What do I do

- Try to Remember everyone's date of birth?

No. I decided to build a program.

Birthday Wisher

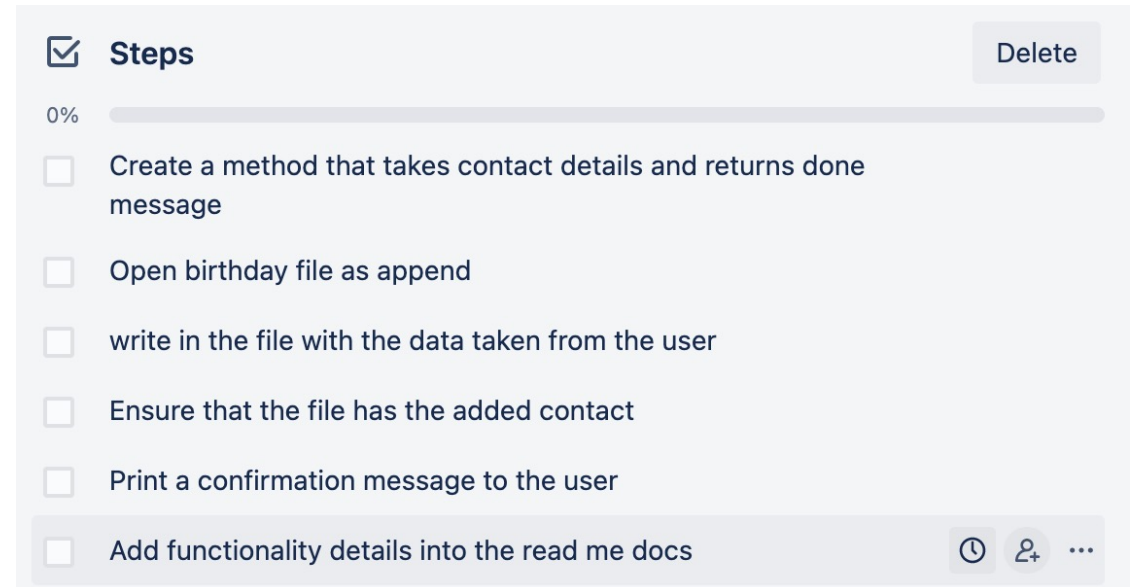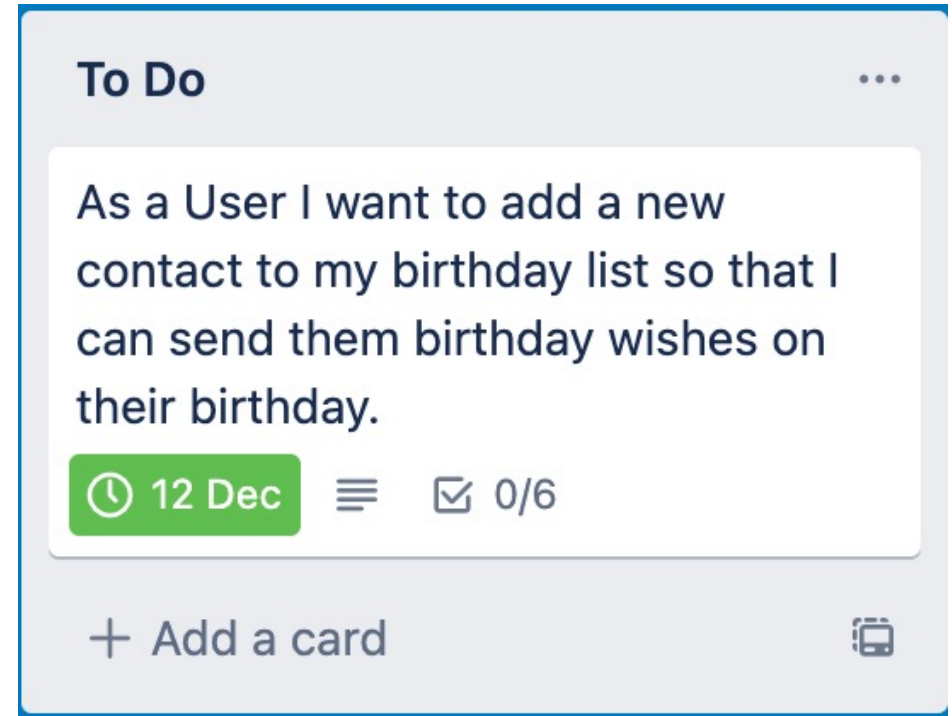Ruby Terminal Application

