Calorie Counter App

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Calorie Counter App

- *A terminal app that counts and tracks the user's calories consumed.*

Problem

For anyone interested in weight management, monitoring & tracking calories become -

- emotionally stressful to be on top of personal recording at all times.
- tedious to manually calculate and create a readable data view.
- difficult to know how you've done it over a period.

Solution

- Navigate menu with clear directions to track and view calorie intake.
- Provide guideline comments daily/weekly.
- Give confidence in weight management.

Audience

Health enthusiast, Busy individuals interested in weight management.

Features

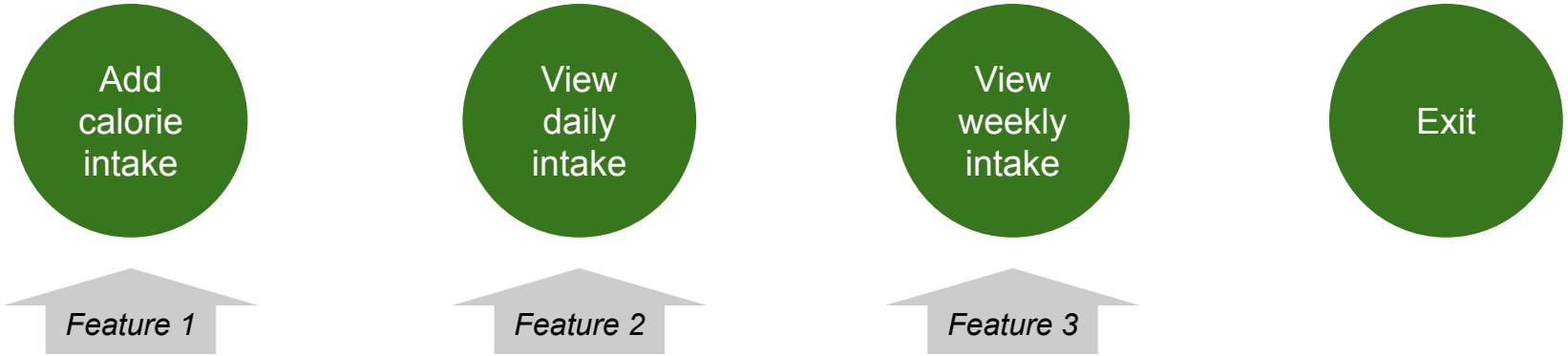
As a user, I want to be able to

1. Record my calorie intake.
2. Calculate and view my calorie intake daily and receive an appropriate health recommendation.
3. Calculate and view my calorie intake weekly and receive an appropriate health recommendation.

Demo

Menu Options

- *Easy to navigate, Clear instructions, Reliable*



Menu Options

User Inputs
- Date (Sat - Sun)
- Food Item (CSV file)
- Portion (0.5/1/1.5/2)

Functions
- Read/Write to CSV files
- Confirms the inputs
- Store user data (date, total calories)
- Error handling
- Add another data

