RoomieSync

Midterm Presentation

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Overview

App Overview

- RoomieSync is an all-in-one mobile platform that transforms the chaos of shared living into seamless harmony.

- By consolidating expense tracking, chore management, maintenance documentation, and communication into one intelligent app, RoomieSync replaces 5-8 disconnected tools with a unified solution designed specifically for roommates.

Problem Statement

In today's fast-paced world, millions of college students and young professionals struggle to manage the complex financial, logistical, and interpersonal dynamics of shared living. Challenges such as unequal expense splitting, inconsistent chore distribution, and awkward confrontations create unnecessary conflicts that damage relationships and mental wellbeing. Without a comprehensive, user-friendly solution that addresses all aspects of roommate coordination, users feel frustrated, financially stressed, and unable to maintain harmony in their homes

Target Audience

In today's fast-paced world, millions of college students and young professionals struggle to manage the complex financial, logistical, and interpersonal dynamics of shared living. Challenges such as unequal expense splitting, inconsistent chore distribution, and awkward confrontations create unnecessary conflicts that damage relationships and mental wellbeing. Without a comprehensive, user-friendly solution that addresses all aspects of roommate coordination, users feel frustrated, financially stressed, and unable to maintain harmony in their homes

Product Objectives

1. Eliminate Financial Disputes : Reduce money-related roommate conflicts by **80%** through automated expense splitting, receipt scanning, and transparent payment tracking that removes the awkwardness from "who owes what."

2. Create Fair Household Accountability : Achieve **90% on-time completion** of household tasks through AI-powered fair chore rotation and objective contribution tracking that proves equity over arguments.

3. Prevent Conflicts Before They Escalate : Resolve **60% of potential conflicts early** using anonymous feedback tools, AI-powered pattern recognition, and documented agreements that address small issues before they become relationship-damaging disputes.

4. Protect Security Deposits : Enable **95% maintenance issue tracking** from report to resolution with photo documentation and landlord communication logs that help users recover an average of **$450 more** on security deposits.

5. Reduce Coordination Time by 75% : Save users **2.5 hours per week** through intelligent automation, smart reminders, and seamless integrations—freeing time for what actually matters: school, work, and life.

What Are Personas?

- User personas are fictional, research-based profiles that represent key user types who interact with a product. They help designers and developers understand users' needs, behaviors, goals, and challenges.

How User Personas Help?

- Make design decisions more user-centered

- Align teams on target audience and priorities

- Identify pain points and opportunities

- Guide UX writing, feature prioritization, and visual design

User Persona 1 :

Ashley
(Student)

Ashley

Graduate student

About

A 23-year-old graduate student pursuing a Master's Student Northeastern University. She's the natural leader in her apartment, often taking charge of organizing finances, chores, and schedules.

Personality Traits ● ● ● ●

- Proactive, organized, natural leader
- Values efficiency and clarity
- Direct communication style
- Can be perfectionist
- Prefers data-driven decisions

Education ● ● ● ●

Master's Degree in Information Systems
Northeastern University
(2024 - 2026)

Goals ● ● ● ● ● ● ●

- Complete master's degree with minimal stress
- Save money while paying off undergrad loans
- Maintain a clean, organized, drama-free home
- Preserve friendships while living together
- Build good financial habits for future

Pain Points ● ● ● ● ● ● ● ● ●

Feels burdened by being the "house mom"

