Product Backlog

Entire User Interface Design to be implement:
> https://xd.adobe.com/spec/0f18f745-95d1-4488-56b8-ac2028f60ab3-7929/

Testing Strategies include:
- Automated Unit testing using Mocha Framework for Javascript
- Manual Acceptance testing.

Technologies and Tools involved:
- React Framework for good looking API.
- MySQL for data management
- Express Framework for using various server side features such as file upload and routing
- Axios to handle client side HTTP requests and responses
- Node.js to execute javascript without a browser
- Adobe Xd for designing the user interface, and individual screens.

User Stories and Tasks

The product backlog has changed since the last sprint. This is because, since the last deliverable, we have noticed some redundancies, and lack of detail in the product backlog. In addition, we discovered that some of these tasks should be divided up further, and some grouped into one.

1. As Andy, an Organization member, I would like to be able to upload selected iCare files to TEQ's database.
    a. (frontend) Create login page for users with react components
    b. Creation of SQL database by inputting all the tables in the database by manually or automated scripts
    c. translate iCare files to central database using some javascript library (tbd) and writing scripts to translate the data
    d. Create a router that will allow us to move between pages
    e. Connect backend and frontend by making a server side verification function and client side request handler to handle file upload
2. As Bob, TEQ, I would like to run preset queries on collected data from iCare templates, with data fields and variables already preselected (i.e select to run a query from a drop down menu)
    a. (front end) add button functionality which makes a GET request to the server and let it receive the response.
    b. (backend) make back end functions that compose and run the SQL queries and returns a json object

3. As Bob, TEQ, I would like to be able to generate reports based on the queries I have saved and save them as .csv, or .xls files on my account. (DEPENDENT ON USER STORY 2)
   a. (backend)create functions that will produce xlsx files given the rows and columns of the returned query from the SQL database
   b. (Front end) Create button which makes a request to the server for the report
4. As Bob, TEQ, I would like to customize a query by selecting the variables I want to retrieve data on (i.e check/mark the variables i want from a list)
   a. (frontend) Make a menu/checklist using a REACT component for users to check the variables they want to query for
   b. (backend) make a function to compose a SQL query from database with the inputted variables
   c. Add the ability to save it to the user account and run it later
5. As Bob, TEQ, I would like to be able to create new accounts to provide access for new organizations or project staff with certain permission levels.
   a. (front end) Make a page for account creation with a form for the user to fill out
   b. (back end) using the data given, compose a SQL query and run it in the database.
6. As Andy, an Organization member, I would like to be able to change my password so that I have a password I can easily remember
   a. (back end) create function to change password in the SQL database, given a user ID and current password
   b. (front end) Verify the user's identity and let admins input new password to the backend given user email.

Legend: For tasks, a = 1, b = 2, c = 3, d = 4