11055 – Programming for Design Assessment 2 (Documentation) Jehru Harris // U3202988

Programming Goals

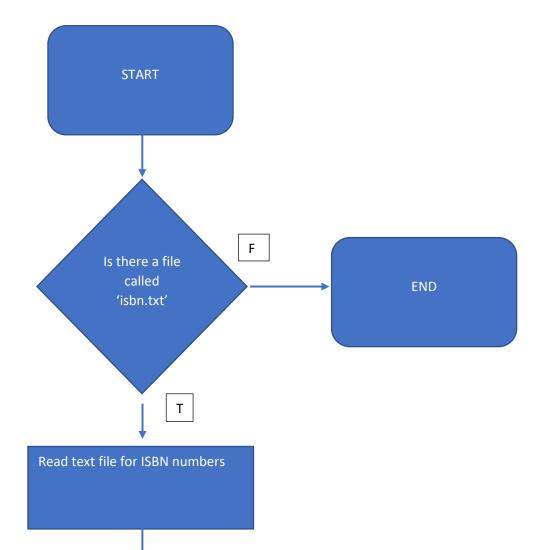
I broke this assessment down into a few iterations.

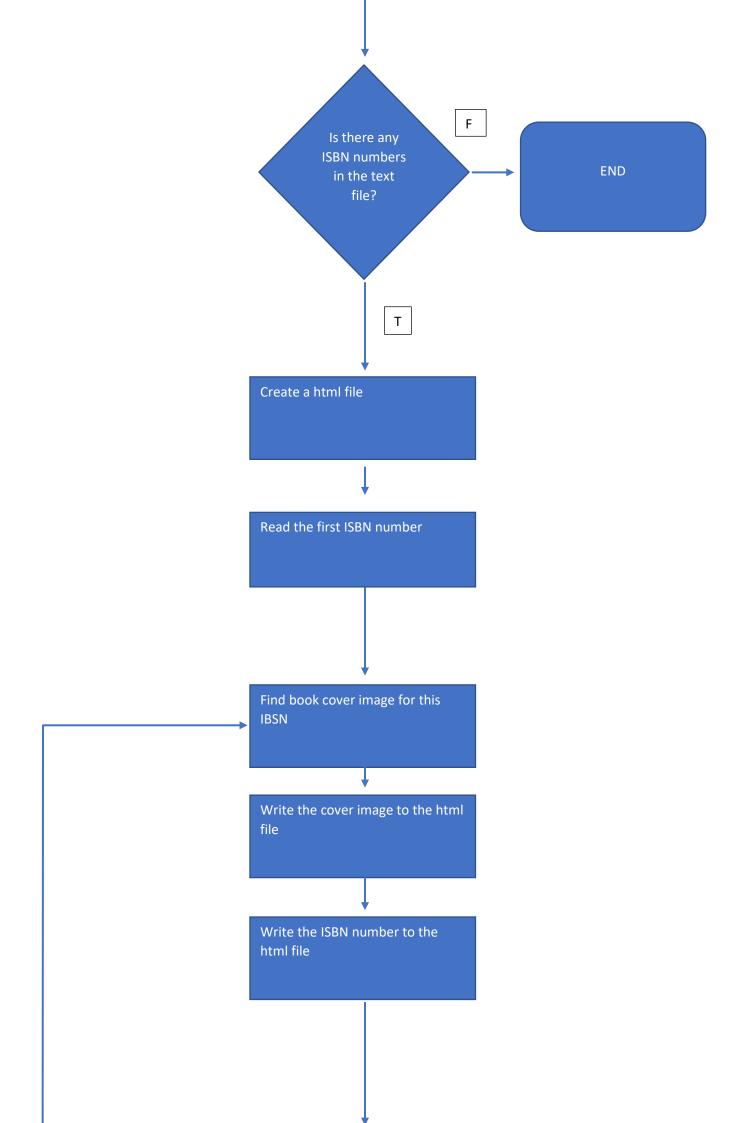
- 1. Get python file to read text file
- 2. Get python to create a html file
- 3. Get python to read ISBN numbers in a text file and output them into a html file
- 4. Get python to read these ISBN's and get book covers on each ISBN in the text file
- 5. Get python to provide information (author, book name etc) on each ISBN in the text file

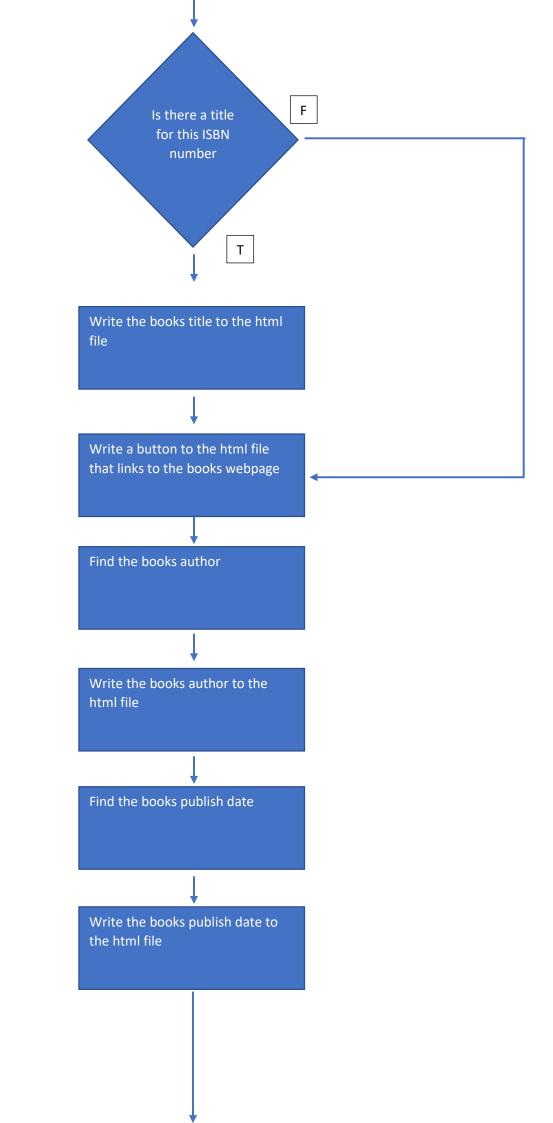
My goal was for the python file to read through all the ISBN numbers in a text file and produce an html page with the cover and other relevant information.