By.Eman Youssef

Purpose

- To help remember our friend and family 's birthday. And send them birthday wishes

- Marketing department for an online retail store or a loyalty program.

Planning

- Listing the requirements.
- Priorities the requirements based on the dependency.
- Starting building the app with the MOST IMPORTANT with NO Dependency.

To Do ...

As a User I want to add a new contact to my birthday list so that I can send them birthday wishes on their birthday.

🕐 12 Dec   ☰   ☑ 0/6

+ Add a card

☑ **Steps**   Delete

0%

☐ Create a method that takes contact details and returns done message

☐ Open birthday file as append

☐ write in the file with the data taken from the user

☐ Ensure that the file has the added contact

☐ Print a confirmation message to the user

☐ Add functionality details into the read me docs

To Do

As a User I want to know whose birthday is within a custom interval of time so that I can send them a birthday wish in advance.

☑ 6/6

As a User I want to edit my current contacts on my birthday list so that I can send them birthday wishes on their birthday.

🕐 13 Dec   ☑ 8/8

As a User I want to be able to send an email so that I can whish my friends and family "happy birthday" in their birthday .

☑ 0/4

+ Add a card

Work In Progress

As a User I want to know whose birthday is today so that I can send them a birthday wish

☑ 7/7

+ Add a card

Done

As a User I want to add a new contact to my birthday list so that I can send them birthday wishes on their birthday.
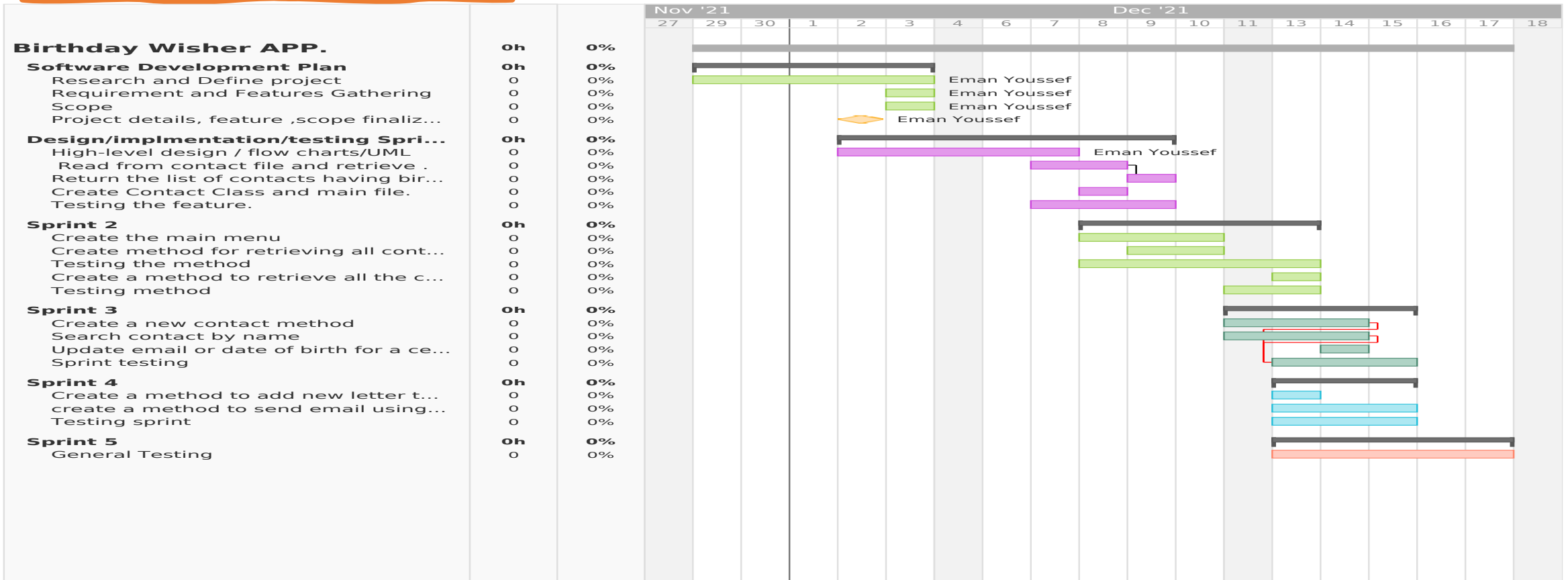
🕐 12 Dec   ☰   ☑ 0/6

