Open website>

FORM

- *Username*
- *Password*
- BUTTON: Sign In
    - If user/pass incorrect > error message
    - If user/pass correct [>01]
- BUTTON: Sign Up[>02]

<02

FORM

- Title: *Register*
- *First name*
- *Last name*
- *Registration Code*
    - *A code I'll give people so that no rando can just make an account*
    - *If this is necessary, we can make the code: 092120*
- *Email*
- *Phone*
- *Username*
- *Password*
- *Add to website contact list?*
    - If yes to previous, ask: *Preferred contact method?*
        - *Email*
        - *Call*
        - *Text*
            - *all the above are checkbox options (can select one or more, must select at least one)*
- BUTTON: Register
    - If all required information present [> 01]
    - If not all required info present > error message

NAV BAR

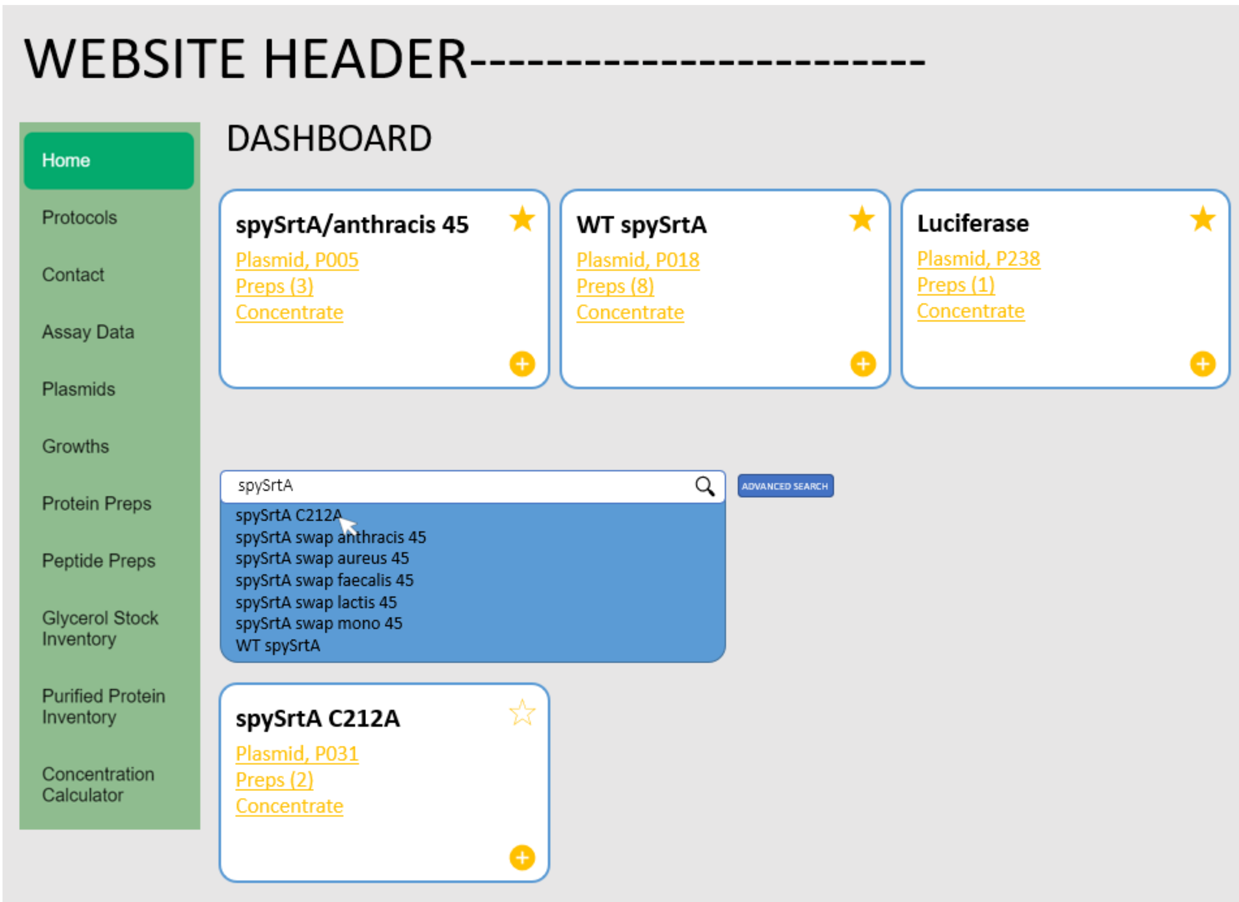
<01

DASHBOARD :

Essentially just a search page, there's a search bar, with filters available (kind of like amazon filters), has the user's favorited tiles already visible, nav bar on the left side. The picture below shows a rough idea of what this page would look like

I just screenshotted the tabs from the first bit of code that I did (those aren't all the same now)

The bookmarked tiles are at the top, and then there's a search bar. Any tiles that come up with a given search will show up under the search bar



[NAV BAR]

NAVIGATING AN INDIVIDUAL TILE

Anything in the picture that is yellow can be clicked on, but the specific clicks it took to get to the 2nd, 3rd, and 4th figures are written out. Further details about every single yellow thing/function of the tiles are detailed on the next page

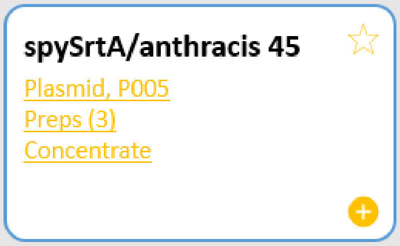


Fig 1

CLICKS
1. the + icon expands the right side of the tile out from behind the small tile

