					
EXT-	Message	sender,				Frontend	
001-	Extraction	preserve	5	Critical	Development	Dev	EXT-001-T008
Т009	Engine	formatting,				Dev	
	Liigiiic	handle					
		multimedia					
		Detect					
EXT-	Handle Lazy	infinite scroll,				Frontend	
001-	Loading	trigger	3	High	Development	Dev	EXT-001-T009
T010	Detection	loading, wait				Dev	
		for content					
		Reconstruct					
EXT-	Build	chronological				Doolsond	
001-	Conversation	order, handle	3	High	Development	Backend	EXT-001-T009
T011	Thread Parser	conversation				Dev	
		branches					
EXT-	Implement	Clean HTML,	2	Medium	Development	Backend	EXT-001-T011
001-	Data	remove				Dev	
T012	Sanitization	tracking					
		pixels,					
		validate					

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Dependencies
		message					
		structure					
EXT- 001- T013	Create Local Storage System	Store conversations in Chrome storage, implement	2	High	Development	Backend Dev	EXT-001-T012
		data compression					
EXT- 001- T014	Add Incremental Capture Logic	Detect new messages, avoid re- processing, handle page refreshes	3	High	Development	Backend Dev	EXT-001-T013
EXT- 001- T015	Handle Edge Cases - Empty Conversations	Gracefully handle no messages, loading states, network errors	1	Medium	Development	Frontend Dev	EXT-001-T009
EXT- 001- T016	Handle Edge Cases - Very	Memory management, chunked	2	Medium	Development	Backend Dev	EXT-001-T011

Task ID	Task Summary Long Conversations	Detailed Description processing, progress indicators	Story Points	Priority	Туре	Assignee	Dependencies
EXT- 001- T017	Handle Edge Cases - Special Characters	Unicode support, emoji handling, code block preservation	1	Medium	Development	Frontend Dev	EXT-001-T012
EXT- 001- T018	Test Cross- Platform Compatibility	Test all platforms, different conversation types, error scenarios	3	High	Testing	QA Engineer	EXT-001-T014

**Story 1 Subtotal: 42 Story Points** 

# **III USER STORY 2:** Chat Summarization

As a user, I want the chat to be summarized for efficient storage and usage

### **Solution** Acceptance Criteria

- Summary length limited (max 500 tokens for conversations <10k tokens)
- Summary includes main topics, key decisions, and action items

- Summary stored alongside original conversation
- API rate limiting and error handling implemented
- Configurable summarization depth/style

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Dependencie
EXT- 002- T001	Setup OpenAl API Integration	Configure API client, environment variables, rate limiting	2	Critical	Development	Backend Dev	-
EXT- 002- T002	Design Summarization Prompts	Create prompts for different conversation lengths and types	2	High	Development	AI Engineer	-
EXT- 002- T003	Implement Token Counting System	Count tokens before API calls, implement chunking strategy	2	High	Development	Backend Dev	EXT-002-T00
EXT- 002- T004	Build Conversation Chunking Logic	Split long conversations, maintain context between chunks	3	High	Development	Backend Dev	EXT-002-T00
EXT- 002-	Create Summarization	Main service orchestrating	3	Critical	Development	Backend Dev	EXT-002- T002-T004

Task	Task	Detailed	Story	Priority	Turno	Assignee	Donondonoid
ID	Summary	Description	Points	Priority	Туре	Assignee	Dependencie
T005	Service	chunking, API					
		calls, merging					
EXT- 002- T006	Implement Summary Quality Validation	Check summary completeness, topic coverage, action item extraction	2	Medium	Development	AI Engineer	EXT-002-T00
EXT- 002- T007	Add API Error Handling	Handle rate limits, API outages, invalid responses, retries	2	High	Development	Backend Dev	EXT-002-T00
EXT- 002- T008	Create Summary Caching System	Cache summaries, invalidation logic, storage optimization	2	Medium	Development	Backend Dev	EXT-002-T00
EXT- 002- T009	Handle Edge Cases - API Failures	Graceful degradation, offline mode, user notifications	2	Medium	Development	Backend Dev	EXT-002-T00

