



Our roommate finder application contains one actor and seven objects. The user is an obvious actor for any application. Furthermore, the system and database are necessary objects for any application, the menu and profile are necessary objects for a roommate finder, the messages and notifications objects are not necessary for a roommate finder but significantly improve quality, and the match algorithm is specific to a roommate finder.

The user must open the application and enter their credentials to access the menu, which holds all available options. The menu is where the user may choose to either update their profile information, search for roommates, select preferences, or send messages. The system interacts with the database to verify login credentials, but the database is more active than the system. The match algorithm is, of course, necessary for the application's purpose, and it interacts heavily with the menu and database. Finally, notifications must be activated whenever messages are received. The user is likely unaware of messages until a potential roommate sends them.