

UMass Roommate Finder Application Software Requirements Specification

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Overview : Proposed idea and stakeholders

The intent of this project was to develop a roommate matching application for students, alumni, and faculty of UMass Amherst. The application allows UMass students to find compatible roommates and get their contact information. There currently exists a roommate matching application for UMass, however our application aims to make improvements over this application. We aimed to improve the quality of roommate match results and also improve the UI. The stakeholders for this project are: UMass Amherst students, alumni, faculty, and site administrators.

List of features

- Create profile with email verification
- Edit profile
- View similar roommates (top matches)
- Filter similar roommate results
- Request roommate contact information
- Confirm/deny contact information request
- Deactivate/reactivate account
- Permanently delete account

Functional requirements

User :

- *User Creation:* The system allows users to navigate to the page and create an account.
- *User Verification:* The system has a verification process for users to confirm their identity as a UMass student using email domain for verification of their UMass email address to prevent fake profiles and scams.
- *Edit Profile:* The system allows users to edit their profile that includes information about them as a roommate. This information is contained by fields such as:
 - Name, email, phone number, level of study (undergrad/grad), year, gender, college, major, cleanliness, social habits, etc. (a complete list of fields is shown in the data model section below)
- *Roommate Matching:* The system provides a way for users to find compatible roommates based on their profiles, preferences, and other criteria.
- *Match Filters:* The system provides interactive filters to help users narrow down their roommate match search based on the information fields held by other roommates.

- *Request Roommate Contact*: The system allows users to request contact info from a potential roommate (email or phone number).
- *Roommate Request Response*: The system should notify users if their contact information has been requested and allow them to confirm or deny sharing their contact.

Administrator:

- *Account Deactivation*: The system allows admin to deactivate a user from appearing in search results
- *Account Deletion*: The system allows admin to delete a user from the database
- *List all users*: The system allows the admin to be able to view all users i.e., those that are active and those whose accounts have been deactivated.
- *View contact information*: The admin retains rights to viewing all users' email id and phone numbers.

Non-functional requirements

- *Usability*: The system is easy to use and navigate, with a clear and intuitive user interface. Users are able to easily find and access the features that are available.
- *Security*: The site is secure, with user data protected by encryption and password authentication.
- *Performance*: The system is fast and responsive with quick search results and page loading. The system is able to handle a reasonable number of users and data without slowing down or crashing.
- *Scalability*: The system is scalable to accommodate a growing number of users and data.
- *Compatibility*: The system is compatible with a variety of devices, web browsers, and screen sizes to ensure that users can access the system from any device.
- *Modularity*: The system is organized into components based on functionality. This increases the maintainability of the application for future updates or bug fixes.
- *Correctness*: The system functions correctly for all use cases.