Ateam 1
Milk Weights

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Project Description:
Create an interactive data visualizer program with a graphic user interface (GUI) to help a local farm analyze and report on the milk that has been sold to them by their farmers. The data is in one file per month-year, so a year's worth of data is in 12 files that can be read into the program and used to display results and print reports.

Class Summary:

Enum, interface, class, abstract class	Type Name	Description of use or purpose
Class	FarmReport	Handles the data + display for a farm report
Class	MonthlyReport	Handles the data + display for a monthly report
Class	AnnualReport	Handles the data + display for an annual report
Class	DateRangeReport	Handles the data + display for a report given the start and end date
Abstract class	ReportBase	The bare minimums of a report
Class	Farm	An instance of a single farm, with its ID and milk weights
Class	Milk	An instance of a single milk weight
Class	FarmEditor	Handles any changes made by the user to any Farm
Abstract class	FarmFile	Basic operations: reading/saving from/to a file
Class	CSVFile	Handles the reading and saving

|		from/to a CSV file
Class	JSONFile	Handles the reading and saving from/to a JSONFile
Class	Main	Run the GUI and ask for input

UI Design

We will not exclude missing data from calculating the average. For example, if they forgot to input the milk weight for one day, we will set that day's milk weight to 0 and keep the number of days as 365. Our average algorithm will keep on being **total milk weight / total days in the date range** regardless of missing data.
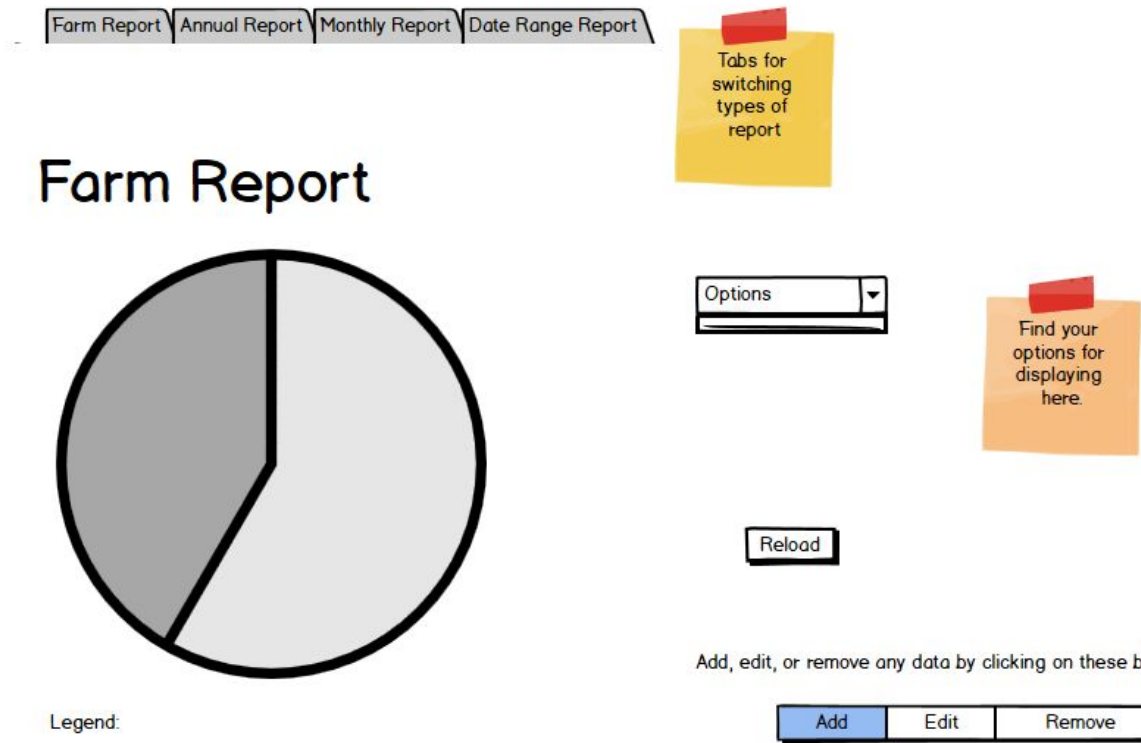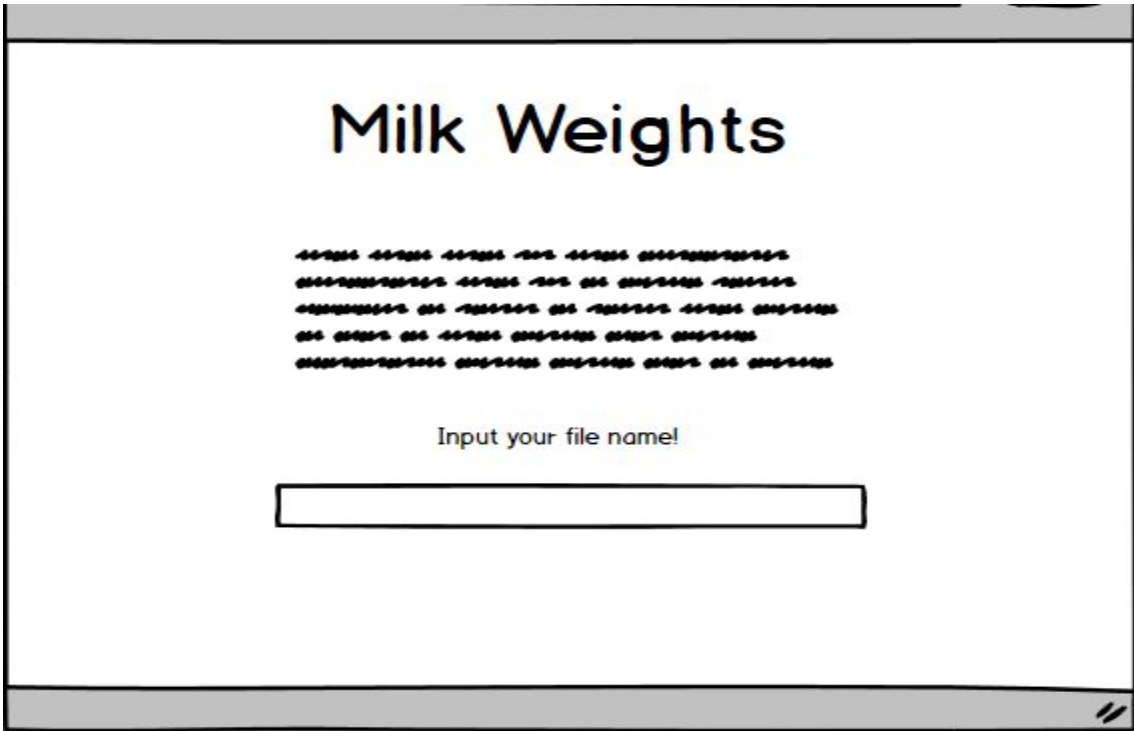
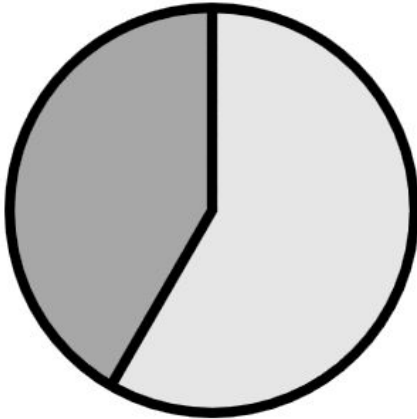## Class Diagram:
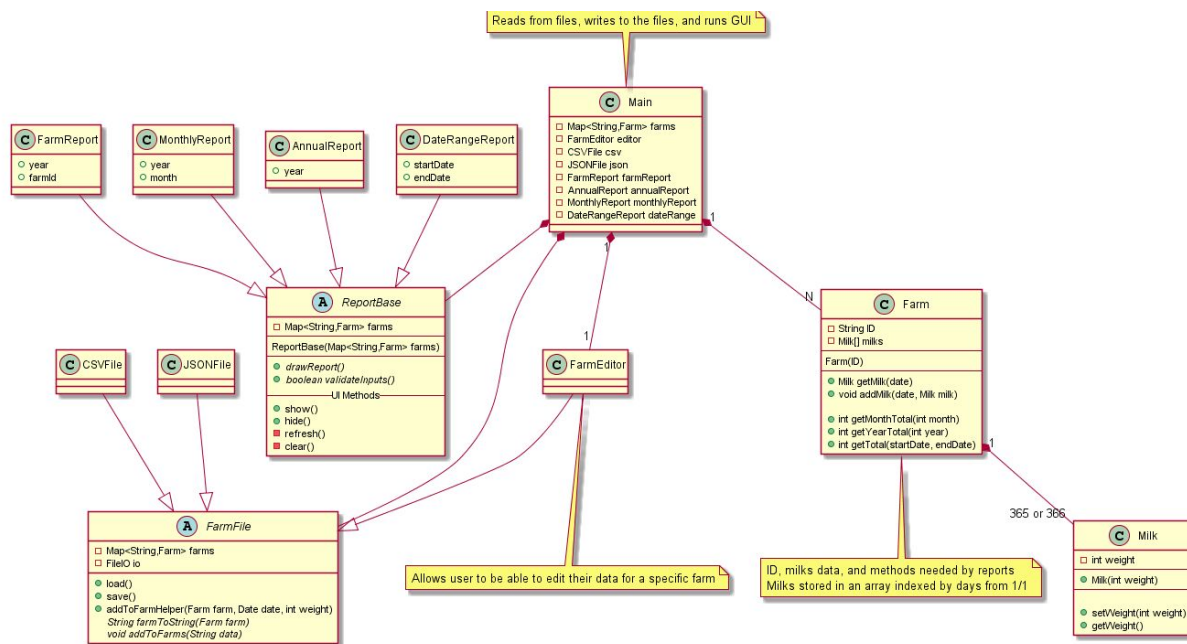
Object Diagram:

Milk Weights
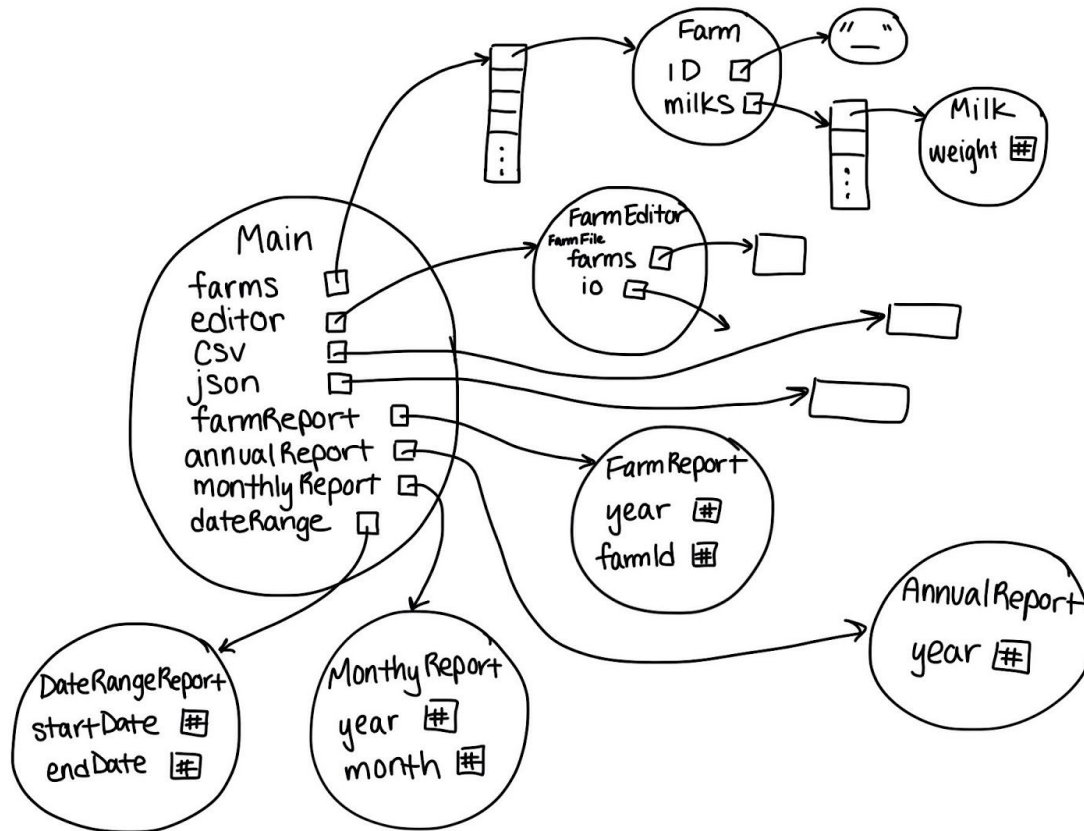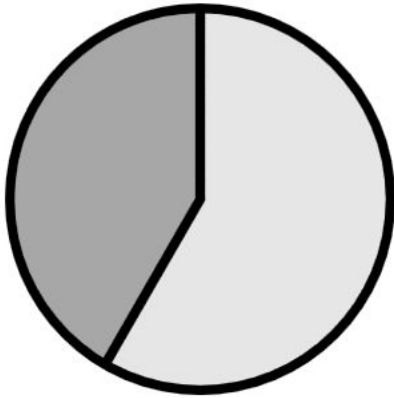
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Input your file name!

```
[                                          ]
```

| Farm Report | Annual Report | Monthly Report | Date Range Report |

Tabs for switching types of report

Farm Report

```
Options        [▼]
[_____]
```

Find your options for displaying here.

```
Reload
```

Add, edit, or remove any data by clicking on these buttons.

| Add | Edit | Remove |

Legend:

| Farm Report | Annual Report | Monthly Report | Date Range Report |

Annual Report

| Options ▼ |

| Reload |

Add, edit, or remove any data by clicking on these buttons.

Legend:

| Add | Edit | Remove |

| Farm Report | Annual Report | Monthly Report | Date Range Report |

Monthly Report

Legend:

Options ▼

Reload

Add, edit, or remove any data by clicking on these buttons.

| Add | Edit | Remove |

| Farm Report | Annual Report | Monthly Report | Date Range Report |

Date Range Report

Legend:

Options ▼

Input your date range

Reload

Add, edit, or remove any data by clicking on these buttons.

| Add | Edit | Remove |

Edit your farm data

Input your data

Farm   [   ]

Month   [   ]

Day   [   ]

Year   [   ]

New milk weight [   ]

[Add]   [Edit]   [Remove]