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Dependencie
EXT- 002- T010	Handle Edge Cases - Large Conversations	Memory management, streaming responses, progress tracking	2	Medium	Development	Backend Dev	EXT-002-T00
EXT- 002- T011	Test Summarization Quality	Test with various conversation types, validate output quality	2	High	Testing	AI Engineer	EXT-002-T00

**Story 2 Subtotal: 24 Story Points** 

# **III USER STORY 3:** Popup UI with Status Display

As a user, I want a popup UI to display capture and summarization status

#### **Solution Acceptance Criteria**

- Popup shows clear status states: "Capturing...", "Summarizing...", "Done", "Error"
- Real-time progress indicators for long operations
- Error messages are user-friendly and actionable
- Manual trigger button for capture process
- Settings panel for configuration

Task	Task	Detailed	Story	Priority	Туре	Assignee	Dependen
ID	Summary	Description	Points	Priority	туре	Assignee	Dependen
EXT- 003- T001	Design Popup UI Mockups	Create wireframes, user flow, responsive design specs	1	High	Design	UI/UX Designer	-
EXT- 003- T002	Create Popup HTML Structure	Semantic HTML, accessibility attributes, component structure	1	High	Development	Frontend Dev	EXT-003-T(
EXT- 003- T003	Implement Popup CSS Styling	Modern design, animations, dark/light theme, responsive	2	High	Development	Frontend Dev	EXT-003-T(
EXT- 003- T004	Build Status Management System	State machine for different status phases, transition logic	2	Critical	Development	Frontend Dev	EXT-003-T(
EXT- 003- T005	Add Progress Indicators	Progress bars, spinners, step indicators for multi-phase operations	1	Medium	Development	Frontend Dev	EXT-003-T0

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Dependen
EXT- 003- T006	Implement Error Display System	User-friendly error messages, retry buttons, help links	1	High	Development	Frontend Dev	EXT-003-T0
EXT- 003- T007	Create Manual Trigger Controls	"Capture Now" button, settings toggle, refresh functionality	1	Medium	Development	Frontend Dev	EXT-003-T0
EXT- 003- T008	Add Settings Configuration Panel	API key input, summarization options, platform toggles	2	Medium	Development	Frontend Dev	EXT-003-T0
EXT- 003- T009	Handle Edge Cases - No Active Chat	Detect when no supported chat is open, show helpful message	1	Medium	Development	Frontend Dev	EXT-003-T0
EXT- 003- T010	Handle Edge Cases - Multiple Tabs	Handle multiple chat tabs, tab switching, state synchronization	1	Medium	Development	Backend Dev	EXT-003-T0
EXT- 003-	Test UI Responsiveness	Test popup in different screen	1	Medium	Testing	Frontend Dev	EXT-003-T

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Dependen
T011		sizes, Chrome versions					

**Story 3 Subtotal: 14 Story Points** 

# RESEARCH/SPIKE TASKS

Task ID	Task	Detailed	Story	Priority	Туре	Assignee	Time
Idskib	Summary	Description	Points	Priority	Туре	Assignee	Вох
EXT- SPIKE- 001	DOM Structure Analysis Spike	Deep dive into chat platform DOM changes, update frequency	3	Critical	Research	Frontend Dev	4 hours
EXT- SPIKE- 002	LLM API Performance Benchmark	Test API response times, token limits, cost analysis	2	High	Research	AI Engineer	3 hours
EXT- SPIKE- 003	Chrome Extension Security Audit	CSP policies, injection methods, data storage security	2	High	Research	Security Engineer	3 hours
EXT- SPIKE- 004	Alternative LLM Provider Research	Explore Claude  API, local models, fallback strategies	1	Low	Research	AI Engineer	2 hours

