1. User Table and Data Table
   1. User Table
      1. Invariants
         1. Id: auto increments for each table entry.
         2. Is\_verfied: once is set to 1 is invariant (for email verification).
         3. Creation\_time: creation time of the account entry; once set is invariant.
      2. Preconditions
         1. None really, just make sure your environment can run SQLLite.
         2. If the table does not exist, a new one is created; this is handled.
      3. Postconditions
         1. For as many elements in the array(n) there must be a creation\_time, email, user\_name, salt, and p\_hash entry.
         2. Every entry has an unique id entry, auto-incremented.
      4. Methods
         1. Create table: makes the table if it doesn’t exist.
         2. Setting data: added data row to the table, table must exist.
         3. Getting data: gets data from table, table must exist.
         4. Removing data: removes data with the specified id.
   2. Data Table
      1. Invariants
         1. Data\_id: auto increments for each table entry.
         2. Data\_time\_time: creation time of the data entry. Immutable once set.
      2. Preconditions
         1. Make sure your environment can run SQLLite.
         2. 2 other tables must exist before a data entry can be added.
            1. Users
            2. Devices
      3. Postconditions
         1. For as many elements in the array(n) there must be a data\_time, owner\_id, device\_id, device\_code, sensor\_type, and a json for each entry in n.
         2. Every entry has an unique id entry, auto incremented.
      4. Methods
         1. Create table: makes the table if it doesn’t exist.
         2. Setting data: added data row to the table, table must exist.
         3. Getting JSON: gets the jason from table, table must exist; can specify the category: data\_id, owner\_id, group\_id, sensor\_type, or device\_code.
         4. Getting data: gets all the data from table, table must exist; can specify the category: data\_id, owner\_id, group\_id, sensor\_type, or device\_code.