\*\*Note: Some mockup components are just place holders (data grid for example) and the actual finished version will look different.

# Components

## **Navigation**

- Main navigation should be the same across the site for user personas (Faculty / Admin)
- Nav content:
  - Page Links (Admin)
    - Dashboard
    - Analyze Data
    - TIP Editor
    - FAQs
  - Page Links (Faculty)
    - Dashboard
    - Analyze Data
    - TIP Assessment
    - FAQs
  - Everyone
    - Dropdown button with (near it should be an indication of user login)
      - Profile settings
      - logout

## Filter Dashboard

- Filters will be shown as a side panel of collapsible buttons
- When clicked, the user will be shown the input for that criteria
- Basic search process:
  - Query is constructed using user-specified filters when user presses the "analyze" button
  - This will update the page components with relevant results
  - Search is triggered by the "analyze" button, which will be when we know they've applied all the filters they want for the current database query
- Considerations
  - Because the user might want to search with multiple input for each filter type, the input\_id should be dynamically updated with each search (first entry = entry1, etc.)
  - To keep search criteria current, we should avoid hard coding anything for maintainability
  - We might want to consider allowing admins to update the following filters if the assessment is modified:
    - Action Taken
- For functionality, it might be nice if filters were displayed in the side panel as subcategories:

- Date
  - Quarter
  - Date Range
- Departmental
  - Faculty Name
  - Course
  - Department
- o Education Outcome
  - Keyword
  - Question
  - Learning Outcome
  - Action Taken

## **Filter Input**

\*\*Note: The feasibility of some of these should be reviewed further. Perhaps we could ask if these are the analysis tools required prior to implementation.

## 1. Keyword

- Text input
  - o id: keyword<counter>
  - Tool tip: Narrow results to assessment responses including these words
  - Autosuggest would be a nice feature
- Trigger
  - o id: keyword\_go
  - Type: button "add criteria"
- Considerations
  - Need to determine if we consider sentences keywords
    - Example: if they input a sentence, should the query return only records with that exact sentence (same pattern), or should it return anything that contains any of the words in the sentence.
    - Perhaps we should have a search by phrase feature....tbd

## 2. Department

- Radial buttons
  - o Id: AHSS, HHS, BEIT, BTS, HHS, LIB, M&S (the departments)
  - Tool tip: Narrow results to assessments submitted by faculty in these departments.
- Trigger
  - id: dept\_go
  - Type: button "add criteria"
- Considerations
  - Would they want the full name of the departments displayed?

#### 3. Question

• Drop Down:

- Id: question number (as in whatever it's number is in the assessment)
- Tool tip: Results will only include response text from specified questions (By default, all response data is included)
  - The actual drop down items should be displayed as question numbers, and when hovered, contain a tooltip with question text, just so the drop down isn't outrageous looking)
- Trigger
  - id: question\_go
  - Type: button "add criteria"
- Considerations
  - Because they will be able to edit the TIP, we should have the drop down populate with the text from the questions in a drop down
  - Because certain questions contain basic information, maybe in the TIP editor, we include a feature that allows a way to specify include these questions in search filters (tool tip could explain what it is for)
  - Because of these considerations this might not be feasible

#### 4. Course

- Drop Down
  - Id: course\_number<counter>
  - Tool tip: Narrow results to assessments submitted for this course only
- Trigger
  - o id: course\_go
  - o Type: button "add criteria"
- Considerations
  - Would they want full course name, or the abbreviation
  - Should be populated from whatever courses are currently offered

#### 5. Quarter

- Drop down
  - Id: quarter<counter>
  - Tool tip: Narrow results to assessments submitted during this quarter
- Trigger:
  - Id: quarter\_go
  - Type: button "add criteria"
- Considerations
  - Should provide a way to select all quarters data is available for

#### 6. Learning Outcome

- Drop Down
  - Id: lo<counter>
  - Tool tip: Narrow results to assessments regarding this learning outcome
- Trigger
  - o id: lo\_go
  - Type: button "add criteria"
- Considerations

 Drop down should display the NSC learning outcomes (which shouldn't be hard coded because they will change -- we were told that at the meeting)