+ Add a card

Scope/Features

1. The user can **send a birthday** wish email.

2. The user can **add a contact** to the list.

3. The user can **edit the contact** list.

4. It will randomly pick an email to send to each of these friends in the contact list.

5. The user can **add a new template** .

6. The user can see the **list of contacts** with their details.

Out of Scope

1. Send a text message.
2. Send photos or pictures to the emails.
3. The user cannot search the contact list by a day within the month
4. The user cannot update the details of more than one contact at a time.
5. The user cannot search the contact list by date of birth or email.
6. The application will not save birthdays on a **leap year.**
7. The year of birth is not included in the date of birth.
8. The names of the sender or receiver will not include emojis, emoticons, symbols or other languages.
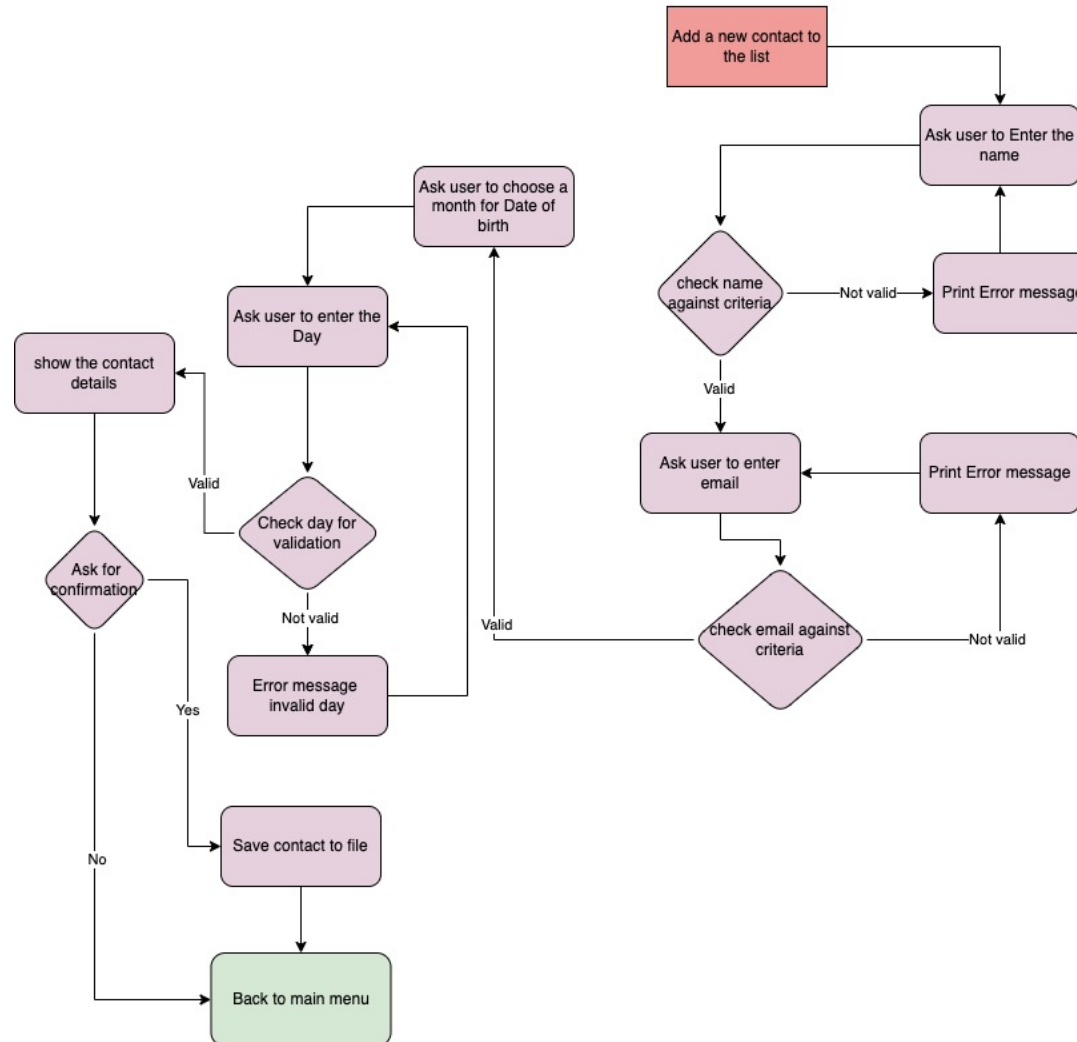
Project Timeline