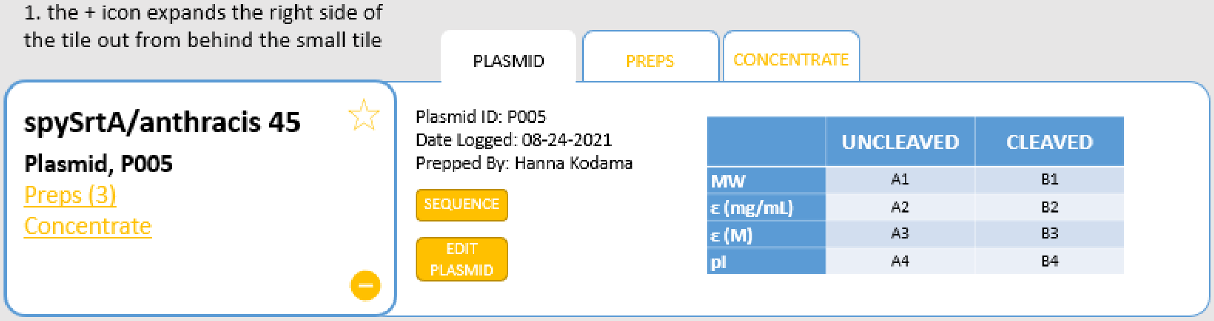


Fig 2

CLICKS
1. the star icon to 'favorite' this tile to my dashboard
2. preps tab (switches to preps tab)
3. the first growth in the list (opened up all the stats on the right side of the tile)

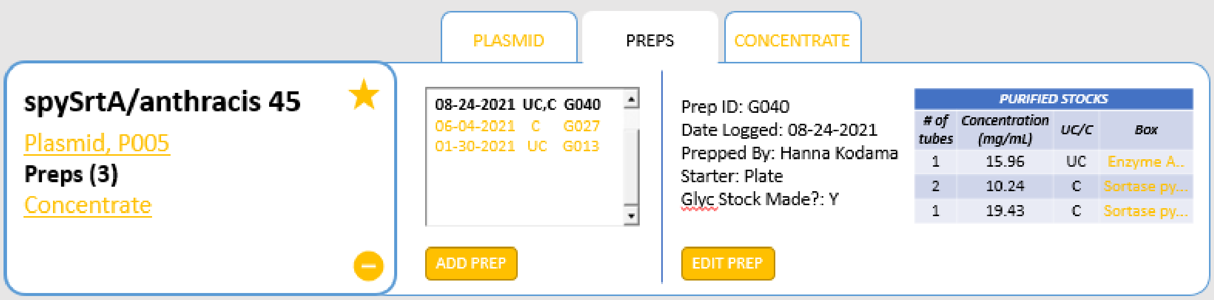


Fig 3

CLICKS
1. concentrate tab (switches to concentrate tab)
2. check box next to "Cleaved?" (alters the formulas used when click "CONVERT" buttons

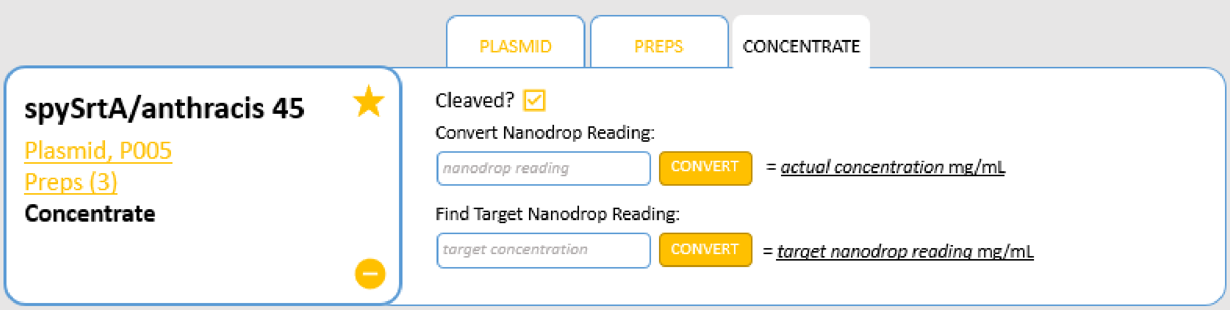


Fig 4

NAV BAR

FIGURE 1: Minimized tile
Contents
- *Plasmid Name* in large bold text at top
- Smaller text underneath
    - *Plasmid, P####*
        - CLICK: opens Plasmid tab
    - *Preps (#)* -the number is the number of preps linked to that plasmid
        - CLICK: opens Prep tab
    - *Concentrate*
        - CLICK: opens Concentrate tab
- Star icon
    - CLICK: toggle between filled and no fill
        - Filled: tile appears on dashboard
        - No fill: tile will not appear on dashboard
    - *Doesn't have to be a star…a little bookmark would be cool, but it doesn't really matter*
- Plus icon
    - CLICK: toggles between + and –
        - +: tile is in minimized form
        - -: tile is in maximized form

FIGURE 2: Maximized tile open to Plasmid tab
Contents
- Small left side tile stays the same (except + becomes -, and "Plasmid" is formatted differently somehow)
- The actual "Plasmid" tab on top of the tile is formatted slightly different than the other tabs to show it is open
- The other tabs can be clicked on to switch over to those tabs, and you can still click on the words in the small left tile to go to those tabs
- *Plasmid ID* and *Date Logged* values are listed (no interaction)
    - *The figure has a line for Prepped by and it doesn't need to be there*
- TABLE: formulas for A1-B4 (see form 11)
- BUTTON: Sequence
    - HOVER: small message pops up that says "Copy to clipboard"
    - CLICK: copies sequence to user's clipboard (*is this possible?)*
- BUTTON: Edit Plasmid
    - CLICK >11b

