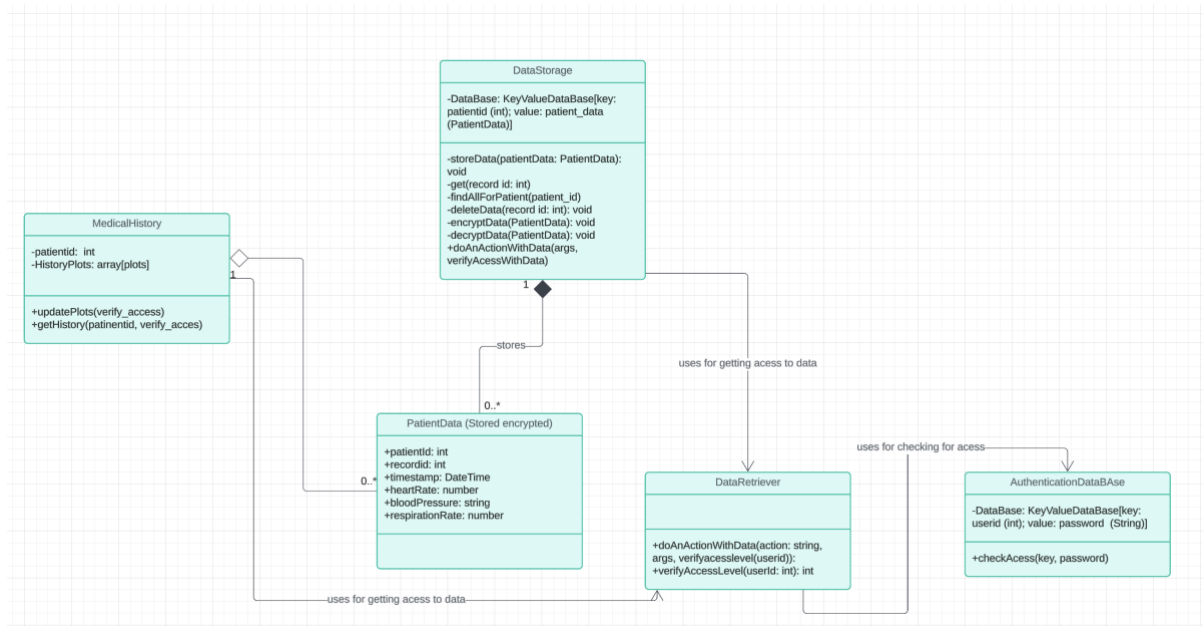


DataStorage



This UML diagram shows the structure of DataStorage. Basically, what we need from this class is to store and give us desired data.

DataStorage itself is a class which basically represents a database with patient_data and handlers to deal with them (get, store, etc.) which are private, because we want to have a “security layer” between datastorage and user. Basically, all the actions are performed by doAnActionWithData method, which already has access_level as a passed parameter and has a logic of access levels inside itself. One important thing is that stored data is encrypted by hash-function inside encryptData method. Users interact with database via DataRetriever, which checks whether a user has an access and calls the function in DataStorage.

PatientData entity is basically one record of all the patient’s metrics. These evaluations are made each half a second (approximately) for each user. And they all are just stored in DataStorage. To have a glance on plots of medical history of a patient, one should use a MedicalHistory class, which aggregates all the historical data of the patient into plots. To use that, a user should have access as well, so it is checked via DataRetriever. In order to call functions of MedicalHistory, you should just call doAnActionWithData with right parameters.