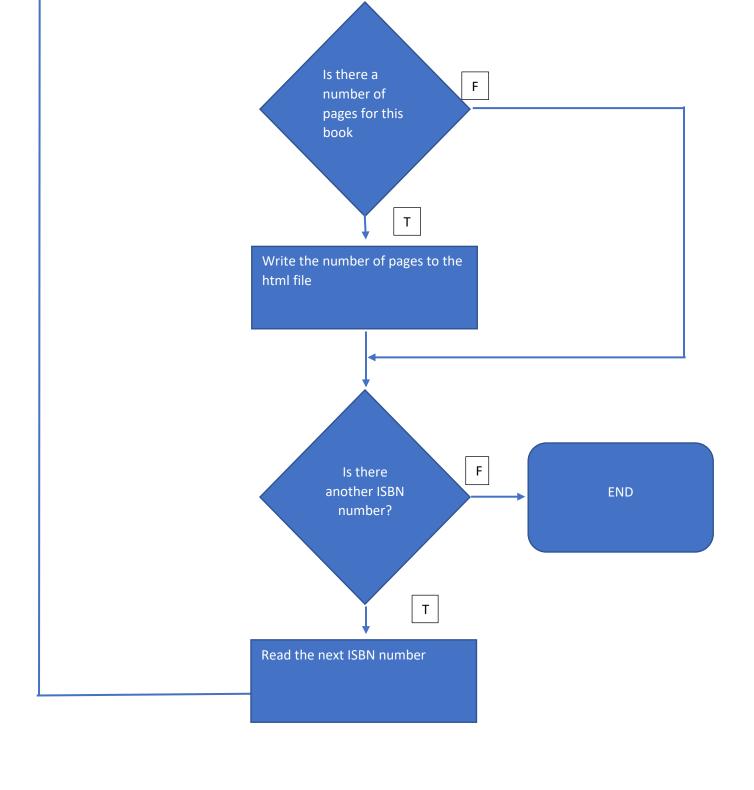
For this project my original idea of how the webpage was going to look was to have all the pictures of the book covers on the page. If the user clicks on a one of those book covers it would load the data for the book next to it (similar to how google images works). This however was not the final output.

Flowchart









Pseudo Code

START IF there is a file called isbn.txt Open the text document called 'isbn.txt'. ELSE Tell the user to rename or make a file called 'isbn.txt'. Which they should place the ISBN numbers inside. **END** Read the text file for ISBN numbers IF the text file is empty Tell the user that the text file is empty **END** ELSE DO Read ISBN number in the text document and store it in an array. LOOP WHILE, there is another ISBN number. Create a html file. Write correct html document opening tags to the html file. DO IF can find information for this ISBN, THEN Find the book cover image. Write the books cover to the html file. Write the ISBN number to the html file. IF there is a title to this ISBN Find the book title for the ISBN. Write the book title to the html file. ELSE continue the loop Write a button to the html file that links to the books webpage. Find the author for this book.

Write the authors name to the html file.

Find the books publish date.

Write the books publish date to the html file.

IF there is a number of pages for this book

Write the number of pages to the html file.

ELSE continue the loop

ELSE skip this ISBN

LOOP through ISBN array.

Write the end/closing html tags to the html file.

END

Final Reflection/Evaluation

Unfortunately I couldn't get this program to work with the built in python module 'urllib.request'. To get the program to work you may need to install the requests module. Type ("pip install requests") into your command line to get it to install.

Also, when reading out a long list of ISBN numbers the program takes a long time to get the data for each one. I have used print statements throughout the code so when the user runs the program, they can see that its loading the data.

My code will error out if it doesn't detect a file called 'isbn.txt' or if the text file is empty. This is not intentional. I have made the program sleep so that the user can read the print statements which may help to debug or fix any problems they may have.

During my testing I found that the program will work with ISBN 10 and 13's and can even work with a dash between numbers such as 978-1-891830-75-4. However, it will not work with all ISBN's and will only work with ones that open library can recognise and has information/cover image for.

Despite not being able to produce the original design output for this assessment I feel that by using a html div for each book it works just as well and still looks great.

References

I used the open library API to get the data for the ISBN's

https://openlibrary.org/dev/docs/api/books

https://openlibrary.org/dev/docs/api/read

and the covers API for the book covers

https://openlibrary.org/dev/docs/api/covers