Birthday Wisher APP.	0h	0%
Software Development Plan	0h	0%
Research and Define project	0	0%
Requirement and Features Gathering	0	0%
Scope	0	0%
Project details, feature ,scope finaliz…	0	0%
Design/implmentation/testing Spri…	0h	0%
High-level design / flow charts/UML	0	0%
Read from contact file and retrieve .	0	0%
Return the list of contacts having bir…	0	0%
Create Contact Class and main file.	0	0%
Testing the feature.	0	0%
Sprint 2	0h	0%
Create the main menu	0	0%
Create method for retrieving all cont…	0	0%
Testing the method	0	0%
Create a method to retrieve all the c…	0	0%
Testing method	0	0%
Sprint 3	0h	0%
Create a new contact method	0	0%
Search contact by name	0	0%
Update email or date of birth for a ce…	0	0%
Sprint testing	0	0%
Sprint 4	0h	0%
Create a method to add new letter t…	0	0%
create a method to send email using…	0	0%
Testing sprint	0	0%
Sprint 5	0h	0%
General Testing	0	0%

Flow Chart
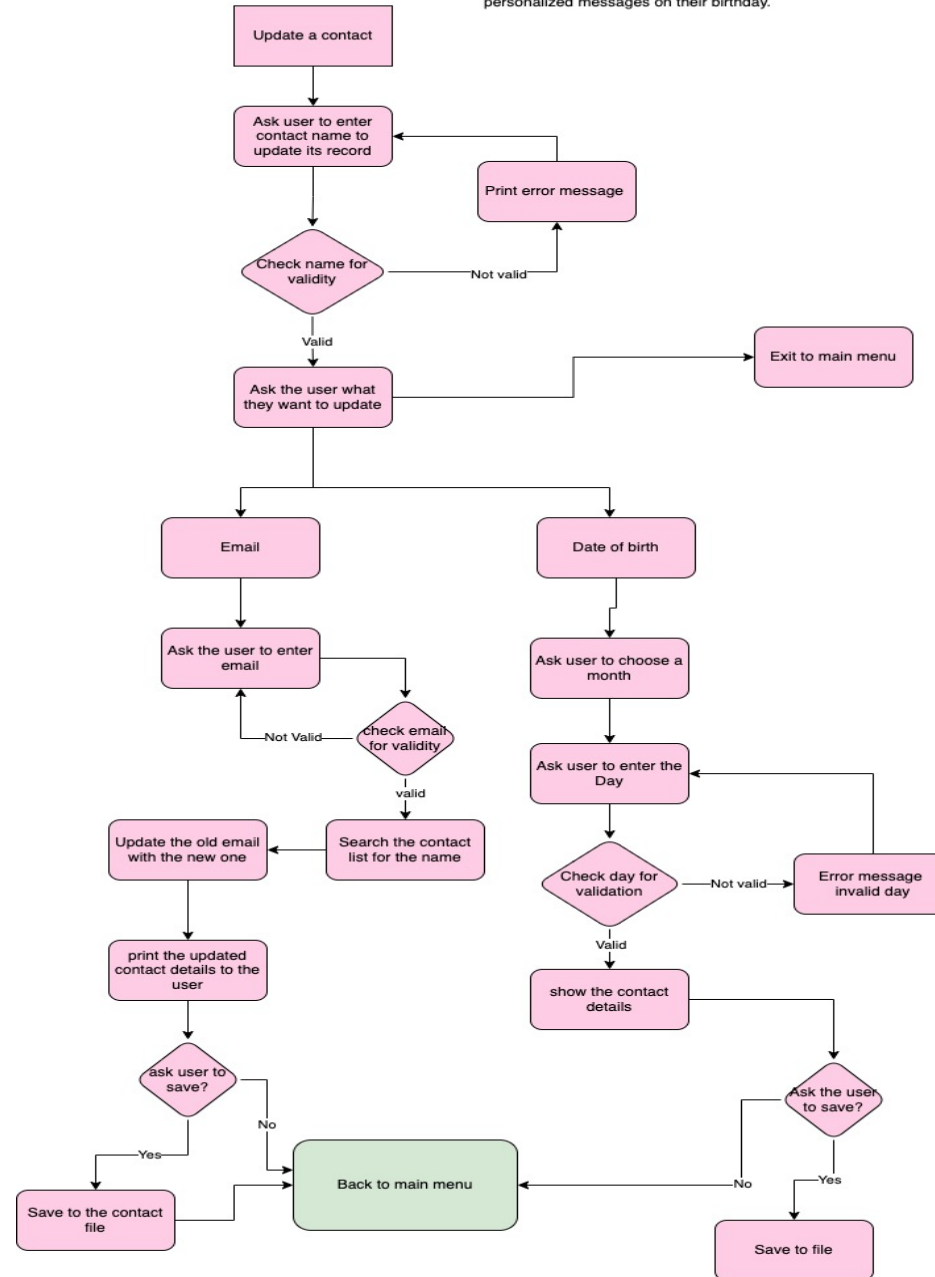
Add a New Contact to the list:

This feature allows the user to add new contacts to thier list so they can keep track of their birthday and can send them personalized messages on their birthday.

Flow Chart

Update Contact :

This feature allows the user to update email or date of birth so they can keep track of their birthday and can send them personalized messages on their birthday.

