Data Design

Currently we are storing our databases in MongoDB Atlas that was established by the previous team. This allows the client to be able to have access to the database and easily add our team and any future teams to the project. This MongoDB database holds all our data related to the web app that collects the user’s daily logs of their thoughts and feelings. In this database we store users, surveys, signatures, situations, and all multiple-choice options as collections in the database. Each survey document contains an ID, user, signature, fi-then, situation, positive feelings, negative feelings, positive thoughts, negative thoughts, and behavior. The web app then makes a connection to the cluster of our database and then is ready to use. The positive and negative thoughts and feelings as well as behavior options each are stored in the database and then appear as multiple-choice options in the app. The web app then retrieves these multiple-choice options from the database and displays them on the screen when a person is logging into an event. The document classes for these multiple-choice options are stored in Models.py with each collection in Mongo having a class in the main app file psychclinic.py which fills the collections when the app is initialized. Once the app is run, the multiple-choice options are filled out and do not need to be filled out again. If we need to update the multiple-choice options, we can easily do so through MongoDB by adding them into the database.

Another way we store our data is through a csv file we create when retrieving the survey data from Qualtrics, which hosts the PICA. When we call Report\_Generator.py after someone completes their PICA, the report generator then connects to the Qualtrics API to collect the list of surveys taken which is then locally saved as a csv file in PythonAnywhere. That csv file is then loaded into our report generator as a DataFrame. We take the last row of the DataFrame, which is the data of the most recently taken survey and use that data to generate our report and send it to the corresponding email. Storing the data this way allows us to have local access to the list of surveys and potentially send multiple survey reports to multiple people based off the one csv file.