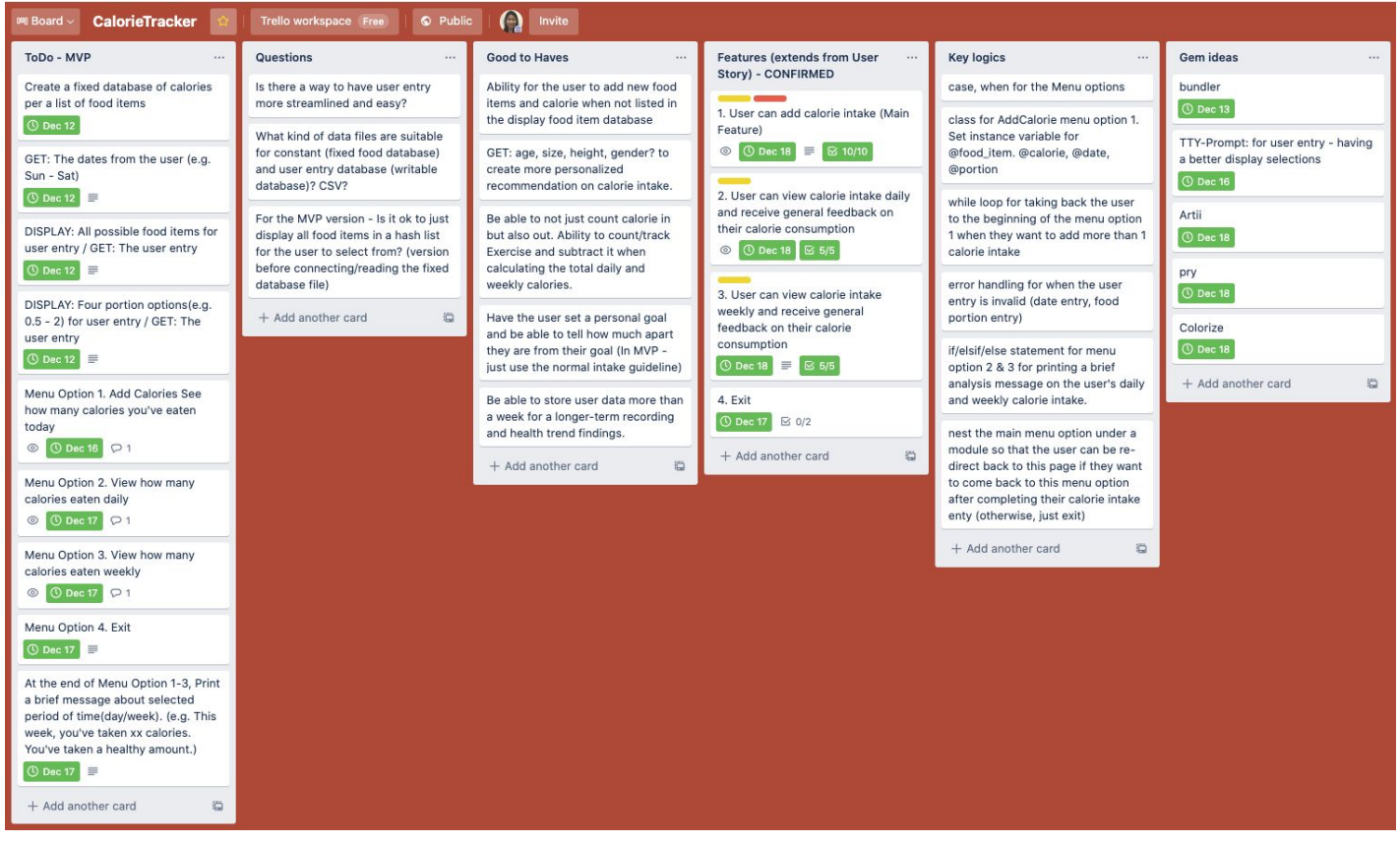
User Input
- Date (Sat - Sun)

Functions
- Calculate daily total calories
- Print brief guideline messages
- Error handling
- Add a new data intake