Gems

- Artii
- tty-prompt
- Tty-table
- pastel
- colorize
- Json.
- Postmark
- Dotenv

Overview

- ## Main Menu

With the main features
While loop and Constant Variable


```
What would you like to do? (Press ↑/↓ arrow to move and Enter to select)
> I want to know whose birthday is today.
  I want to know whose birthday is within an interval.
  I want to add a contact.
  I want to add new letter.
  I want to update a contact.
  I want to remove a contact.
  I want to send Birthday wish to someone.
  I want to see my contact list.
  Exit
```

```
LIST_OF_MAIN_MENU ={
    'I want to know whose birthday is today.'=> 1,
    'I want to know whose birthday is within an interval.'=>2,
    'I want to add a contact.'=>3,
    'I want to add new letter.'=>4,
    'I want to update a contact.'=>5,
    'I want to remove a contact.'=>6,
    'I want to send Birthday wish to someone.'=>7,
    'I want to see my contact list.'=>8,
    'Exit'=>9
}
> while true        You, 6 days ago • add search contact feature , ad
  end
```

Birthdays List (today)


```
Today is Bob's Birthday
+----+--------------+-------------+
|Name|Birthday DD-MM|Email        |
+----+--------------+-------------+
|Bob |16- 12        |bob@email.com|
+----+--------------+-------------+
Do You want to send an email? (Y/n) ▌
```

