Graduation Date Filtering

User Goal: Being able to search for all students who graduate on, before, or after a specific date.

Part 1: Getting and searching by a specific date.

Part 2: Sorting by before or after a specific date.

Sorting By Graduation Date

In The View:

The following div and form elements should be added to app\views\students_search_form_html.erb under the Search By Major field. They implement a field where a date can be typed as mm / dd / yyyy, or manually selected using a built-in calendar option. The input value is then passed as :graduation_date.

```
<div>
    <%= form.label :graduation_date, "Select Graduation Date", class: "form-label" %>
    <%= form.date_field :graduation_date, value: params.dig(:search, :graduation_date), name: 'search[graduation_date]', class: "form-control" %>
    </div>
```

In the Controller:

Implement the following if statement to check if the search query contains a graduation date or if the field was left blank.

```
if @search_params[:graduation_date].present?
end
```

Inside the if statement but before the end statement, insert the if/elsif/else sequence below. The statements will read the value of :beforeafter from the form (explained in the next section) to determine what comparison to make. Inside of each statement, @students is searched for students whose graduation_date attribute compares to the search form's :graduation_date value. The use of the Date.parse method and "?" instead of direct comparison are used as additional insurance of data integrity.

```
if @search_params[:beforeafter] == "Before"

    @students = @students.where("graduation_date <= ?",
Date.parse(@search_params[:graduation_date]))
    elsif @search_params[:beforeafter] == "After"

        @students = @students.where("graduation_date >= ?",
Date.parse(@search_params[:graduation_date]))
    else
        @students = @students.where("graduation_date == ?",
Date.parse(@search_params[:graduation_date]))
    end
```

```
if @search_params[:graduation_date].present?
# Print the selected date and the selected timeframe choice
Rails.logger.info "#{Date.parse(@search_params[:graduation_date])}"
Rails.logger.info "#{@search_params[:beforeafter]}"

# Sorts by timeframe choice, or only the exact date if timeframe was left at the default.
if @search_params[:beforeafter] == "Before"
| @students = @students.where("graduation_date <= ?", Date.parse(@search_params[:graduation_date]))
elsif @search_params[:beforeafter] == "After"
| @students = @students.where("graduation_date >= ?", Date.parse(@search_params[:graduation_date]))
else
| @students = @students.where("graduation_date == ?", Date.parse(@search_params[:graduation_date]))
end
end
```

However, there is not yet anything to specifically handle a search where neither a major nor a graduation date was input (even if the timeframe is specified). Insert the following statement, which will show zero students as there are zero valid criteria.

```
if (@search_params[:major].present? == false) && (@search_params[:graduation_date].present? ==
false)
    @students = @students.none
end

if (@search_params[:major].present? == false) && (@search_params[:graduation_date].present? == false)
    # If neither major nor date are supplied when search is pressed, this will show no students.
    @students = @students.none
end
```

Sorting By Timeframe

In the View:

The following div and form elements should be added to app\views\students_search_form_html.erb right above or below the graduation_date form elements. They implement a dropdown where the default option is "Exact Date", but other selectable options are "Before" and "After". The chosen value is then passed as :beforeafter.

In the Controller:

If instructions from the prior section were followed, the if/elsif/else statements evaluating :beforeafter are already implemented and nothing else needs to be added inside the outer if statement. For clarity, the sequence checks if the user selected "Before", then "After", or does an "Exact" comparison if neither was

selected (because Exact is the default option). For a transcribed excerpt, see **Sorting By Graduation Date** under **In the Controller**.

```
if @search_params[:graduation_date].present?
# Print the selected date and the selected timeframe choice
Rails.logger.info "#{Date.parse(@search_params[:graduation_date])}"
Rails.logger.info "#{@search_params[:beforeafter]}"

# Sorts by timeframe choice, or only the exact date if timeframe was left at the default.
if @search_params[:beforeafter] == "Before"
| @students = @students.where("graduation_date <= ?", Date.parse(@search_params[:graduation_date]))
elsif @search_params[:beforeafter] == "After"
| @students = @students.where("graduation_date >= ?", Date.parse(@search_params[:graduation_date]))
else
| @students = @students.where("graduation_date == ?", Date.parse(@search_params[:graduation_date]))
end
end
```