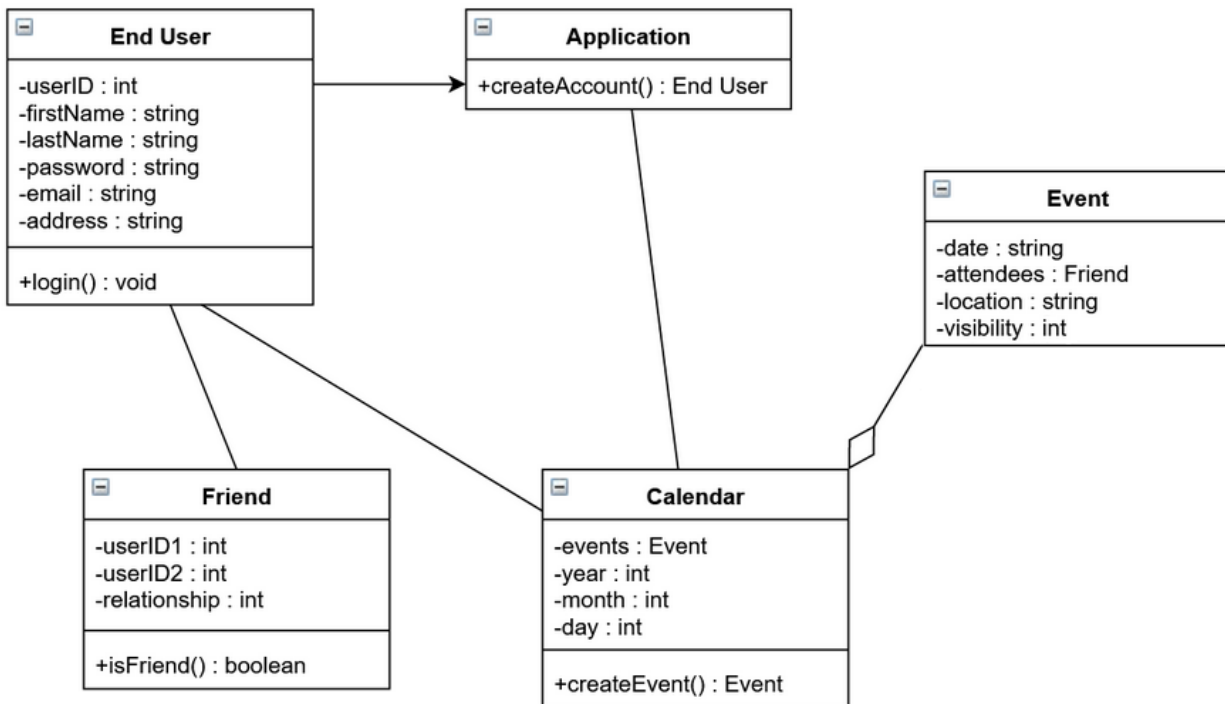


The class diagram for the core system is shown below, with descriptions of the classes following the diagram.



**End User:** A class that stores all relevant user information.

- **userID:** Unique username used when logging into the system.
- **firstName/lastName:** The user's first/last name.
- **password:** The user-defined password to protect their information.
- **email:** The user's email address.
- **address:** The user's home address.
- **login():** Function allowing the user to log into their account.

**Application:** Singleton class that displays the UI and contains the Calendar class within it.

- **createAccount():** Function to create new End User objects.

**Friend:** A data structure that contains all friend relationships in the database.

- **userID1/userID2:** IDs of both users defining the relationship.
- **relationship:** numerical representation of the relationship of the two users.
- **isFriend():** Function that returns whether or not the two users are friends.

**Calendar:** A class that contains current date/time information as well as handles creation and modification of child Event objects.

- **events:** List of Events contained within the Calendar object.
- **year:** Current year.
- **month:** Current month.
- **day:** Current day.
- **createEvent():** Function to create a new Event with all required information.

**Event:** A child of Calendar containing all relevant information pertaining to its own event.

- **date:** The date the Event is occurring on.

- **attendees:** List of Friends who have access to the Event.
- **visibility:** Whether or not the Event is public, friends only, or private.