

SlugMates

UCSC-Exclusive Roommate Matching Platform

Product Requirements Document

Version 1.0 | November 2025 | Author: Meha Manimaran

1. Problem / Opportunity

UCSC students face significant challenges finding compatible roommates, leading to poor living situations that negatively impact academic performance, mental health, and finances.

The Core Problems

- Fragmented search: Information scattered across 5+ platforms (Facebook, Places4Students, Discord, Craigslist)
- No compatibility matching: Students manually evaluate each potential roommate with no filtering
- Trust and safety concerns: No student verification leads to scam risk
- UCSC-specific needs ignored: National apps don't understand college affiliations or campus housing

"A bad roommate match affects academic performance, mental health, and finances. Students deserve better than hoping for the best."

2. Target Users & Use Cases

Primary: Housing-Seeking Student

Sarah, Sophomore: Living on campus, wants to move off-campus next year

Pain Points:

- Doesn't know anyone looking for roommates
- Nervous about living with a stranger
- Worried about compatibility (early sleeper, needs quiet)

Goals:

- Find 1-2 compatible roommates for a 3BR apartment
- Verify the person is actually a UCSC student
- Chat before committing

Secondary: Room-Filler

Marcus, Junior: Already has a lease, needs to fill one room

Pain Points:

- Posted in 3 Facebook groups, got 50 messages

- No way to filter for compatibility
- Some responses seem like scams

Goals:

- Find someone compatible by specific date
- Efficiently filter through candidates
- Verify student status

3. Current Landscape

No existing solution combines UCSC-exclusive verification, compatibility matching, and real-time communication.

Platform	Strengths	Weaknesses
Places4Students	UCSC official	No matching, clunky UX
Facebook Groups	High usage	Chaotic, no filtering, scams
Roomsurf	Good quiz	Not UCSC-specific
Bunky	Good UX	Not focused on UCSC

4. Proposed Solution

Elevator Pitch

SlugMates is a mobile app that helps UCSC students find compatible roommates through verified matching. Students complete a lifestyle quiz, browse matches sorted by compatibility, and chat with mutual matches—all within a trusted, UCSC-exclusive platform.

Core Value Propositions

1. Trust: @ucsc.edu email verification ensures every user is a real UCSC student
2. Compatibility: 15-question quiz with weighted algorithm calculates match scores
3. Simplicity: One app replaces 5+ scattered platforms

5. Goals / Measurable Outcomes

Metric	Launch Target	3-Month Target
Registered users	50	500
Quiz completion rate	80%	85%
Mutual match rate	15%	20%
Messages sent	100	2,000
7-day retention	40%	50%

Non-Goals for MVP

- Housing listings integration

- Group matching (2-3 roommates together)
- Expansion to other UC campuses

6. MVP / Functional Requirements

Requirements organized by user journey. P0 = required for launch, P1 = important, P2 = nice-to-have.

Journey 1: Onboarding & Profile

[P0] Must Have

- User can sign in with Google using @ucsc.edu email
- Non-UCSC emails rejected with clear error message
- User stays logged in for 7 days
- First-time user completes profile: name, photo, bio, college, year, housing status, budget
- User can edit profile from settings

[P1] Important

- Upload custom profile photo
- Specify optional move-in date

Journey 2: Compatibility Quiz

[P0] Must Have

- User completes 15-question lifestyle quiz
- Quiz shows progress bar, allows back navigation
- Cannot access matches until quiz complete
- Answers saved for matching algorithm

Journey 3: Discovery & Matching

[P0] Must Have

- See potential matches sorted by compatibility (highest first)
- Each card shows: photo, name, college, year, bio, compatibility %
- Like or Pass on each profile
- Mutual like creates a match with celebration UI
- Only show users with $\geq 50\%$ compatibility
- Exclude users already liked/passed/matched

[P1] Important

- Filter by college, year, budget overlap
- Expand card to see full profile + quiz summary

Journey 4: Matches & Chat

[P0] Must Have

- View list of all mutual matches
- Send and receive messages in real-time
- Message history persists
- Matches list shows last message preview

[P1] Important

- Online/offline status indicators
- Unread message indicators
- Push notifications for new messages

[P2] Nice to Have

- Typing indicators
- Read receipts
- Unmatch functionality

7. Appendix

A. Quiz Categories & Weights

Category	Weight	Questions
Sleep Schedule	20%	Bedtime, wake time, noise sensitivity
Cleanliness	20%	Cleaning frequency, dishes, organization
Social Habits	15%	Guests, parties, alone time
Study Habits	15%	Study location, silence needs
Lifestyle	15%	Smoking/vaping, alcohol
Communication	15%	Conflict handling, check-in frequency

B. Matching Algorithm

For each question, $\text{similarity} = 1 - (|\text{answer1} - \text{answer2}| / 3)$. Final score is weighted average across all categories, scaled to 0-100%.

C. Technical Stack

- Mobile: React Native with Expo
- Backend: Node.js, Express, Prisma ORM
- Database: PostgreSQL
- Real-time: Socket.io
- Auth: Google OAuth 2.0 + JWT

D. Open Questions

4. Should users be able to unmatched? (Recommendation: Yes)
5. How long to hide passed users? (Recommendation: Forever for MVP)
6. Show "who liked you" or anonymous? (Recommendation: Anonymous until match)

E. Wireframes

See separate wireframe document for visual designs of: Welcome Screen, Profile Creation, Quiz, Discover, Match Celebration, Matches List, Chat, and Profile screens.