Awkwardness reminding roommates about payments

Lack of follow-through from roommates

Time pressure balancing school, research, and chores
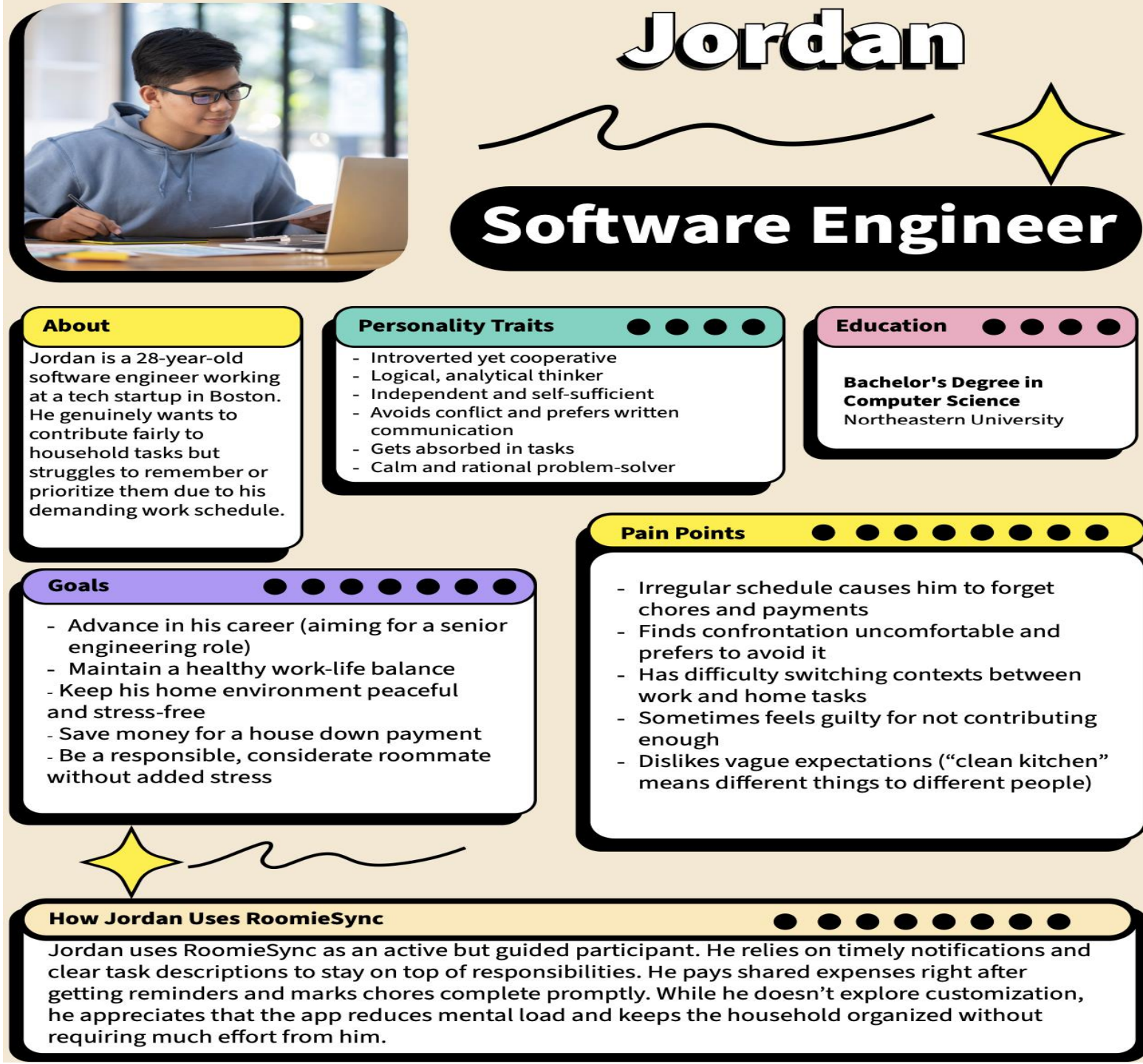
Fear of roommate tension or damaged friendships

How Ashley Uses RoomieSync ● ● ● ● ● ● ● ● ●

Ashley acts as the household admin — she sets up the app, configures expenses and chores, checks dashboards daily, and uses analytics to ensure fairness. She appreciates the automation and documentation that lighten her mental load.

User Persona 2 :

Jordan
(Working Professional)

Jordan

Software Engineer

About

Jordan is a 28-year-old software engineer working at a tech startup in Boston. He genuinely wants to contribute fairly to household tasks but struggles to remember or prioritize them due to his demanding work schedule.

