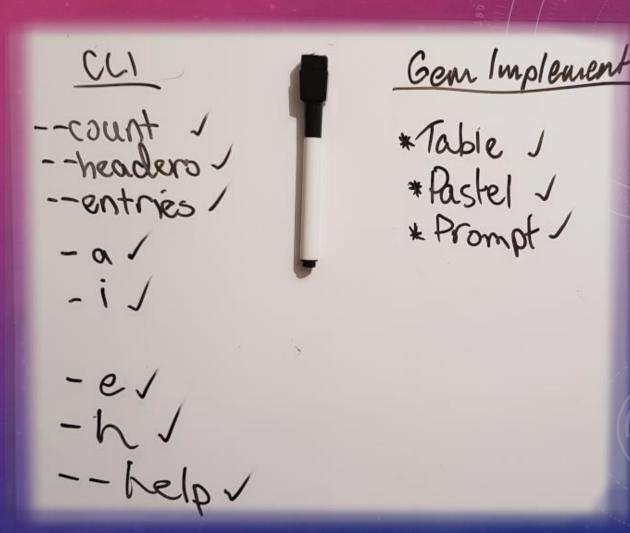


BUILD WORKFLOW DESIGN

As the project was a freeform design, workflow was kept simple by following these steps

- Establish the program idea in a reference document (README.md)
- Write out in detail each individual option the user had available in the document
- Write down each of the gems to be used
- Based on how each part of the implementation of the build performed, reevaluate the program features, scope, functions and required components
- Upon each re-evaluation, update the documentation accordingly

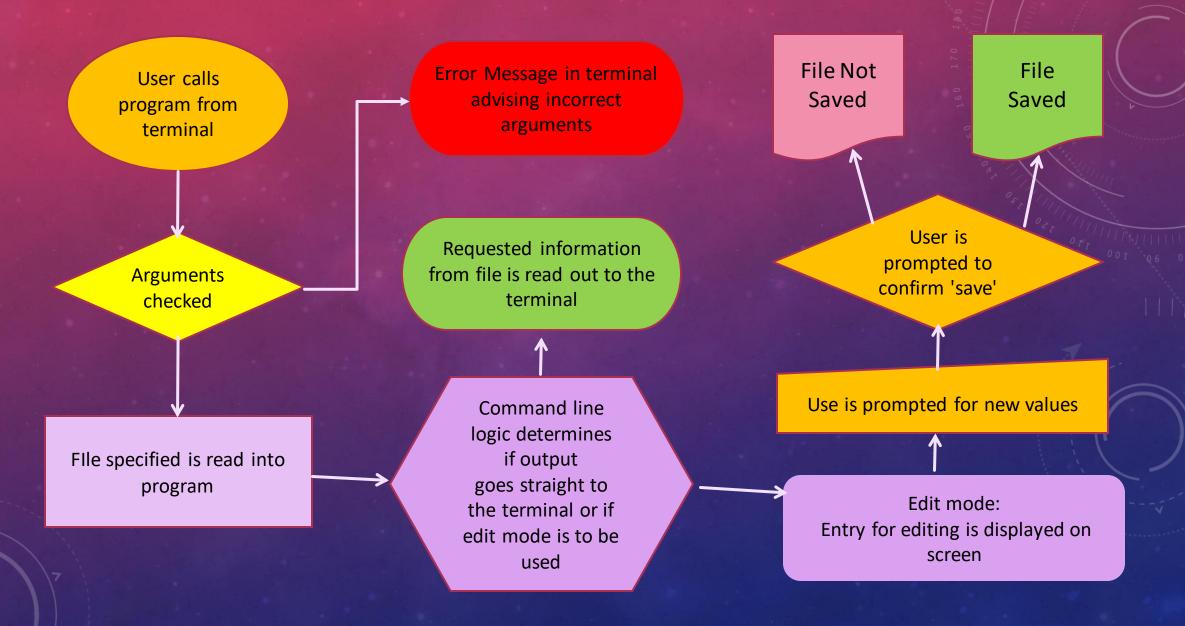


BUILD WORKFLOW IMPLEMENTATION

- The initial part of the build was the main program class and the command line logic
- The command line logic was then moved to its own module to reduce code in the main file for better readability.
- Each feature of the application was coded one after the other.
- For testing purposes, test data was used locally in each file for testing each method
- Once all the methods for each module was deemed working, it was linked in to the main program and tested once again

```
require pascer
          pastel = Pastel.new
          $accepted = pastel.white.on_green.detach
          $rejected = pastel.white.on_red.detach
          $warning = pastel.black.on_yellow.detach
          require "./modules/CSV_IO.rb"
          def file_count_headers
              return "File header count: #{@data[0].length}"
          end
          def file_count_entries
              return "File entry count: #{@data.length - 1}"
          end
          def file_count_headers_and_entries
              return [file_count_headers, file_count_entries]
          def index_output_read(index)
              output = []
              entry = @data[index]
              for field in entry do
                  output.push(field)
                DEBUG CONSOLE PROBLEMS
                                                   1: ruby
Installing ri documentation for wisper-2.0.1
Parsing documentation for tty-screen-0.7.1
Installing ri documentation for tty-screen-0.7.1
Parsing documentation for tty-cursor-0.7.1
```

USER OPTIONS AND PROGRAM FLOW



PERSONAL BENEFITS FROM THE PROJECT

Learnings

- Reading and writing files in Ruby is sometimes better done in pure core Ruby standard constructs rather than relying gems
- The difficulty of implementing a gem is directly proportionate to amount of documentation available for the gem
- Modules are awesome for the DRY principle
- Checking what data (and its structure) has been passed to a method is the best thing to do first when debugging errors
- Sithu Aye has some awesome albums that are great to use as a mental focus tool

Favourite Milestones and Parts

- When code just worked without having to debug an error (it was a rare and welcome sight)
- Getting the ARGV parsing logic right for the command line (This made things so much easier to integrate later on)
- Working out how to transpose multidimensional arrays
- Working with the pastel gem –using aliases made putting together preset themed colours so much easier than doing it manually
- Sleeping after it was finished
- Waking up and realising I wrote approximately 320 lines of freeform refactored code in four days – a new P.B.