

a1 ATEAM Project Milestone 1

Design

Project Name: A Farm's Milk Dashboard

Description: The Chalet Cheese factory sells a variety of different cheeses. This project aims to 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.

Class Summary

Type	Name	Description
class	FileManager	Defines required operations to read/write input/output files
class	Farm	Defines a farm and its constituent milk supplies
class	CheeseFactory	Defines a factory that gets its supplies from multiple farms each year
class	DataManager	Defines operations on data manipulations and forming the required data for the visualizer.
class	GUI	GUI class
class	Main	Putting it all together

Class Diagram

FileManager
+ inputFile: String + outputFile: String
+ readFile(): boolean

- + writeToFile(): boolean
- + getFileContents(): String

Farm

- + farmID: String
- + owner: String
- + milkData: DataStructure

- + insertMilkForDate(): boolean
- + editMilkForDate(): boolean
- + removeMilkForDate(): data
- + clearData(): data

CheeseFactory

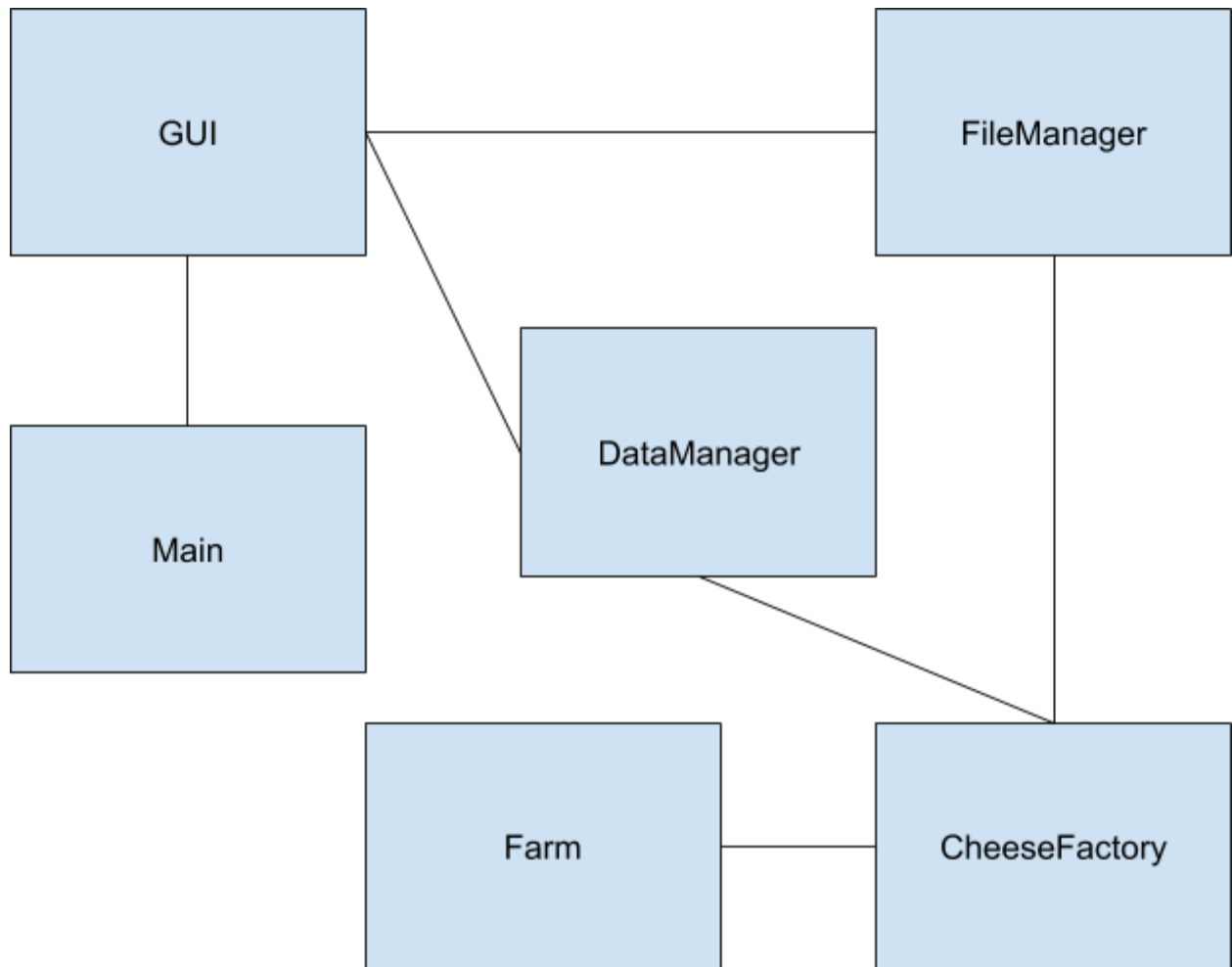
- + name: String
- + milkDataFromFarms: DataStructure

- + insertSingleData(): boolean
- + insertData(): boolean
- + editSingleData(): boolean
- + removeSingleData(): data

DataManager

- + getMonthlyAverage(): data
- + getMonthlyMin(): data
- + getMonthlyMax(): data
- + getMonthlyAverageForFarm(): data
- + getMonthlyMinForFarm(): data
- + getMonthlyMaxForFarm(): data
- + getDataSortedByField(): data
- + getAverageInDateRange(): data
- + getMinInDateRange(): data
- + getMaxInDateRange(): data

Object Diagram



UML Flow Diagram