**Research Tasks Subtotal: 8 Story Points** 

# **⊘** INTEGRATION & SYSTEM TASKS

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Deper
EXT- SYS- 001	Setup Background Script Architecture	Service worker, message passing, event handling	3	Critical	Development	Backend Dev	EXT-00
EXT- SYS- 002	Implement Cross- Component Communication	Content script ↔ background ↔ popup messaging	2	Critical	Development	Backend Dev	EXT-S`
SYS-	Create Data Persistence Layer	Chrome storage API, data encryption, backup/restore	2	High	Development	Backend Dev	EXT-S`
EXT- SYS- 004	Build Process Orchestration Engine	Coordinate capture  → summarization →  storage workflow	3	Critical	Development	Backend Dev	All use
EXT- SYS- 005	Add Performance Monitoring	Memory usage tracking, execution time logging, bottleneck detection	1	Medium	Development	Backend Dev	EXT-S
EXT- SYS- 006	Implement Error Recovery System	Automatic retries, partial success handling, state cleanup	2	High	Development	Backend Dev	EXT-S
EXT- SYS- 007	Create Development Build System	Webpack/Vite, hot reload, TypeScript, testing framework	2	High	DevOps	DevOps Engineer	EXT-00

Task ID	Task Summary	Detailed Description	Story Points	Priority	Туре	Assignee	Deper
EXT-	Setup End-to- End Testing	Playwright/Puppeteer for Chrome extension	3	Medium	Testing	QA	EXT-S
008	Framework	testing	3	Mediaiii	resung	Engineer	LXI-3

**System Tasks Subtotal: 18 Story Points** 

# TO DAILY SPRINT BREAKDOWN

Day	Focus Area	Primary Tasks	Story Points	Key Deliverable
Day	Foundation &	EXT-001-T001, T002, T006 + EXT-	12	Extension structure +
1	Research	SPIKE-001, EXT-SYS-001, T007	12	DOM research
Day	Platform Detection	EXT-001-T003-T005, T007, T008 +	44	Platform detection
2	& DOM	EXT-SPIKE-002	11	working
Day	Cara Cantura Lagia	EXT-001-T009, T010, T011 + EXT-	13	Message extraction
3	Core Capture Logic	002-T001, T002	13	functional
Day	Summarization	EXT-002-T003-T007 + EXT-SYS-	12	LLM integration
4	Service	002, T003	12	complete
Day 5	UI Development	EXT-003-T001-T006 + EXT-001- T013, T014	10	Popup UI with status display
Day	Integration & Edge	EXT-SYS-004, T006 + Edge case	12	Full workflow
6	Cases	tasks + EXT-002-T008-T010	12	integrated
Day 7	Testing & Polish	All testing tasks + EXT-SYS-005, T008 + Bug fixes	8	MVP ready for demo

**Total Sprint Points: 78 points** (Note: Higher than typical due to research tasks)

#### CRITICAL RISKS & MITIGATION

Risk	Impact	Probability	Mitigation Strategy	Owner	
Chat platform DOM	Lliede	Madium	Build robust selectors with	Frontend	
changes break scraping	High Medium		fallbacks, monitor platform updates	Dev	
LLM API costs exceed	Madium	Law	Implement caching, optimize	Backend	
budget	Medium Low		prompts, set usage limits	Dev	
Chrome extension review	⊔iah	Low	Follow security best practices,	DovOps	
rejection	High Low		prepare detailed documentation	DevOps	
Performance issues with			Implement chunking, lazy loading,	Backend	
large conversations	Medium	Medium	memory management	Dev	
Cross-platform	Madium		Extensive testing, platform-specific	QA	
compatibility issues	Medium	High	handling	Engineer	

#### **©** DEFINITION OF DONE

#### **Task Level DoD**

- Code written and peer reviewed
- ☐ Unit tests passing (>80% coverage)
- Documentation updated
- No critical security vulnerabilities
- Performance benchmarks met

#### **Story Level DoD**

- All acceptance criteria met
- Integration tests passing

Manual testing completed
Edge cases handled
User experience validated

# **Sprint Level DoD**

Extension captures full conversations from ChatGPT and Claude
Summaries generated with acceptable quality
Popup UI provides clear feedback
No critical bugs or crashes
Performance acceptable for typical use cases
Ready for alpha testing

# II SUCCESS METRICS

Metric	Target	Measurement Method	
Conversation Capture Accuracy	95% of messages captured	Automated comparison tests	
Summary Quality Score	4.0/5.0 average rating	Manual evaluation rubric	
UI Response Time	<2 seconds for status updates	Performance monitoring	
Error Rate	<5% of operations fail	Error logging and analytics	
Memory Usage	<50MB peak usage	Chrome DevTools profiling	