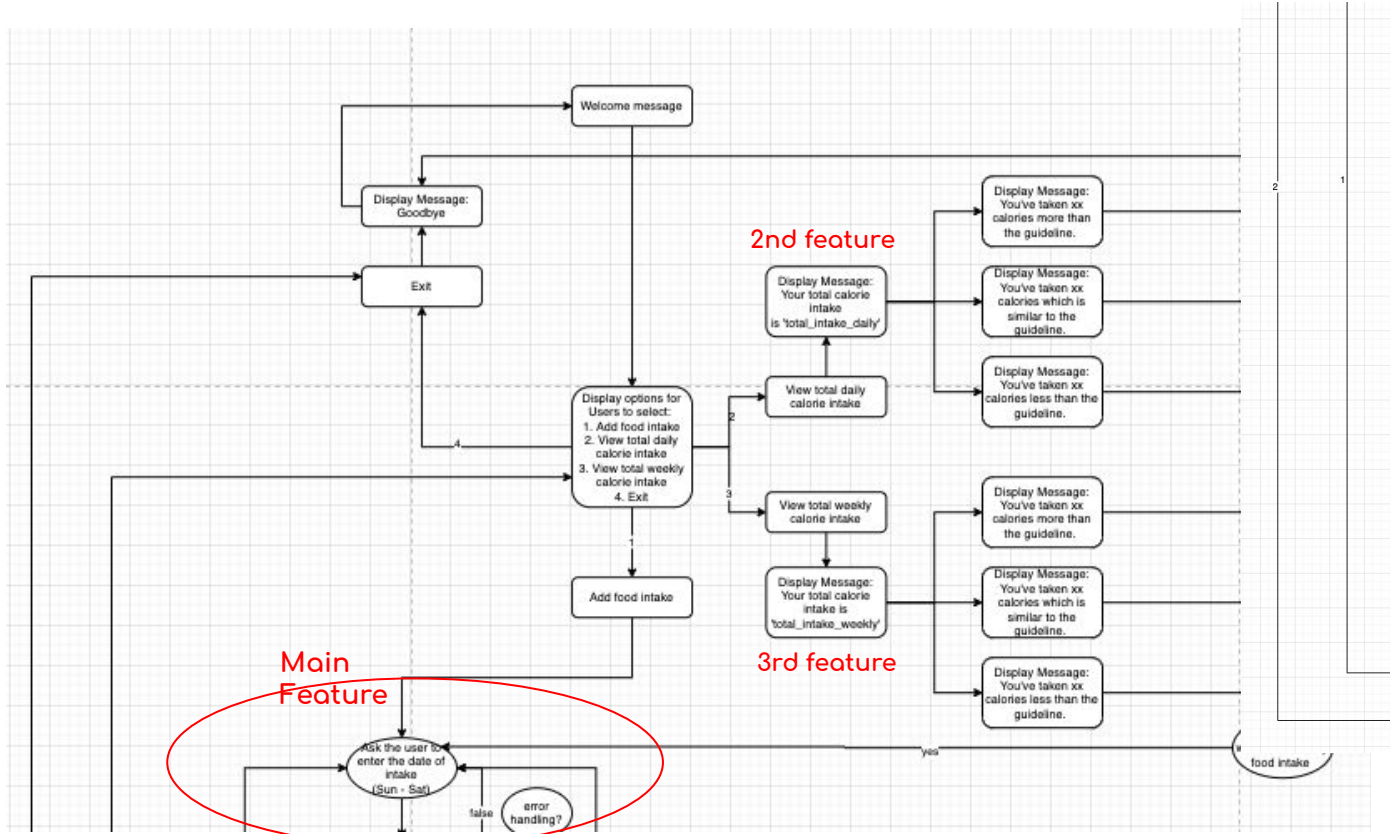
Functions
- Calculate weekly total calories per number of calorie entry
- Print brief guideline messages
- Error handling
- Add a new intake

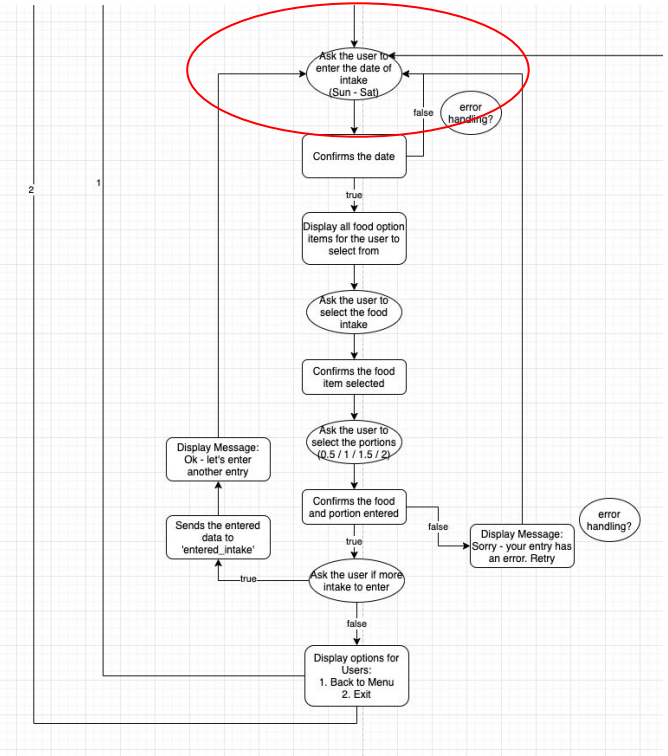
Functions
- Error handling
- Exit

Development Process - Trello board



Development Process - Flow Chart





Key logics of the application

- class AddCalorie
  - initialize objects, create instance variables, added attr_accessor/reader
  - Interacting objects across methods
- case, when for the main menu options
  - while loop to re-run ‘menu 1’ when needed
  - active use of instance variables across the code
  - boolean (re-direct, print calorie analysis)
  - iterators for hash and array
- methods
  - Art
  - welcome
  - Initialize
  - user_select
  - find_food_item
  - handle_input

