Basic Specification

* Should store a list of database item objects
  + Name
    - User input
  + Per-Unit Cost
    - User input
* Should store a separate list of budget item objects (we want to keep our legacy budgets the same even if we update our item database).
  + Name
    - Initialize with database item list
  + Per-Unit Cost
    - Initialize with database item list
  + Recurring Quantity
    - User Input
      * Must be less than or equal to total quantity. If we reduce total quantity below current recurring quantity, we should set them equal.
  + Total Quantity
    - User Input
      * Must be greater than or equal to recurring quantity. If we increase recurring quantity above total quantity, we should set them equal.
* Main Menu Interface
  + Title
  + Button to take us to Item Database
  + Button to take us to Budget List
* Item Database
  + Title
    - Button to go back to main menu
  + Creating new database item
    - Underlined Text Field => for name for new item
    - Underlined Text Field => for cost of new item
      * Formatted?
    - Button to
      * Add new item to database item list
      * Update UI
  + Divider Line
  + Grid for Database Item information
    - First row 2 columns (Name, Per-Unit Cost)
      * Buttons to Sort list by name or by per-unit cost
    - Remaining rows have 4 columns
      * Buttons to delete items from database
        + Maybe add “Are you sure?”
      * Item names
      * Per unit cost
      * Scroll bar on the end.
* Budget List
  + Title
    - Button to go back to main menu
  + Creating new budget
    - Underlined Text Field => Name of the budget
    - Underlined Text Field => The length, in days, of the budget
    - Button to
      * Create new budget
        + Uses current Item Database
      * Update UI
  + Divider Line
  + Grid for Budget List Information
    - First row 2 columns (Name, Days)
      * Buttons to sort list by Name or Days
    - Remaining rows have five columns
      * Buttons to delete budget from database
        + Maybe add “Are you sure?”
      * Buttons to go to budget
      * Budget Name
      * Budget Days
      * Scroll Bar
* Individual Budget Display
  + Title
    - Button to go back to budget list
  + Show Aggregate Info (Should update based on changing quantities)
    - Total Expenditures
    - Predicted Expenditures
    - Recurring Expenditures
    - Non-Recurring Expenditures
  + Divider Line
  + Grid For Budget Item Information
    - First row has 4 columns (Name, Total Quantity, Recurring Quantity, Total Cost)
      * Buttons to sort over each field
    - Remaining rows have 5 columns
      * Item names => Display only, don’t change here
      * Text Fields => Total Quantities
        + Update on Enter:

Budget Item List

UI

Aggregate Info

Recurring Quantities

Total Cost Fields

* + - * Text Fields => Recurring Quantities
        + Update on Enter:

Budget Item List

UI

Aggregate Info

Total Quantities

Total Cost Fields

* + - * Total Cost => Display only, respond to changing quantities
      * Scroll Bar

Other Thoughts

1. Could simplify Item Database and Budget List by making it so when you click on a row, it highlights the row, and then there’s only one button on the entire ui to delete stuff, and one button on the budget list ui to go to that budget.
2. Color scheme needs serious work
3. I don’t know javax.swing\* well enough right now to pull this off… I don’t know if it has all of the utility needed for this. I know that there’s another Java package mentioned briefly in the week 2 videos…
4. Excel can basically do everything that this app would do… it’s more of a project.
   1. NEW IDEAS ARE ALWAYS WELCOME!!!