

The database must hold many `user` :

- Each `user`: is uniquely identified by their `username`
- Each `user` has a `password`

The app does allow joint ownership of a `garden`

- A `user` can have many `garden` , `garden` in turn can have many `user`
- A `garden` can exist separately from the `user`

For each `garden` they can have:

- Many `report` , each `report` can only have 1 `garden`, this is a weak entity with the parent entity `garden`
- `report` has the following properties:
 - `humidity`
 - `light level`
 - `temperature`
 - `soil moisture`
 - `time` : this is also the ID for the report
- All readings are measured at the same time, it wouldn't be very helpful if we measure them separately.

Changes to the `garden` are also documented (e.g. change lighting, watering soil, etc..), each time a device is changed, or an activity happens, it is saved into a log file, with:

- `time` : this also serves as the ID
- `category` : tells us what kind of change is happening (watering, heating, etc...)
- `description` : what happens? specific info? we can format this using software

`Warnings` : A warning message for the user when something went wrong (different types of warning leads to different `description` format), this is a weak entity with the parent `user`

- `time created` : this is also ID
- `description` : it contains all the necessary information about the problem, (e.g. the `garden` ID, the specific problem)