FIGURE 3: Maximized tile open to Prep tab
- Like figure 2, small left side tile stays the same (except "Prep" is formatted differently somehow)
- The actual "Prep" tab on top of the tile is formatted slightly different than the other tabs to show it is open
- The other tabs can be clicked on to switch over to those tabs, and you can still click on the words in the small left tile to go to those tabs
- All preps are listed out in a text box of sorts with only 3 values per prep showing: *Date logged, UC/C, Prep ID*
    - UC/C value can be UC or C or UC,C (the latter indicating that both UC and C were prepped in this prep)

NAV BAR

- BUTTON: Add Prep
  - CLICK >12a
- CLICK: (on one of the preps): information appears on the right
  - *Prep ID, Date Logged, Prepped by, Starter, Glyc Stock Made?*
  - TABLE: just entirely based off of what's filled out in the corresponding prep form
  - The prep that is open will be formatted differently in the text box on the left, and all the other preps can still be clicked on, to switch between the existing preps
  - BUTTON: Edit Prep
    - CLICK >12b

FIGURE 4: Maximized tile open to Concentrate Tab

- Like figure 2 and 3, small left side tile stays the same (except "Concentrate" is formatted differently somehow)
- The actual "Concentrate" tab on top of the tile is formatted slightly different than the other tabs to show it is open
- The other tabs can be clicked on to switch over to those tabs, and you can still click on the words in the small left tile to go to those tabs
- "Cleaved?" with a checkbox next to it
  - CLICK: changes which formulas will be used in the calculator
- Text input box that says "nanodrop reading"
  - BUTTON: Convert
    - CLICK: formula
      - If cleaved checkbox unselected
        - Actual concentration= (input) / A2
      - If cleaved checkbox selected
        - Actual concentration= (input) / B2
- Text input box that says "target concentration"
  - BUTTON: Convert
    - CLICK: formula
      - If cleaved checkbox unselected
        - Target nanodrop reading = (input) * A2
      - If cleaved checkbox selected
        - Target nanodrop reading = (input)* B2

NAV BAR: (visible no matter where you are in the website)
Dashboard > 01 Tile (form access)
Plasmids >04 Table (form access)
Protein Preps >05 Table (form access)
Inventory >06 Table (form access)
Protocols >07 Table (form access)
Tray Calculator >08 Tile
Contact >09 Table
Profile >10 Form

<04
PLASMIDS PAGE
Basically just a table of all logged plasmids, with a search bar and available filters on the side (again, like Amazon)

BUTTON: *Add Plasmid* >11a

TABLE
- Table headers*: Plasmid ID, Plasmid Name, Date, Sequence, Glycerol Stock?, Purified Protein?*
- Table features:
    - Automatically, all table rows are sorted based on Column 1, with the highest values at the top
    - Each table header should be a 'button' that can be clicked in order to sort the table by that column. If the table is already sorted by a given column, and that column's table header is clicked again, the order will simply be reversed (just like files folders on a computer)
    - Filters:
        - *Date interval:* show only rows with dates in the chosen interval
        - *Plasmid Name includes*: shows only rows including the string chosen
        - *Glycerol stock*: shows only rows with "Y" in Column 5
        - *Purified protein:* shows only rows with "Y" in Column 6
    - Search bar
- Column 1 (*Plasmid ID*)
    - Values: "P###"
    - Sort: First click= high to low (default table sort setting), second click = low to high
    - Each will have a little triangle button next to them that drops down a small menu of options
        - *Go to tile >*
        - *Open tile in dashboard >*
            - If tile already open in dashboard, pop up message "Tile already open"
            - If not already open in dashboard, pop up message "Added to dashboard" that fades away pretty quickly (like the "added to queue" message in spotify)
        - *Add a prep* >12a
        - *Edit plasmid* >11b
- Column 2 (*Plasmid Name*)
    - Values: from form
    - Sort: first click = a to z, second click = z to a

NAV BAR

- Column 3 (*Date*)
    - Values: from form
    - Sort: first click = newest to oldest, second click = oldest to newest
- Column 4 (*Sequence)*
    - Values: from form
    - Sort: first click = a to z, second click = z to a
    - Because the sequences are usually really long, just show the first 5 characters
    - If the user clicks on the actual value, copy the sequence to clipboard
- Column 5 *(Glycerol Stock?)*
    - Values: Y or N
        - Y if: there is at least 1 entry in the *Glycerol Stock Inventory* that is associated with this P### and is not empty
        - else, N
    - sort: first click = Y to N, second click = N to Y
    - clicking on the value takes you to the glycerol stock entry in the *Glycerol Stock Inventory*>
- Column 6 (*Purified Protein?)*
    - Values: Y or N
        - Y if: there is at least 1 entry in the *Purified Protein Inventory* that is associated with this P### and is not empty
        - else, N
    - sort: first click = Y to N, second click = N to Y
    - clicking on the value takes you to the glycerol stock entry in the *Purified Protein Inventory*>