Personality Traits ● ● ● ●

- Introverted yet cooperative
- Logical, analytical thinker
- Independent and self-sufficient
- Avoids conflict and prefers written communication
- Gets absorbed in tasks
- Calm and rational problem-solver

Education ● ● ● ●

Bachelor's Degree in Computer Science
Northeastern University

Goals ● ● ● ● ● ● ●

- Advance in his career (aiming for a senior engineering role)
- Maintain a healthy work-life balance
- Keep his home environment peaceful and stress-free
- Save money for a house down payment
- Be a responsible, considerate roommate without added stress

Pain Points ● ● ● ● ● ● ● ● ●

- Irregular schedule causes him to forget chores and payments
- Finds confrontation uncomfortable and prefers to avoid it
- Has difficulty switching contexts between work and home tasks
- Sometimes feels guilty for not contributing enough
- Dislikes vague expectations ("clean kitchen" means different things to different people)

How Jordan Uses RoomieSync ● ● ● ● ● ● ● ●

Jordan uses RoomieSync as an active but guided participant. He relies on timely notifications and clear task descriptions to stay on top of responsibilities. He pays shared expenses right after getting reminders and marks chores complete promptly. While he doesn't explore customization, he appreciates that the app reduces mental load and keeps the household organized without requiring much effort from him.

- **UX Research Methods:**

  - UX research methods help teams understand **how users think, feel, and behave** so that products meet real human needs. These methods guide decision-making throughout the design process — from concept to usability testing.

Common UX Research Methods:

- 🔶 **Competitive Analysis:** Study existing tools to identify market gaps and differentiation.

- 🧩 **Open/Closed Card Sorting:** Understand how users categorize and navigate information.

- 🎬 **Storyboarding:** Visualize user journeys and emotional states.

- 💭 **Empathy Mapping:** Capture users' thoughts, feelings, and behaviors.

- 🧠 **SWOT Analysis:** Evaluate product strengths, weaknesses, opportunities, and threats.

- 📽 **Affinity Mapping:** Organize insights from user data to identify recurring themes.

Purpose Of UX Research Methods:

- To ensure that every design decision is backed by *evidence*, *empathy*, and *strategic understanding*.

Research Method 1: Competitive Analysis

Reason for Choosing This Method

To identify what roommate management solutions already exist in the market and find gaps that RoomieSync can fill, while learning from competitors' successes and failures.

Overview of the Research Method

Systematically evaluated direct competitors (Splitwise, OurHome), indirect competitors (Venmo, Google Sheets), and analogous competitors (family management apps) by analyzing their features, pricing, user reviews, and UI/UX design through comparison matrices.

Needs Met & Benefits

Discovered that no comprehensive all-in-one roommate solution exists—users are frustrated juggling 5-8 fragmented apps, which validated our "unified platform" approach and informed our core positioning: "Replace 5 apps with 1."

Goals:

- Understand existing roommate and household management tools to identify market gaps.

Findings:

- Splitwise:
- OurHome:
- Venmo/Zelle:
- Google Sheets:

Insights:

- Roommates currently juggle 5–8 apps for shared living.
- No competitor integrates financial, chore, communication, and maintenance tools.

Outcome for RoomieSync:

- RoomiesSync position as **"The All-in-One Roommate Operating System"** with AI-driven conflict prevention and automation.

- Focus on *simplicity*, *clarity*, and *fairness* as design differentiators.