- Call a method to display a banner
- Call a method to read from Birthday file json to array
- Call a method that check the date of birth and return an array of contacts that match

```ruby
when 1 #to find a birthday matches today
  menu_heading("BIRTHDAY    MATCH")
  hash_of_contacts = file_to_array (BIRTHDAY_FILE_PATH)
  array_of_contacts = hash_of_contacts["contacts"]
    found_birthday_array = get_birthday_of_today(array_of_contacts)
    if found_birthday_array.empty? …
end
```

Birthdays List (range)

- Call a method to read from the birthday file.
- Show the list of 12 months to choose the From.
- Then show the rest of months in the To
- call a method that returns all the contacts that match


```
Select from month JAN.
To: DEC.
+----+--------------+--------------+
|Name|Birthday DD-MM|Email         |
+----+--------------+--------------+
|Bob |16- 12        |bob@email.com|
|Bill|16- 12        |bill@mail.com|
+----+--------------+--------------+

press any key to go to the main menu
```

```ruby
when 2 # to find contact in an interval
  menu_heading("BIRTHDAY   MATCH")
  hash_of_contacts = file_to_array (BIRTHDAY_FILE_PATH)
  array_of_contacts = hash_of_contacts["contacts"]
  # puts "Any birthday between:"
  answer = select_month
  from_month = answer
  answer = prompt.select("To:",LIST_OF_MONTHS.select{|key,value| value >= from_month},symbols: { marker: ">"
  to_month = answer
  found_birthday_array = get_birthday_in_interval(array_of_contacts,from_month,to_month)
  if found_birthday_array.empty?
    no_data_style("You dont seem to have any Birthdays in this interval!!")

  else
    table_display (found_birthday_array)
  end
```

Add Contact

- Call a method to display and read the input from user.
- Call a method to write the contact to the file.

```
 _____   _____   _____           _____   _____   _____   _____   _____   _____
/\  ___\  /\  __ \  /\  __ \         /\  ___\  /\  __ \  /\  == \  /\__  _\  /\  __ \  /\  ___\  /\__  _\
\ \  __\  \ \ \/\ \ \ \  __ \        \ \ \____  \ \ \/\ \  \ \  _-/  \/_/\ \/  \ \  __ \  \ \ \____  \/_/\ \/
 \ \_\     \ \_____\ \ \_\ \_\        \ \_____\  \ \_____\  \ \_\      \ \_\   \ \_\ \_\  \ \_____\    \ \_\
  \/_/      \/_____/  \/_/\/_/         \/_____/   \/_____/   \/_/       \/_/    \/_/\/_/   \/_____/     \/_/
```

```
To add a new contact you need to provide Name, email, and Date of Birth
[Enter Name: Eman
[Enter Email: eman@mail.com
Enter Date of Birth
Select from month
  JAN.
  FEB.
  MAR.
> APR.
  MAY.
  JUNE.
  JULY.
  AUG.
  SEP.
  OCT.
  NOV.
  DEC.
```

```ruby
when 3 # to add new contact
  menu_heading("ADD    CONTACT")
  puts "To add a new contact you need to provide Name, email, and Date of Birth"
  new_contact = enter_contact_data
  new_contact.display_contact
  if prompt.yes?("Do You want to save?")
    new_contact.add_contact_to_file(BIRTHDAY_FILE_PATH)
  else
```