<11
FORM

- Title: *Add Plasmid* [11a] or *Edit Plasmid* [11b]
- [11b] – entire form already filled out with original info, anything can be changed, there is a save button at the bottom to save changes
- *User* (autofill, but can be changed)
- *Date* (autofill, but can be changed)
- *Plasmid Name*
    - User can type anything – letters, numbers—they are responsible for naming this plasmid in the context of our lab use. But if the final input is an already-existing plasmid name, give error message "Plasmid name already exists"
- *Sequence*
    - Only allow string input (it's okay if there are white spaces, just get rid of them on the backend). If string includes numbers, AND/OR doesn't include the letter "M", give an error message
- *Uncleaved Properties*
    - *Molecular Weight*: set this as value 'A1' in Fig. 2 under "Navigating an Individual Tile"
    - *Extinction Coefficient (mg/mL)*: set this as value 'A2' in Fig. 2 under "Navigating an Individual Tile"
    - *Extinction Coefficient (M)*: set this as value 'A3' in Fig. 2 under "Navigating an Individual Tile"
    - *Isoelectric Point*: set this as value 'A4' in Fig. 2 under "Navigating an Individual Tile"

NAV BAR

- *Cleaved Properties*
    - *Molecular Weight*: set this as value 'B1' in Fig. 2 under "Navigating an Individual Tile"
    - *Extinction Coefficient (mg/mL)*: set this as value 'B2' in Fig. 2 under "Navigating an Individual Tile"
    - *Extinction Coefficient (M)*: set this as value 'B3' in Fig. 2 under "Navigating an Individual Tile"
    - *Isoelectric Point*: set this as value 'B4' in Fig. 2 under "Navigating an Individual Tile"
-
- BUTTON: *Log Plasmid*
    - If all required info present >
        - If [11a] automatically generate a *Plasmid ID* with the form of P###, where the number is just the last plasmid entry + 1
        - If [11b] do not change or regenerate another *Plasmid ID*
    - If not all required info present > error message

<05

PROTEIN PREPS PAGE

VERY similar to the plasmid page in that it is just a table with a search bar, filters

BUTTON: *Add Prep* >12c

TABLE
- Table headers: *Prep ID, Plasmid Name, Date, Prepped By, Plasmid ID*
- Table features:
    - Automatically, all table rows are sorted based on Column 1, with the highest values at the top
    - Each table header should be a 'button' that can be clicked in order to sort the table by that column. If the table is already sorted by a given column, and that column's table header is clicked again, the order will simply be reversed (just like files folders on a computer)
    - Filters:
        - *Date interval:* show only rows with dates in the chosen interval
        - *Plasmid Name includes*: shows only rows including the string chosen
        - *Prepped by:* (presents all lab members, each with a checkbox next to them) shows only rows prepped by lab members selected
    - Search bar
- Column 1 (*Prep ID*)
    - Values: "G###"
    - Sort: First click= high to low (default table sort setting), second click = low to high
    - Each will have a little triangle button next to them that drops down a small menu of options
        - *Go to tile >*
        - *Open tile in dashboard >*
            - If tile already open in dashboard, pop up message "Tile already open"
            - If not already open in dashboard, pop up message "Added to dashboard" that fades away pretty quickly (like the "added to queue" message in spotify)
        - *Edit prep* >12b

NAV BAR

- Column 2 (*Plasmid Name)*
  - Values: from form
  - Sort: first click = a to z, second click = z to a
- Column 3 (*Date*)
  - Values: from form
  - Sort: first click = newest to oldest, second click = oldest to newest
- Column 4 (*Prepped By)*
  - Values: User's initials (or first name?)
  - Sort: first click = a to z, second click = z to a
- Column 5 (*Plasmid ID)*
  - Values: P#### (the ID linked to this Prep ID)
  - Sort: first click = high to low, second click = low to high

<12

FORM

- Title: *Add Prep* [12a or 12c] or *Edit Prep* [12b]
- [12b] – entire form already filled out with original info, anything can be changed, there is a save button at the bottom to save changes
- *User* (autofill, but can be changed)
- *Date* (autofill, but can be changed)
- *Plasmid ID*
  - there will only ever be one "Plasmid Name" associated with any "Plasmid ID", and vice versa. In other words, you can identify a plasmid by either its ID or its Name. In this form, whichever the user decides to fill out first (ID or Name), the other one should autofill with the corresponding value
  - If [12a], autofill based on the plasmid clicked
  - If [12c], can type in numbers, can only select from existing IDs
- *Plasmid Name* (see comment)
  - If [12a], autofill based on the plasmid clicked
  - If [12c], can type in letters, can only select from existing Plasmid Names
- *Growth Starter*
  - Drop down menu options: *Plate, Glycerol Stock, Both*
- *Glycerol Stock Made?*
  - Yes or No (drop down menu? Button? Idk)
- *Purified Stocks*
  - TABLE for user to fill out
    - Table features:
      - Default start with 2 rows for user to fill out, but there should be some sort of "+" button that will add as many rows as the user needs
    - Table headers: *# of tubes, Concentration (mg/mL), Box, Cleaved?*
    - Column 1 (*# of tubes)*
      - Values: number greater than 0
    - Column 2 (*Concentration (mg/mL))*
      - Values: number greater than 0, less than 50
      - If value greater than 50 entered, pop up message "Make sure you are using mg/mL"
    - Column 3 (*Box)*

[NAV BAR](#)

            - Drop down menu options: all existing box names, and one option to "Add box"
        - Column 4 (*Cleaved?)*
            - A checkbox
- BUTTON: *Log Prep*
    - If all required info present >
        - If [12a or 12c] automatically generate a *Prep ID* with the form of G###, where the number is just the last prep entry + 1
        - If [12b] do not change or regenerate another *Prep ID*
    - If not all required info present > error message

<06

INVENTORY PAGE

First thing you see is 4 square tile things labelled with the 4 inventory names (Purified Protein, glycerol Stocks, Peptides, and Primers)

You can click on any of the 4 squares to load up the corresponding inventory

These are (again) tables very similar to the Plasmid and Protein Prep pages (search, filters, sorting capabilities) and a couple extra features