Research Method 2: Empathy Mapping

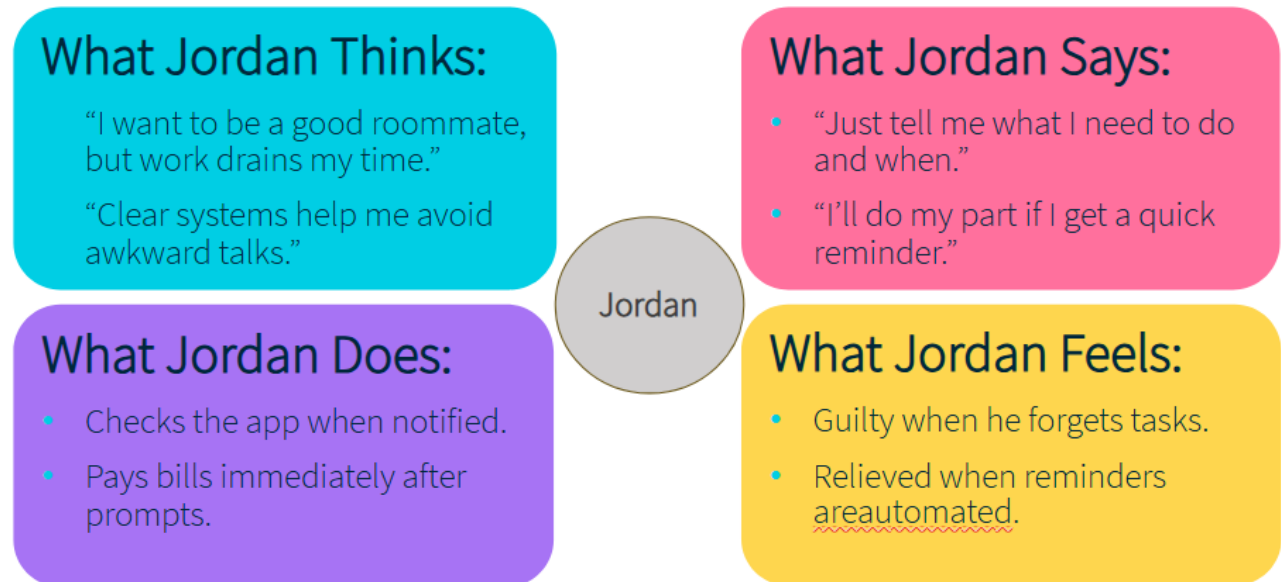**Reason for Choosing This Method**

To understand the deep emotional aspects of roommate conflicts beyond just logistics, uncovering what users think, feel, say, and do to design compassionate, non-judgmental solutions.

Overview of the Research Method

Created empathy maps with four quadrants (THINKS, FEELS, SAYS, DOES) plus PAINS and GAINS for each user persona, identifying gaps between what users verbally express versus their actual emotions and behaviors.

Needs Met & Benefits

Revealed that users aren't just annoyed about chores—they feel disrespected and anxious about confrontation, which led to designing neutral messaging ("Payment pending" not "Alex owes you") and an anonymous feedback feature for conflict-avoidant users.

What Jordan Thinks:
"I want to be a good roommate, but work drains my time."
"Clear systems help me avoid awkward talks."

What Jordan Says:
- "Just tell me what I need to do and when."
- "I'll do my part if I get a quick reminder."

Jordan

What Jordan Does:
- Checks the app when notified.
- Pays bills immediately after prompts.

What Jordan Feels:
- Guilty when he forgets tasks.
- Relieved when reminders areautomated.

Research Method 3: SWOT Analysis

Reason for Choosing This Method

To comprehensively assess RoomieSync's internal capabilities and external market conditions, enabling informed strategic decisions about features, pricing, launch strategy, and risk mitigation.

Overview of the Research Method

Analyzed four strategic dimensions—Strengths (comprehensive AI-powered platform), Weaknesses (new brand, requires household adoption), Opportunities (growing roommate market, remote work), and Threats (established competitors could expand)—to develop actionable strategies.

Needs Met & Benefits

Identified our core differentiator (only all-in-one roommate solution) and created a strategic launch plan: target college campuses initially through ambassador programs, build network effects competitors can't replicate, and leverage the perfect market timing of rising housing costs and remote work trends.

Strengths:

- Centralized roommate management system combining **bills, chores, and communication**.
- Promotes **transparency, fairness, and accountability** among roommates.
- Designed to **reduce conflict and emotional stress** in shared living situations.

Weakness:

- Requires all roommates to use the app for full functionality.
- Initial setup and data input may feel time-consuming.
- Adoption as a new app.

Opportunities:

- Growing number of **young professionals and students** in shared housing.
- Increasing demand for **mental-load-reducing and automation tools**.
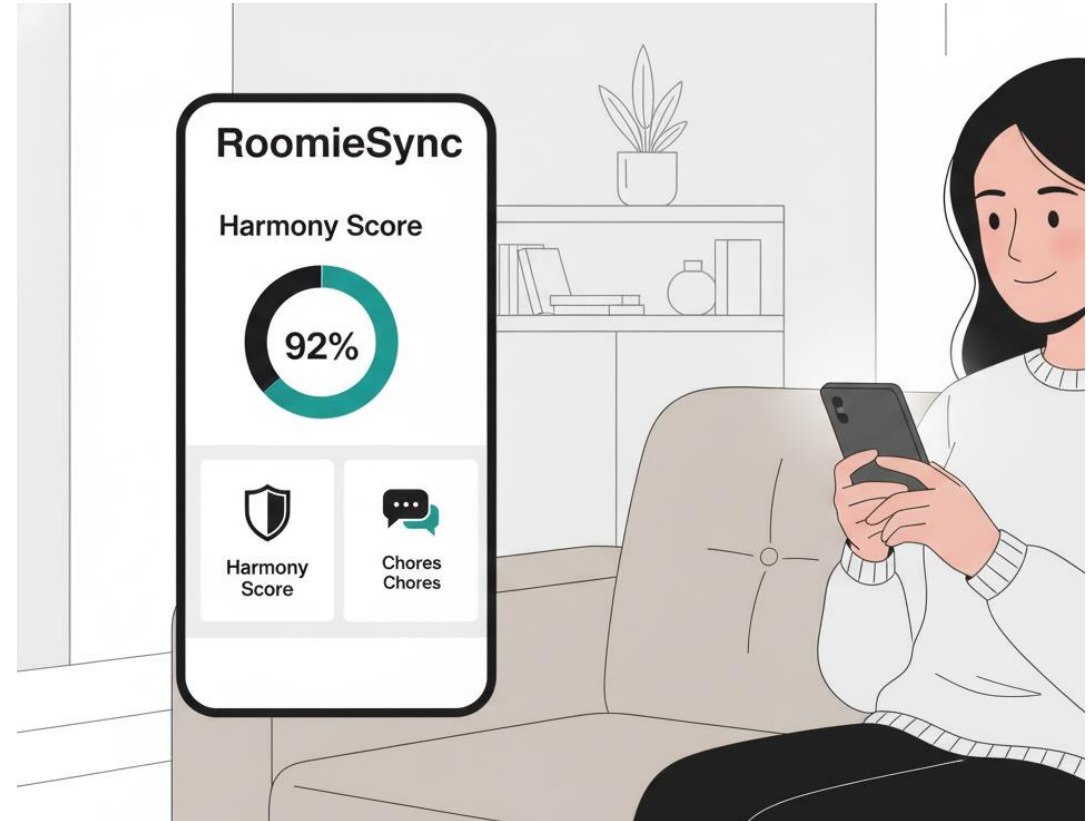- Expansion potential into **coliving, rental, and smart-home ecosystems**.

Threats:

- Established competitors like Splitwise or OurHome could integrate similar features.
- Privacy or data security concerns (sensitive financial data).

Conclusion

RoomieSync addresses a universal challenge affecting **young adults**: the difficulty of managing shared living arrangements. Through comprehensive user research—including competitive analysis, empathy mapping, and SWOT analysis—we've validated that roommates desperately need a unified platform that goes beyond fragmented tools.

What We've Demonstrated:

- A clear, widespread problem with measurable impact (68% money conflicts, chore disputes)

- A comprehensive solution addressing financial, practical, and emotional needs

- Strategic objectives with quantifiable success metrics

- Deep understanding of our target users and their pain points

AI Integration

AI solves the issue of *perceived unfairness* and *mental load* among roommates — people struggle to objectively track chores, expenses, or communication patterns. The system uses AI to turn household behavior into actionable, empathetic feedback

The UI/UX Problem AI Solves

😰 Without AI

- Conflicts become "he said, she said" arguments
- Manual tracking overwhelms users
- Reactive problem-solving (after damage is done)
- Users abandon the app due to complexity

✨ With AI

- Data-driven insights prevent conflicts
- Automation reduces user effort by 75%
- Proactive alerts before tensions escalate
- Personalized experience increases engagement

Core Insight: Humans are poor at objectively tracking contributions over time. AI removes emotion from accountability.

How AI enhances UI/UX

Predictive Conflict Detection

- AI monitors user data such as payment timeliness, chore completion, and communication frequency.
- When deviations appear, the UI surfaces a *neutral insight* card — not a blame message — to prompt discussion.
- *UX Value:* Prevents conflict before it escalates, maintains a calm tone and shared accountability .