Command Line arg.

```
minaki@minas-MBP src % ruby main.rb -h
Start with choosing one of the options provided in the menu
using the up and down arrows and then press return
-info    - information about the app
-c       -prints all the contacts in your file
-l       -prints all the wishies templates
-s       -send email to contacts who have birthday today
minaki@minas-MBP src %
```

```
[minaki@minas-MBP src % ruby main.rb -c
+----+-------------+--------------+
|Name|Birthday DD-MM|Email        |
+----+-------------+--------------+
|Bob |16- 12       |bob@email.com|
|Bill|16- 12       |bill@mail.com|
+----+-------------+--------------+
```

```
minaki@minas-MBP src % ruby main.rb -s E Y
Today is Bob's Birthday
Today is Bill's Birthday
Today is Eman Youssef's Birthday
+-----------+------------+---------------------------+
|Name       |Birthday DD-MM|Email                      |
+-----------+------------+---------------------------+
|Bob        |16- 12      |bob@email.com              |
|Bill       |16- 12      |bill@mail.com              |
|Eman Youssef|16- 12     |gcas022101@coderacademy.edu.au|
+-----------+------------+---------------------------+
Dear Bob,
Happy birthday!
All the best for the year!
 E Y
Error Occured Message not sent ***Please Check your account on Postmark***
Dear Bill,
 Hello
Wish You A very Happy and Blessed Birthday,
Yours
Error Occured Message not sent ***Please Check your account on Postmark***
Dear Eman Youssef,
Happy birthday!
All the best for the year!
 E Y
DONE!!! message has been sent
minaki@minas-MBP src %
```

Send Email

- Will select the contact
- Randomly select a letter
- Replace the name in the letter with the contact name
- Add signature
- Display the message
- Send email using PostMark.
- Using env file to add the api token from postmark

```
 _____  _____  ____   _____     _____  ____    ____   _____  _____
/\  ___\/\  ___\/\  _ `\/\  __-.  /\  ___\/\  _`\ /\  _`\/\  __ \/\  __-.
\ \___  \ \  __\\ \ \ \ \ \ \/\ \ \ \  __\\ \ \ \ \ \ \ \ \ \ \ \ \ \/\ \
 \/\_____\ \_____\ \_\ \_\ \____-  \ \_____\ \_\ \_\ \_\ \_\ \_\ \_\ \____-
  \/_____/\/_____/\/_/\/_/\/____/   \/_____/\/_/\/_/\/_/\/_/\/_/\/_/\/____/
```

```
Enter Name: bob
Name: Bob   Email: bob@email.com   Data of Birth (dd – mm): 16– 12
Enter Signiture Name: Eman
Dear Bob,
Happy birthday!
All the best for the year!
Eman
```

```ruby
when 7  # sending email to someone
  menu_heading("SEND    EMAIL")
  contact = choose_contact
  if contact         You, a day ago • add email sending function
  random_letter_name =random_letter
  name = ask_for_signiture
  message = prepare_email(contact,random_letter_name,name)
  send_email(message,contact["email"])
  end
```

```
export
API_TOKEN_POSTMARK = '69                              f3a'
SENDER_SIGNATURE_POSTMORK = 'g                cademy.edu.au'
```

```ruby
API_TOKEN = ENV['API_TOKEN_POSTMARK']
SENDER_SIGNATURE = ENV['SENDER_SIGNATURE_POSTMORK']
```

Testing

- Using Rspec to write automated testing .
- Method tested by rspec are:
- Get_birthday_of _today
- Method that turns a json file into an array
- And returning the birthday in an interval

```
methods
  file_to_array
    file_to_array should return an array
  get_birthday_of_today
Today is Today's Birthday
Today is Today's Birthday
    get_birthday_of_today should return an array
Today is Today's Birthday
Today is Today's Birthday
    get_birthday_of_today should return an array
  get_birthday_in_interval
    should return array of contacts in interval

Finished in 0.00479 seconds (files took 0.25919 seconds to load)
4 examples, 0 failures
```

Challenges

- What problem to solve.
- Refactoring To make the code simple and readable (code is easy to understand, commented, and logically ordered) length trade off
- Modular (to use bits of the code)
- Efficient
- To Find out how to send email using an API.

Ethical issues

- In send email using an API.
(API Token and email address) how to keep them safe.

Favorite Parts

SPEND 24HRS DEBUGGING

```
expect(file_to_array('./test-birthday.json')). to be_a (Hash)
```


FINALLY! A DIFFERENT ERROR MESSAGE