

RoomieTaskTracker: Requirements Doc & Use Case Diagram

Requirements/Rationale

Rationale:

- The purpose of this application will be to tackle communication issues that often happen among roommates.
- It's particularly targeted towards college students who have shared living spaces in dorm rooms or apartments.
- This application will be designed to help those who have experienced a difficult time communicating about chores and shared responsibilities with their roommates.
- The system will allow college roommates (or any type of roommate in general) to have efficient communication and chore management, accountability, and an overall peaceful living environment.

Description:

- This Roommate Task Tracker application will allow roommate groups to manage their chores and responsibilities.
- It will offer features such as chore tracking and customizable reminders to suit the needs and preferences of each roommate group.
- Users will be able to create/join roommate groups and choose from a list of common household chores like taking out the trash/recycling, cleaning the bathroom, or washing the dishes.
- It will also allow users to check off the chore when they have completed a task.

Functional Requirements:

- Group Making: The system must allow users to establish and join their roommate groups.
- Chore Selection: Users will be able to choose from a list of common chores.
- Task Assignment: Users will be able to assign chores.
- Task Completion: Roommates can confirm/check off the completion of their chore and it will update the status for the rest of the group.
- Personalized Alerts: Roommate groups can decide on custom reminders for specific chores and be able to adjust frequency.
- Notifications: The system must be able to send out alerts to the users for reminders

Nonfunctional Requirements:

- Since the system is targeted towards students, the app will have emojis/icons to symbolize a task (this will only be implemented if I do a GUI). For example, I would use a trash symbol for taking out the trash chore.
- The system should have readability between texts, icons, and backgrounds.

Use Case Diagram and Descriptions

Use Case Diagram:



Description:

Actors: User

Use Cases:

- **Create Roommate Group:** The user will be able to create a new roommate group.
- **Join Roommate Group:** The user will be able to join a roommate group that has been made.
- **View Chores:** The user will be able to view a list of pre-generated tasks/chores that are available for assignment within their roommate group.
- **Select Chores:** The user will be able to choose from the list of tasks to add to the group's chore list. This will allow them to customize the chores needed for their home.
- **Assign Chores:** The user will be able to assign specific chores to members of the group. This will ensure that the responsibilities are clear and equally distributed.
- **Mark Chore Completion:** The user will be able to mark a chore as completed and will update the status for other group members that it has been taken care of.

- Set Reminders: The user will be able to set reminders for specific tasks and specify frequency to make sure chores are done in time.
- Receive Notifications: The user will automatically receive reminders from the system to complete their task.

Relationship:

- View chores include select chores -> Selecting chores is a part of the function of viewing chores because users view it to select tasks they need.
- Assign chores include marking chore completion -> Marking a chore off as done is included in the process of the assigning chores process.
- Set reminders include receive notifications -> Receiving notifications is included in the process of setting reminders.
- Create roommate group extends join roommate group -> the first user will join the group first as the first roommate so creating a group extends the behavior of joining a group.