Key logics of the application

- CSV file
  - Read files (CSV.foreach, CSV.read)
  - Write files: CSV.open(“file_name”, “a +”)
- Error Handling
  - begin/rescue
  - when/else
  - boolean (if/elsif/else)
  - data structure (e.g. .to_i/.to_f, value = 0.0, @date = ‘’)
  - TTY-Prompt
  - pry
  - clear instructions

```ruby
@food_calorie_table = CSV.read("food_calorie_file.csv", headers: true, header_converters: :symbol)
```

```ruby
daily_total_calorie = 0.0
CSV.foreach("user_data.csv", options).with_index do |(d,t), i|
  if d == @date
  t = t.to_i
  daily_total_calorie += t
   end
end
```

```ruby
CSV.open("user_data.csv", "a+") do |csv|
  csv << [@date, total_calories]
end
```

Key logics of the application - main menu

```ruby
class AddCalories
   attr_accessor :date, :food_item, :portion
   attr_reader :calorie
   def initialize
      @date = ''
      @food_item = ''
      @portion = 0.0
      @calorie = 0
      @prompt = TTY::Prompt.new
      @food_calorie_table = CSV.read("food_calorie_file.csv", headers: true, header_converters: :symbol)
       ...
    end
end
```

Key logics of the application - redirect

```
when 1
  while_add_intake_start = true
  while while_add_intake_start == true
...
    puts "Do you have more to add? (Y/N)"
    answer = gets.chomp
...
      if answer == 'Y'
         while_add_intake_start = true
      else
         while_add_intake_start = false
         puts "Goodbye"
         exit(0)
      end
    end
end
```

```
when 3
...
puts "Do you have any new food intake to add? (Y/N)"
  redirect_to_menu_one = gets.chomp
  if redirect_to_menu_one == 'Y'
     puts "Enter 1 to add new calorie intake or enter return to exit"
       AddCalories.new().handle_input
  else
     puts "Goodbye"
     exit(0)
  end
end
```

Key logics of the application - working w/ csv files

```ruby
def user_select
   options = {:encoding => 'UTF-8', :skip_blanks => true}
   CSV.foreach("food_calorie_file.csv",options).with_index do |(f,c), i|
      if f == @food_item
      puts "You've eaten #{@food_item} which is #{c}.".colorize(:light_blue)
          @calorie = c
          user_taken_index = i
       end
    end
end
```

To Read / Write on CSV files

```ruby
CSV.open("user_data.csv", "a+") do |csv|
  csv << [@date, total_calories]
end
```

Key logics of the application - error handling

```
#Error handling: If the `food_calorie_file.csv` cannot be located,
#1)print a error message, 2)create a new csv file with the data, and 3)ensure the user can proceed navigating the app normally.
      begin
          @food_calorie_table = CSV.read("food_calorie_file.csv", headers: true, header_converters: :symbol)
      rescue
          puts "Alert: Couldn't open the food calorie file, so a new food calorie file has been created for you."
          puts "Select the above menu option you want to access (1-4)."
          system('touch food_calorie_file.csv')
          CSV.open("food_calorie_file.csv", "a+") do |csv|
              csv << [:food_item, :calories]
              csv << ['Soy milk with muesli', '236']
              csv << ['Quinoa salad', '222']
              csv << ['Avocado toast', '157']
              ...
          end
          @food_calorie_table = CSV.read("food_calorie_file.csv", headers: true, header_converters: :symbol)
      end
```

Key logics of the application - error handling

```
when 4
  puts "Goodbye"
  exit(0)
else #Error handling: If the user input is wrong, print a helpful message so that the user
can enter valid entry.
  puts "Invalid entry: Please input one of the numeric option between 1-4.".colorize(:red)
  AddCalories.new().handle_input
end
```

Reflection

Challenges:

- Thinking about logic details, sequence at the flowchart stage
- Debugging, Loop errors, Method usage
- Error handling
- Difficulty in composing right questions, reading the web resources and understanding the contents, applying the resource into solving my issues

Favourite parts:

- Project Management (flowchart, implementation planning)
- Making it work, and tuning the code (improving)

All done!