Smart Supply Reordering

- Predicts when household essentials will run out.
- The UI proactively adds a "Restock" task to the relevant roommate's dashboard before supplies deplete.
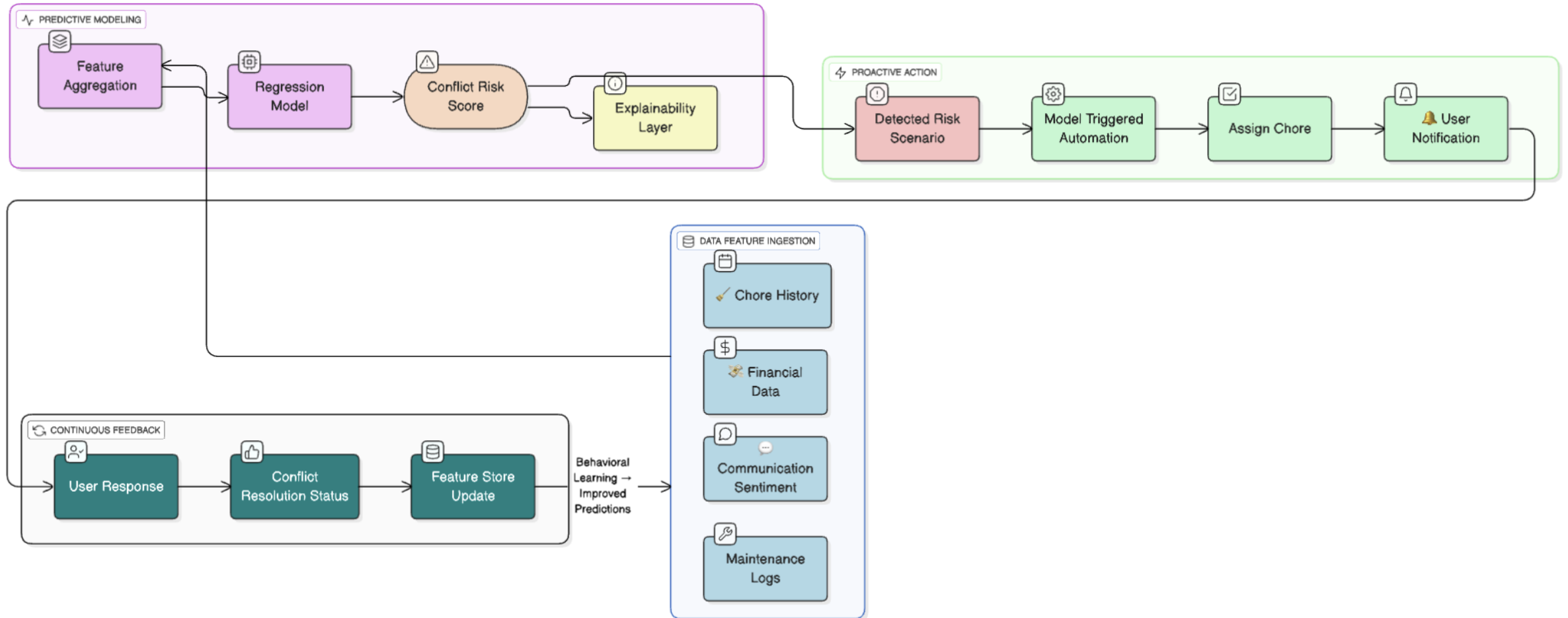- *UX Value:* Reduces household friction and ensures seamless coordination .

Personalized Communication Style

- NLP analyzes each user's responsiveness to tone and timing.
- Notifications adapt — "gentle nudge" for some, "direct reminder" for others.
- *UX Value:* Keeps engagement high and prevents notification fatigue

Fair Chore Rotation Algorithm

- Tracks each roommate's effort score and difficulty level of chores.
- The interface displays this visually through **color-coded balance charts** (green = fair, yellow = imbalance, red = needs attention).
- *UX Value:* Builds trust and reduces resentment through visible fairness and transparency .

Process Flow of RoomieSync

Why RoomieSync Will Succeed

1 Validated Problem

68% of roommates have money conflicts. 73% cite unequal chores. Research confirms real, widespread pain.

2 Differentiated Solution

First all-in-one platform. Empathetic AI-powered design. No competitor offers comprehensive roommate management.

3 Right Timing

Rising housing costs, remote work, mental health awareness. Market conditions favor our solution now.

4 User-Centric Design

Deep empathy mapping. Research-informed UX. Addresses both practical and emotional needs of users.

Bottom Line: RoomieSync isn't just about managing logistics — it's about preserving friendships and reducing stress through intelligent, empathetic design.

Thank you+ Q&A

"RoomieSync redefines shared living — where empathy meets interface."