BUTTON: Purified Protein>

TABLE

- Table features:
    - Automatically, all table rows are sorted based on Column 1, with the highest values at the top
    - There is a checkbox next to every row (on the left side of the table) to allow selecting 1+ rows. If any rows are selected, then a couple buttons will appear above the table: "Empty entire stock", "Empty tube". If either button is selected, there's a pop up message saying "Are you sure?" and Yes/No buttons. (this whole function is kind of like any email inbox)
        - BUTTON: Empty entire stock
            - The row isn't deleted, just the value for "*# of tubes"* changes to 0
        - BUTTON: Empty tube
            - Subtract 1 from value for "*# of tubes"*
    - Each table header should be a 'button' that can be clicked in order to sort the table by that column. If the table is already sorted by a given column, and that column's table header is clicked again, the order will simply be reversed (just like files folders on a computer)
    - Filters:
        - *Date interval:* show only rows with dates in the chosen interval
        - *Plasmid Name includes*: shows only rows including the string chosen
        - *Cleaved*
        - *Uncleaved*
        - *Box:* (presents all boxes, each with a checkbox next to them) shows only rows with box names selected
    - Search bar
        - Sort of works like "Ctrl+F" in the sense that it doesn't actually alter the page view in any way, it just highlights where the search is found, wherever it is in the table

NAV BAR

- *These inventory tables are slightly different from the Plasmid and Protein Prep tables in that: 1 form does not equal 1 row of information. Let me know if this is confusing because I suspect it will be but I'll try to explain here:*
    - *For this inventory ----*
    - *For a protein prep, everything typed into 1 form will show up under Prep ID (G###) in 1 row of information*
    - *If you notice in the protein prep, under "*Purified Stocks"*, there can be multiple rows of stocks. EACH one of those rows is equal to 1 row in THIS particular inventory.*
    - *So, in this inventory, there may actually be multiple rows with the same Prep ID, but what is actually leading to multiple rows is the "Concentration" and the "Cleaved?"*

- Table headers: *Prep ID, Plasmid Name, UC/C, Concentration (mg/mL), # of tubes, Date, Box*
- Column 1 (*Prep ID)*
    - Values: "G###" (value auto-generated from prep form)
    - Sort: First click= high to low (default table sort setting), second click = low to high
    - Each will have a little triangle button next to them that drops down a small menu of options
        - *Go to tile >*
        - *Open tile in dashboard >*
            - If tile already open in dashboard, pop up message "Tile already open"
            - If not already open in dashboard, pop up message "Added to dashboard" that fades away pretty quickly (like the "added to queue" message in spotify)
- Column 2 (*Plasmid Name*)
    - Values: the plasmid name associated with this prep form
    - Sort: first click = a to z, second click = z to a
- Column 3 (*UC/C*)
    - Values: UC or C (from prep form)
    - Sort: first click = UC to C, second click = C to UC
- Column 4 (*Concentration (mg/mL)*)
    - Values: number (from prep form)
    - Sort: first click= high to low, second click = low to high
- Column 5 (*# of tubes*)
    - Value: integer (0 or greater) (from prep form)
    - Sort: first click = high to low, second click = low to high
    - The number itself is a BUTTON that, when clicked, will subtract 1 from that number
        - If clicked, first there's a pop-up window "Are you sure" with Y/N options
        - Once the # of tubes is 0, do not hide or delete that row – just have it show 0 in this column. The button to subtract 1 no longer works
- Column 6 (*Date*)
    - Value: date of Prep ID
    - Sort: first click = newest to oldest, second click = oldest to newest
- Column 7 (*Box*)
    - Value: Box name from prep form

BUTTON: Glycerol Stock>

[NAV BAR]

TABLE

- Table features:
  - Automatically, all table rows are sorted based on Column 1, with the highest values at the top
  - There is a checkbox next to every row (on the left side of the table) to allow selecting 1+ rows. If any rows are selected, then a couple buttons will appear above the table: "Empty entire stock", "Empty tube". If either button is selected, there's a pop up message saying "Are you sure?" and Yes/No buttons. (this whole function is kind of like any email inbox)
    - BUTTON: Empty entire stock
      - The row isn't deleted, just the value for "*# of tubes"* changes to 0
    - BUTTON: Empty tube
      - Subtract 1 from value for "*# of tubes"*
  - Each table header should be a 'button' that can be clicked in order to sort the table by that column. If the table is already sorted by a given column, and that column's table header is clicked again, the order will simply be reversed (just like files folders on a computer)
  - Filters:
    - *Date interval:* show only rows with dates in the chosen interval
    - *Plasmid Name includes*: shows only rows including the string chosen
  - Search bar
    - Sort of works like "Ctrl+F" in the sense that it doesn't actually alter the page view in any way, it just highlights where the search is found, wherever it is in the table
  - This inventory is a little weird too:
    - *The Purified Protein inventory can have multiple rows per prep, whereas this glycerol stock inventory can have one row per multiple preps*
    - *If you look back in the FORM for a prep, there is a question "Glycerol stock made?" IF ANSWERED YES, then a row is added to this inventory table. A* ***glycerol stock's identifier, however, is not the prep it came from, but the PLASMID****. This means that, if multiple preps are done from one plasmid and glycerol stocks are made for each of those preps, there will still only be 1 row in this inventory, but the # of tubes will increase by 1 each time a glycerol stock is made. At the end of the day, even if every plasmid is prepped 100x, there will only be as many rows as there are plasmids*
- Table headers: *Plasmid ID, Plasmid Name, # of tubes*
- Column 1 (*Plasmid ID*)
  - Values: "P###" (plasmid ID that the prep form is linked to)
  - Sort: First click= high to low (default table sort setting), second click = low to high
  - Each will have a little triangle button next to them that drops down a small menu of options
    - *Go to tile >*
    - *Open tile in dashboard >*
      - If tile already open in dashboard, pop up message "Tile already open"
      - If not already open in dashboard, pop up message "Added to dashboard" that fades away pretty quickly (like the "added to queue" message in spotify)
- Column 2 (*Plasmid Name*)

