PROJECT CHARTER

Betty Boulder

October 1, 2025

Revision History

Change Description	Approved by	Date of Revision
Initial Draft	Bert Beckmann	9/30/25

Bert Beckmann

Approval:

Accountable Executive/Project Sponsor

Project Name: Betty Boulder

High-level Objective Statement: The Betty Boulder project will design and implement an AI-powered real estate concierge/assistant for Boulder. Betty Boulder will be a voice-enabled assistant that answers phone calls, has a web presence, responds to chats, and runs in a Flutter mobile app. The system will use a private, localized Retrieval-Augmented Generation (RAG) LLM tuned on Boulder-specific information such as neighborhoods, schools, zoning, trails, transit, and MLS listings. Cached responses for improvement on efficiency, responses can be easily accessed instead of having to be calculated again.

Background Information: The real estate industry in Boulder requires a localized, intelligent, and user-friendly platform to provide quick, accurate, and compliant information to buyers, sellers, and agents. Existing solutions lack integration across phone, web, and mobile, and often fail to provide localized insights. Betty Boulder addresses this gap by combining modern AI/LLM technology, MLS compliance, and multi-channel accessibility.

Successful Outcome Statement: A functional, voice-enabled concierge service will be delivered across three main platforms (phone, web, mobile). The assistant will demonstrate accurate, localized real estate knowledge, support live user testing, and deliver a working demo that agents, buyers, and sellers can interact with.

Strategic Alignment: The project will drive innovation through AI solutions to improve customer experience. It utilizes AI to deliver accurate, user-friendly, and compliant real estate information in a trustworthy manner. It should enhance engagement, increase operational efficiency, and support market growth.

Key Initiative Alignment: *example…Compliance and Logistics*

Primary Project Contacts			
Role	Name/Title	Phone	Email
Project Sponsor	Bert Beckmann	720-354-2372	bertbeck@gmail.com
Project Manager	Gauri Karkhile		gaurikarkhile1@gmail.com

Project Scope & Stakeholders

In-Scope Statement:

- Build a localized AI assistant (Betty Boulder) with AI-based voice, chat, and mobile interfaces.
- Deliverables include: custom localized RAG/LLM, phone call answering system, Flutter web chatbot/widget, Flutter mobile app, MLS integration, and compliance framework.
- Impacts real estate professionals, buyers, renters, and sellers located in Boulder.

Out-Of-Scope Statement:

- Expansion beyond Boulder-specific local knowledge and real estate knowledge.
- Long-term customer support beyond the initial demo.

Assumptions:

- MLS data access will be available through appropriate agreements or channels.
- Voice and web technologies (Twilio, Kiro, Darvin, Flutter, etc.) will be sufficient for the demo.
- Students will share responsibilities across roles.

Project Stakeholders:

- Bert Beckmann (Beckmann Consulting)
- Alan Paradise (Capstone Professor)

Impacted Measures & Improvement Targets

Impacted Performance Measurement Families:

Customer engagement, accuracy of AI answers, and latency of responses.

Success Measures:

Measurement Family	Targeted Improvement	Target Results Date
Accuracy		End of semester demo
Voice Latency		End of semester demo
Task Completion		End of semester demo

Schedule & Budget

Schedule Time Box:

Project Phase:	Deliverables/Milestone:	Baseline Time Box Dates	
		Start	**Finish**
Initiate	● Finalize Business Case ● Receive Business Case Approval ● Identify Project Team Members ● Initiate Project	8/21/25	9/8/25
		Start	**Finish**
Plan	● Complete Project Charter ● Conduct Project Kickoff ● Develop Detailed Requirements ● Develop Detailed Test Plan ● Develop Detailed Training Plan ● Complete Detailed Risk Analysis ● Develop Work (Schedule)	9/22/25	10/5/25
		Start	**Finish**
Execute	● Finalize detailed requirements ● Complete Test Plan ● Complete Training Plan ● Finalize Implementation Plan ● Complete Testing ● Complete Training ● Complete Implementation	TBD	TBD
		Start	**Finish**
Close	● Validate Measures of Success ● Ensure operational controls are in place ● Obtain business sign-off on deliverables ● Receive approval to close the project	TBD	TBD

Project Budget: N/A

- Mac Studio will be supplied for the LLM
- Slack is supplied for the team
- Cloud Servers
- AI Agent tools/accounts as needed

Project Sponsor **(Bert Beckmann)**	● Has ultimate authority ● Approves changes to the scope and provides whatever additional funds those changes require ● Approves budget-related deliverables ● Controls the business aspects of the project ● Assists in developing the project charter and project plans ● Executes formal reviews and management reviews
Backend Team Lead (Manav Shah)	● Lead backend architecture and development for scalable, secure systems. ● Manage/implement data and API integration for AI and MLS services. ● Coordinate team and cross-functional collaboration for reliable performance.
Testing/Documentation Expert + Marketing Assistant (Sharon Xiang)	● Develop and execute test plans to ensure the functionality, performance, and reliability of applications across various platforms. ● Document system architecture, APIs, and tools for team reference. ● Support development where needed and provide actionable insights. ● Develop a marketing plan and assist with the advertising of the site and app.
Backend Developer/Mobile Expert (Charlotte Hauke)	● Lead the architecture and implementation of the Flutter mobile app for iOS and Android. ● Integrate AI assistant features (chat, voice, and MLS data) into the mobile experience using backend APIs. ● Document mobile architecture, dependencies, and integration workflows.
Backend Developer/Web Expert (Calvin Schaller)	● Lead development for mobile versions of Betty Boulder ● Responsible for implementing and managing cross-platform capabilities while maintaining functionality ● Provide support for developing and maintaining backend services to support the AI responses ● Implement responsive and intuitive design philosophies for mobile platforms.
Backend Developer (Nathan Reed)	● Develop and maintain backend services to support AI, web, and mobile platforms. ● Implement APIs and data management for MLS data and cached AI responses. ● Ensure performance, security, and reliability of backend systems.
Backend Developer (Sansh Goel)	● Develop and maintain backend services to support AI, web, and mobile platforms. ● Implement APIs and data management for MLS data and cached AI responses. ● Ensure performance, security, and reliability of backend systems.