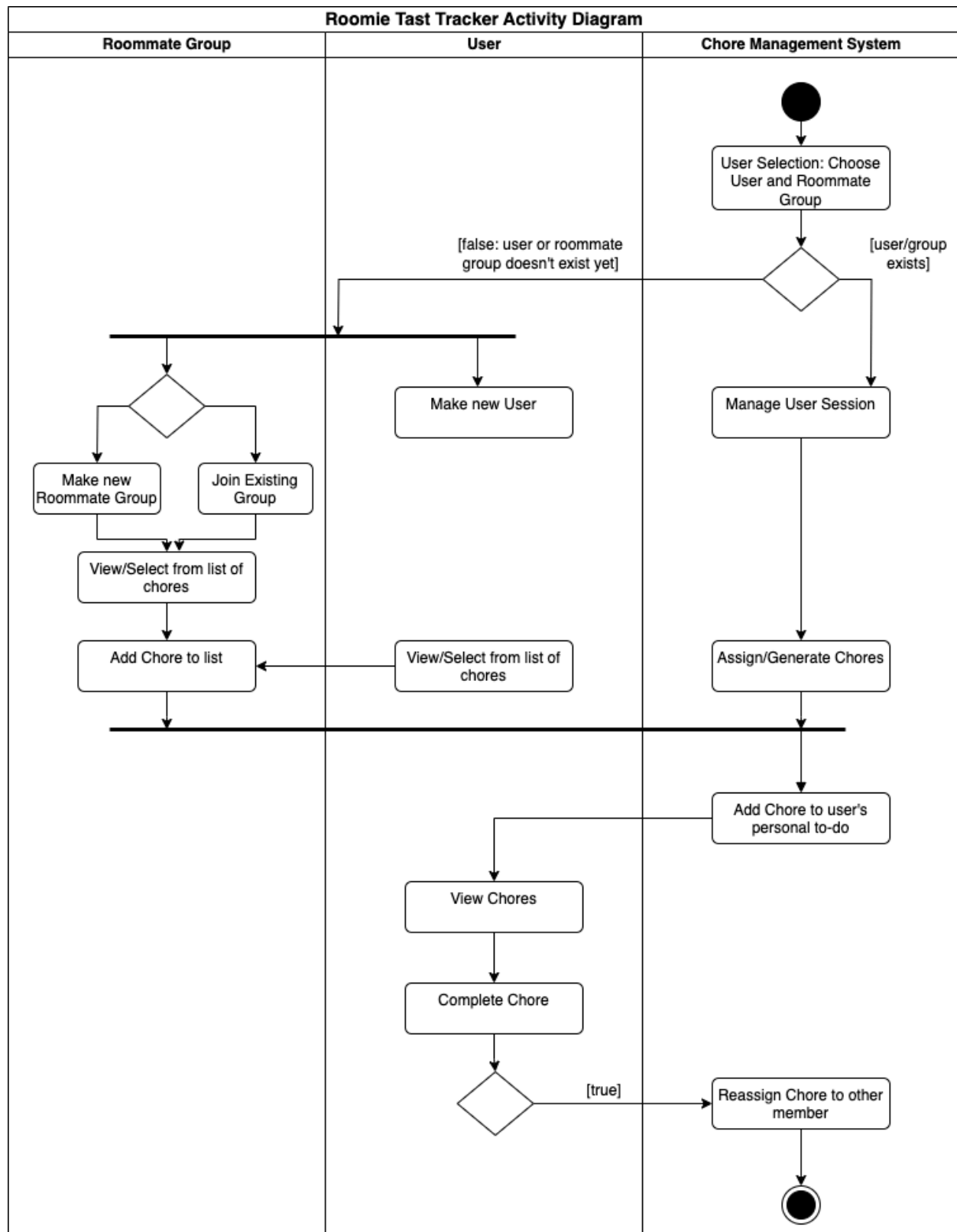


RoomieTaskTracker: Activity Diagram



Written Description

- **Chore Management System:** This system oversees the selection of a user and manages user sessions.
- **User:** Within the chore management system, users have several functionalities available to them. The user can create an account, add to the group's chores by adding tasks to the shared to-do list, view the chores assigned to them, and mark them as completed once finished. This allows for efficient tracking and management of the group's shared responsibilities.
- **RoommateGroup:** Roommate groups consist of individuals sharing a living space who work on household chores together. Within these roommate groups, members can select chores from the available options and add them to the chore list. These activities are interconnected with user actions.

Sequence of Events:

1. **User Selection/Authentication:** The Chore Management System is responsible for managing the user's session and allowing the user to authenticate themselves. If the user is new and creates a new user, they have the option to join an existing roommate group or create a new roommate group. Once the user is authenticated, they can select what they would like to do within the system.
2. **Creating or Joining a Roommate Group:** If the user creates a roommate group, they can initiate the process with the system. After creating a new roommate group (if not already existing), users can view and select from the provided list of chores that they would like to add to their group's to-do list. Alternatively, users can choose to join an existing group, enabling them to collaborate with their housemates on chore management.
3. **Chore Selection and Assignment:** Users/Roommate Groups can view the available list of chores and select tasks to add to their group's to-do list. Once chores are selected, the system generates assignments to respective users within the group. This process ensures an equal distribution of tasks among group members.
4. **Chore Completion and Reassignment:** Users can view their assigned chores and mark them as completed once they are finished. If a user completes a chore, the system will automatically reassign the task to another member of the group.