[NAV BAR]

- Values: the plasmid name associated with this prep form
- Sort: first click = a to z, second click = z to a

- Column 3 (*# of tubes*)
  - Value: integer (0 or greater)
  - Sort: first click = high to low, second click = low to high
  - When a prep for this plasmid is logged, if a glycerol stock is made, this number will go up by 1. If it is the first prep for this plasmid, then a new row is created
  - The number itself is a BUTTON that, when clicked, will subtract 1 from that number
    - If clicked, first there's a pop-up window "Are you sure" with Y/N options
    - Once the # of tubes is 0, do not hide or delete that row – just have it show 0 in this column. The button to subtract 1 no longer works

BUTTON: Peptide>
BUTTON: Add Peptide >13a
TABLE

- Table features:
  - Automatically, all table rows are sorted based on Column 1, with the highest values at the top
  - There is a checkbox next to every row (on the left side of the table) to allow selecting 1+ rows. If any rows are selected, then a couple buttons will appear above the table: "Empty entire stock", "Empty tube". If either button is selected, there's a pop up message saying "Are you sure?" and Yes/No buttons. (this whole function is kind of like any email inbox)
    - BUTTON: Empty entire stock
      - The row isn't deleted, just the value for "*# of tubes*" changes to 0
    - BUTTON: Empty tube
      - Subtract 1 from value for "*# of tubes*"
  - Each table header should be a 'button' that can be clicked in order to sort the table by that column. If the table is already sorted by a given column, and that column's table header is clicked again, the order will simply be reversed (just like files folders on a computer)
  - Filters:
    - *Order*
    - *Synthesis*
    - *Pure*
    - *Crude*
    - *In stock*
    - *Out of stock*
    - *Date interval:* show only rows with dates in the chosen interval
  - Search bar
    - Sort of works like "Ctrl+F" in the sense that it doesn't actually alter the page view in any way, it just highlights where the search is found, wherever it is in the table
  - *This inventory kinda goes back to normal: 1 form = 1 row*
- Table headers:
- Column 1 (*Pure Peptide ID)*
  - Values: S### (auto-generated by form)
  - Sort: First click= high to low (default table sort setting), second click = low to high

NAV BAR

    - for forms where ‘crude’ was selected, set as S000
    - click to reveal small menu of options:
        - Edit Peptide >13b
        - (if ID = S000) Purify Peptide >13c
- Column 2 (*Crude Peptide ID)*
    - Values: C### (auto-generated by form)
    - Sort: first click = high to low, second click = low to high
    - This value won’t exist for forms where ‘order’ was selected
- Column 3 (*Sequence*)
    - Values: string of letters (from form)
    - Sort: first click = a to z, second click = z to a
- Column 4 (*Date*)
    - Values: date of form
    - Sort: first click = newest to oldest, second click = oldest to newest
- Column 5 (*In stock?)*
    - Values: Y or N
    - Sort: first click = Y to N, second click N to Y
    - When form is first filled out, this value is automatically ‘Y’
    - Later, a user can come click on this value and chose ‘Empty’ (and there should be a pop-up window ‘Are you sure?’ with Y/N options)
- Column 6 (*Concentration (mM))*
    - Values: number from form
    - Sort: first click = lowest to highest, second click = highest to lowest
- Column 7 (*Order/Synth*)
    - Values: O or S based on selection in form
    - Sort: first click = S to O, second click = O to S
- Column 8 (*Crude/Pure)*
    - Values: C or P based on selection in form
    - Sort: first click = P to C, second click = C to P
    - Any peptides with ‘O’ in column 7 will automatically be given a ‘P’ in this column

<13
FORM

- Title: *Add Peptide* [13a], *Purify Peptide* [13c], or *Edit Peptide* [13b]
- [13b] – entire form already filled out with original info, anything can be changed, there is a save button at the bottom to save changes
- *User* (autofill, but can be changed)
- *Date* (autofill, but can be changed)
- *Sequence*
- BUTTON (2-option): *Synthesis / Order*
    - [13b or 13c] already selected
- IF SYNTHESIS
    - BUTTON (2-option): *Crude / Pure*
    - IF CRUDE
        - No further questions
    - IF PURE
        - *Concentration (mM)*

NAV BAR

        - *Approximate volume (mL)*
- IF ORDER
    - *Concentration (mM)*
    - *Approximate volume (mL)*
- BUTTON: Log Peptide
    - If required info present,
        - [13a]
            - If synthesis and crude, generate crude peptide ID (C###)
            - If order, generate pure peptide ID (S###)
        - [13c] generate pure peptide ID (S###)
        - [13b] do no change or regenerate either C### or S###
    - If not all required info present, error message