## 7. Faculty Name

- Text Input (autosuggest)
  - o Id: name<counter>
  - Tool tip: Narrow results to assessments submitted by a specific faculty member
- Trigger
  - o Id: name\_go
  - Type: button "add criteria"
- Considerations
  - We should determine if this should be shown to faculty or just administrators, or more specifically, we should clarify which sections faculty should be able to search by, or how they access the data (if at all)

#### 8. Action Take

- Drop down
  - Id: action<counter>
  - Tool tip: Narrow results to only include assessments regarding a specific change made to curriculum by a faculty member (as indicated by their TIP response)
- Trigger
  - o ld: ao\_go
  - Type: button "add criteria"
- Considerations
  - Dropdown should be populated with response options from Q11

#### 9. Date Range

- 2 drop down calendars (start, end)
  - Id: date range<counter>
  - Tool tip: Narrow results to assessments submitted during this date range
- Trigger:
  - Id: date\_range\_go
  - Type: button "add criteria"
- Considerations

## **Main Content**

- Default view should be populated with data from all records for current time period
- View will be updated:
  - When the analyze button is pressed

- When a suggested search is selected (if this feature is included)
- The graph refresh circle is pressed (used when graph type is changed)
- The clear all filters button is pressed, and the refresh button is clicked

#### **Result Stats**

- Data displayed:
  - Number of records in the result set
  - Pie chart representing what percentage of total data (for selected time period)
    this data represents

#### **Current Filters**

- Data Displayed:
  - The input value of selected filters as a tag
  - o If tag "X" is clicked, filter will be dropped from search criteria

#### **Data Visualization**

- The data visualized should be insights commonly considered among all datasets
  - The only panel that wouldn't be toggled is the learning outcomes one
  - The following areas of content are ideas I've thought of, but are just my ideas, and can be changed, but the basic premise is the same data sets, with a drop down for the different charts they are applicable to. Each "panel" should have a check box next to it, which would be used to indicate if it should be included in the data export or not.
  - Response by department panel
    - Summary
      - Display shows response count by department
    - Graph Type Drop Down Content
      - Bar Chart: <a href="https://bl.ocks.org/mbostock/3886208">https://bl.ocks.org/mbostock/3886208</a>
      - Pie Chart: <a href="https://bl.ocks.org/mbostock/3887235">https://bl.ocks.org/mbostock/3887235</a>
      - Donut Chart: <a href="http://bl.ocks.org/dbuezas/9306799">http://bl.ocks.org/dbuezas/9306799</a>
  - Frequency of words by question
    - Summary
      - Drop down allows for user to select from the following questions
        - What is the problem of lesson you identified and will be discussing in this TIP? (Question 6)
        - Please describe more specifically how you identified the problem? (Question 10)
        - Specifically, what did you do to address the problem?
          (Question 12)
        - Please describe more fully how you assessed the impact of the change you made? (Question 14)
      - Graph Type: Bubble visualization (<a href="http://www.infocaptor.com/bubble-my-page">http://www.infocaptor.com/bubble-my-page</a>)Re
    - Tool Tip: Select a question and identify trends in response with our heat map.

- Response by learning outcome Galaxy Chart
  - https://risacher.org/galaxy-chart/
  - The value of a category is the sum of its children
  - Category = learning outcome
  - Children = NSC department
  - Would be a cool way to see which learning outcomes are being addressed most, and by which department.
  - Tool tip: Each NSC learning outcome is represented by the frequency with which it was addressed in TIP response data by each department.
- Features will be built using the D3.js library
- Implementation details still need to be hammered out

#### Records

- Data Displayed:
  - o A data grid will include a scrollable list of all the records in the result set
  - The checkboxes indicate which records will be included for data export
  - To search for specific record in the grid, Select from the "search by" drop down either name or department, and then enter the text to narrow results displayed.
  - Columns:
    - Name
      - faculty name
      - Sortable alphabetically (first, last)
    - Department
      - Department Full Name (not just abbreviation)
      - Sortable alphabetically
    - TIP Assessment
      - Clickable link to view assessment as screen popover
      - Clickable icon that will download the response as a pdf

## Data export

- When the export data button is clicked, the selected data from the areas above should be exported as a pdf
  - The responses included should reflect the questions specified in the search filters
    - By default, include all question responses
    - If a question is selected for inclusion, only include those specified
- Considerations:
  - Should front end be in charge of figuring out data export (just because I assume we'll have to format the pdf somehow)