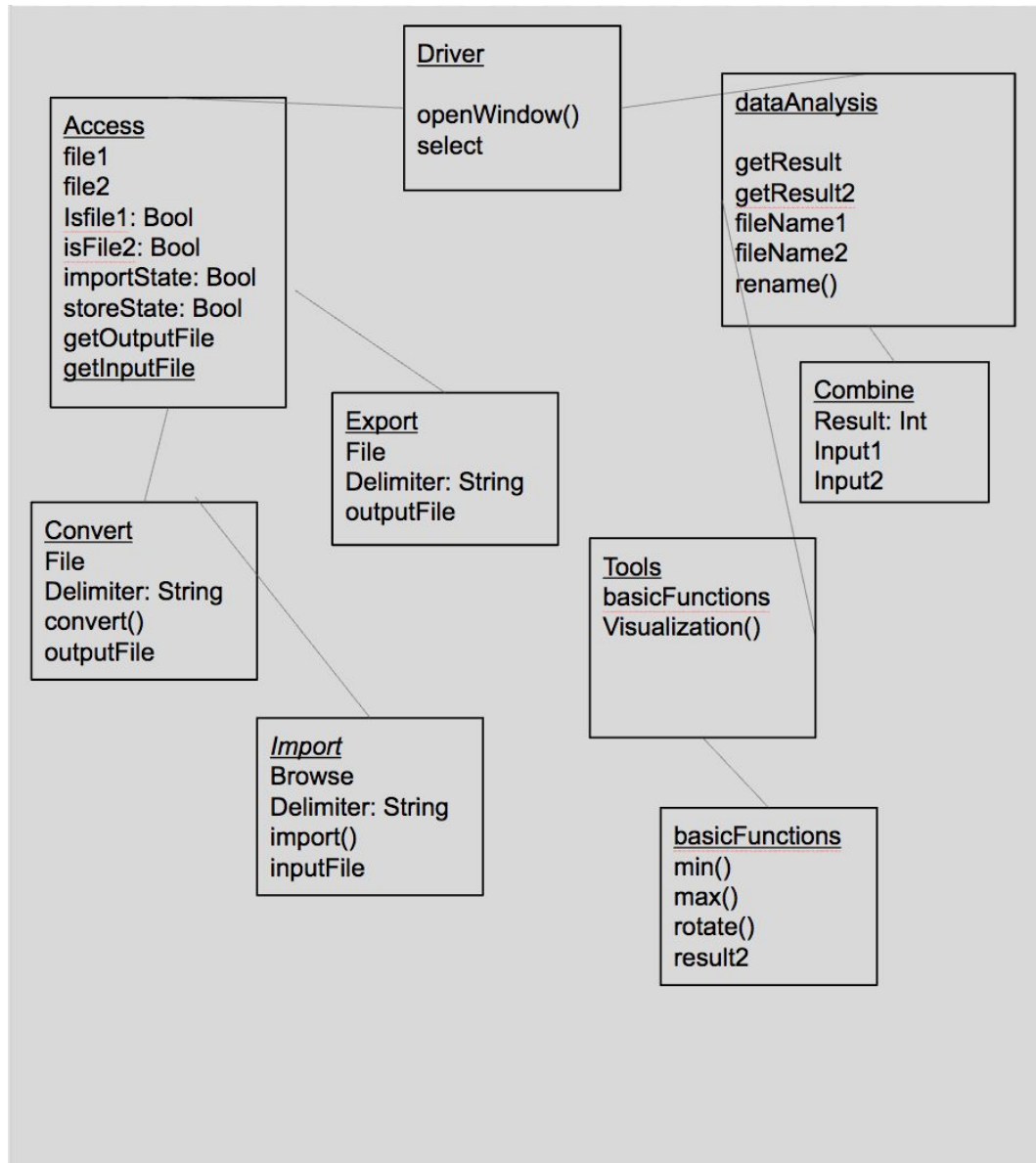


# Data Analysis Tools

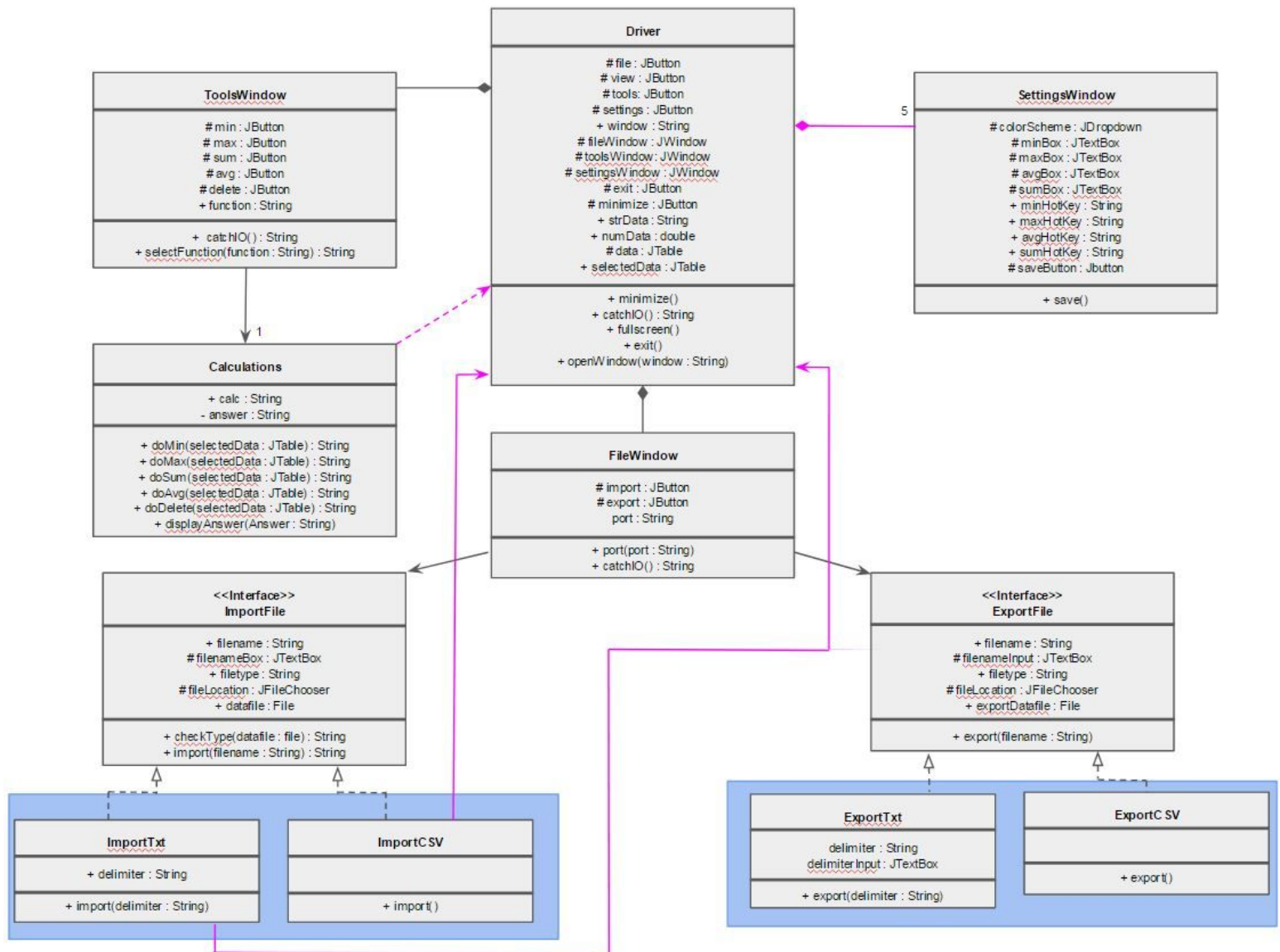
## Project Part 3: Refactoring

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Project Part 2 class diagram:



## Project Part 3 class diagram:



**Describe any design patterns you've applied and show the portions of your new class diagram with those design patterns. Describe any other refactoring you have applied:**

- Changed structure of driver class to included variables w/ types and the included methods
- Corrected mistakes in the structure of the diagram (including arrows and lines, structure of each class, dependencies)
- Added settings class to handle changes to hotkeys and UI
- Added method to save the settings
- Changed dataAnalysis class to Tools class
- Added calculations class as a relation to the tools class
- Changed convert class to File class, with proper Import/Export dependencies
- Because of the poor quality of our first class diagram, it may be difficult to see the exact process of refactoring; but we think we have made large improvements in the class diagram and planning of the application

**Patterns:**

- Used **Strategy Pattern (Represented in Blue Rectangles)** on import and export because different file types require different versions of the algorithm
- With our settings and import functions we are using a **Template Pattern (Represented in Pink Lines)** because we are rendering our display based on the specifics of what is imported (and user preferences), which can change