BUTTON: Primers>
BUTTON: Add Primer >16a
TABLE
- Table features:
    - Automatically, all table rows are sorted based on Column 1, with the highest values at the top
    - There is a checkbox next to every row (on the left side of the table) to allow selecting 1+ rows. If any rows are selected, then a couple buttons will appear above the table: "Empty entire stock", "Empty tube". If either button is selected, there's a pop up message saying "Are you sure?" and Yes/No buttons. (this whole function is kind of like any email inbox)
        - BUTTON: Empty entire stock
            - The row isn't deleted, just the value for "*# of tubes"* changes to 0
        - BUTTON: Empty tube
            - Subtract 1 from value for "*# of tubes"*
    - Each table header should be a 'button' that can be clicked in order to sort the table by that column. If the table is already sorted by a given column, and that column's table header is clicked again, the order will simply be reversed (just like files folders on a computer)
    - Filters:
        -
        - *Date interval:* show only rows with dates in the chosen interval
    - Search bar
        - Sort of works like "Ctrl+F" in the sense that it doesn't actually alter the page view in any way, it just highlights where the search is found, wherever it is in the table
    - *again: 1 form = 1 row*
- Table headers:
- Column 1 (*Primer ID)*
    - Values: Pr### (auto-generated by form)
    - Sort: First click= high to low (default table sort setting), second click = low to high
- Column 2 (*Sequence*)
    - Values: string of letters (from form)
    - Sort: first click = a to z, second click = z to a
- Column 3 (*Date*)

NAV BAR

- Values: date of form
- Sort: first click = newest to oldest, second click = oldest to newest

<16
FORM
- Title: *Add Primer* [16]
- *User* (autofill, but can be changed)
- *Date* (autofill, but can be changed)
- *Sequence*

<07
PROTOCOLS PAGE
First thing you see is a bunch of squares that represent all the projects, as well as one that's sorta grayed out and says "Add Project"
Clicking on any one of these opens up to a list of all the protocols entered under that project
Clicking on a protocol open a pop up window (kinda like opening a pdf from an email) where you can see the protocol file
This whole page is less detailed than pretty much all the other pages, so my ideas are a little rougher. I think the google drive thing is really smart, especially if that means we could go into the document later on and make changes that would be immediately reflected on the website, since it's just showing whatever is in google drive (rather than having to upload a new file every time something is changed)
If the google drive thing is possible, then I would just want to make sure that somewhere on the page is a button that links to the google drive folder (is that possible?)
Now I'm kinda blanking on how google drive works…doesn't a folder have to be linked to somebody's account? Does that matter for access? Should we ask Jeanine to create a folder, or is it fine if it's on mine or even yours?

BUTTON: Add or Edit Protocols
link to the google drive folder

BUTTON: Add Project (on the grayed out square)
FORM
- *Project Name*
- BUTTON: Add Project (and now this project will forever show up on the protocols page)

(click on any existing project square)
list of protocols
(click on a protocol)
pop up window of file
(exit back to protocol page)

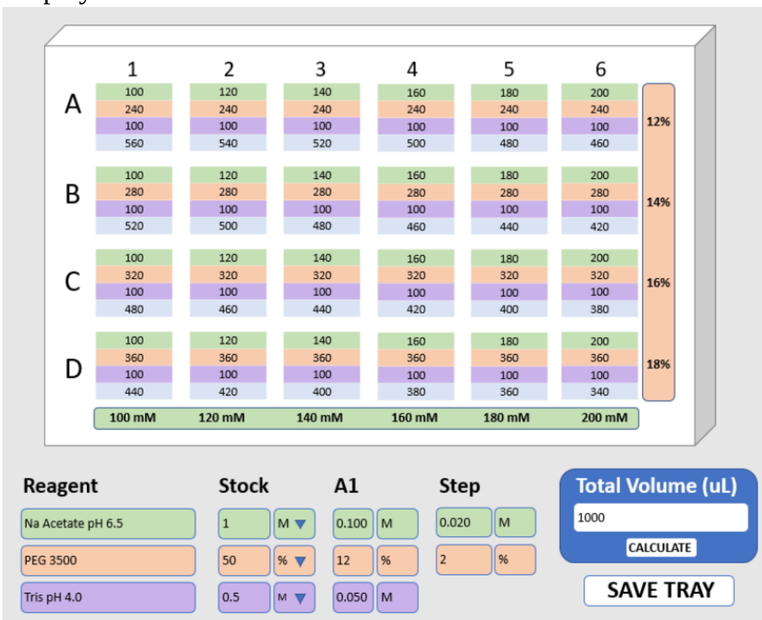
NAV BAR

<08

TRAY CALCULATOR PAGE

First thing you see is a picture of a crystal tray

Display



User doesn't touch the tray image with all the numbers at all, it's all just output values from the formulas

Down here, the user can name each reagent, change any of the numbers, and they can change the units of the "stock" which will automatically change the other units

BUTTON: Calculate

- CLICK: calculates all values for the above picture based on the formulas in the screenshots below

BUTTON: Log Tray (figure says Save tray)

- CLICK: >14

BUTTON (not shown in figure): Saved Trays

- CLICK >15

Formulas:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1			1	2	3	4	5	6	=G23				
2			=($K$16*C18)/$F$22	=($K$16*D18)/$F$22	=($K$16*E18)/$F$22	=($K$16*F18)/$F$22	=($K$16*G18)/$F$2	=($K$16*H18)/$F$2					
3		A	=($K$16*I2)/$F$23	=$C$3	=$C$3	=$C$3	=$C$3	=$C$3					
4			=($K$16*I24)/$F$24	=$C$4	=$C$4	=$C$4	=$C$4	=$C$4					
5			=$K$16-SUM(C2:C4)	=$K$16-SUM(D2:D4)	=$K$16-SUM(E2:E4)	=$K$16-SUM(F2:F4)	=$K$16-SUM(G2:G4	=$K$16-SUM(H2:H4	=I23				
6			=C2	=D2	=E2	=F2	=G2	=H2					
7		B	=($K$16*I6)/$F$23	=$C$7	=$C$7	=$C$7	=$C$7	=$C$7					
8			=$C$4	=$C$4	=$C$4	=$C$4	=$C$4	=$C$4					
9			=$K$16-SUM(C6:C8)	=$K$16-SUM(D6:D8)	=$K$16-SUM(E6:E8)	=$K$16-SUM(F6:F8)	=$K$16-SUM(G6:G8	=$K$16-SUM(H6:H8	=I2+$L$23				
10			=C6	=D6	=E6	=F6	=G6	=H6					
11		C	=($K$16*I10)/$F$23	=$C$11	=$C$11	=$C$11	=$C$11	=$C$11					
12			=$C$4	=$C$4	=$C$4	=$C$4	=$C$4	=$C$4					
13			=$K$16-SUM(C10:C1	=$K$16-SUM(D10:D1	=$K$16-SUM(E10:E1	=$K$16-SUM(F10:F1	=$K$16-SUM(G10:G	=$K$16-SUM(H10:H	=I6+$L$23				
14			=C10	=D10	=E10	=F10	=G10	=H10			Total Volume		
15		D	=($K$16*I14)/$F$23	=$C$15	=$C$15	=$C$15	=$C$15	=$C$15			number	(always uL)	
16			=$C$4	=$C$4	=$C$4	=$C$4	=$C$4	=$C$4			1000		
17			=$K$16-SUM(C14:C1	=$K$16-SUM(D14:D1	=$K$16-SUM(E14:E1	=$K$16-SUM(F14:F1	=$K$16-SUM(G14:G	=$K$16-SUM(H14:H	=I10+$L$23				
18		=G22	=I22	=C18+$L$22	=D18+$L$22	=E18+$L$22	=F18+$L$22	=G18+$L$22					
19													
20				Reagent		Stock Concentration			A1			Step	
21			input type	text		number	% or M		number	% or M		number	% or M
22			horizontal	"salt"		50	%		14	=G22		2	=G22
23			vertical	"PEG"		1	M		0.05	=G23		0.05	=G23
24			no change	"another salt"		1	M		0.2	=G24		none	

Forgot to include this if statement for cell C4:

If there is a value in F24,
Compute as formula is right now

Else (if there is no value entered)
Set C4 = 0

NAV BAR

Tester: (these input values should get these results)

	A	B	C	D	E	F	G	H	I	J	K	L	M
1			1	2	3	4	5	6	M				
2			280	320	360	400	440	480					
3		A	50	50	50	50	50	50	0.05				
4			200	200	200	200	200	200					
5			470	430	390	350	310	270					
6			280	320	360	400	440	480					
7		B	100	100	100	100	100	100	0.1				
8			200	200	200	200	200	200					
9			420	380	340	300	260	220					
10			280	320	360	400	440	480					
11		C	150	150	150	150	150	150	0.15				
12			200	200	200	200	200	200					
13			370	330	290	250	210	170					
14			280	320	360	400	440	480			Total Volume		
15		D	200	200	200	200	200	200	0.2		number	(always uL)	
16			200	200	200	200	200	200			1000		
17			320	280	240	200	160	120					
18		%	14	16	18	20	22	24					
19													
20				Reagent		Stock Concentration			A1			Step	
21			input type	text		number	% or M		numb	% or M		number	% or M
22			horizontal	"salt"		50	%		14	%		2	%
23			vertical	"PEG"		1	M		0.05	M		0.05	M
24			no change	"another salt"		1	M		0.2	M		none	

<14

No form necessary here, just have a temporary pop up that says "Tray saved" and fades away (like the "added to queue" message in spotify)

<15

Saved Trays

Just basically a page that shows all trays saved before in a table format. You can select any one row to open up the actual tray

TABLE

- Table features
  - Auto sorted by column 1
  - Sort by any column (2 directions)
  - Filters:
    - *Date*
    - *Added by*
    - Search bar
- Table headers: *Date Saved, Horizontal, Vertical, No change, Added by*
- Column 1 (*Date Saved*)
  - Value: date
  - Sort: first click: newest to oldest, second click: oldest to newest
- Column 2 (*Horizontal*)

NAV BAR

- Value: reagent (green), range ("C18"-"H18")
- Sort: first click = a to z, second click= z to a

- Column 3 (*Vertical*)
  - Value: reagent (pink), range ("I2"-"I14")
  - Sort: first click = a to z, second click= z to a
- Column 4 (*No change*)
  - Value: reagent (purple, if there is anything there), constant value ("I24")
  - Sort: first click = a to z, second click= z to a
- Column 5 (*Added by*)
  - Value: user name
  - Sort: first click = a to z, second click= z to a

Not sure if I want the whole "save as a new tray" or "save changes" options

<09

CONTACT PAGE

Table with all users who selected "Add to contact list?"

TABLE

- Table features:
  - Automatically sorted by newest to oldest entries
  - Table sort parameters can be changed by clicking on a table header once or twice
- Table headers: *Name, Email, Phone, Preferred contact method*
- Fill out based on user's registration info, or any changes they make later by going to the profile page

<10

PROFILE PAGE

main objective here is just to give a place to make changes to any of the info input at registration
again, another flexible page
I guess what would actually be visible on the page is all the information as it currently exists, and then probably a BUTTON: "Edit Profile" that turns the page into an active form where things can be edited
Maybe it would be fun to have a BUTTON: "Add Profile Picture" and really the only place it would show up publicly is next to your row on the Contact page, and then maybe it could show up next to the word "Profile" on the Nav bar. If there is no profile pic set, it could just default to an icon of the user's initials

NAV BAR