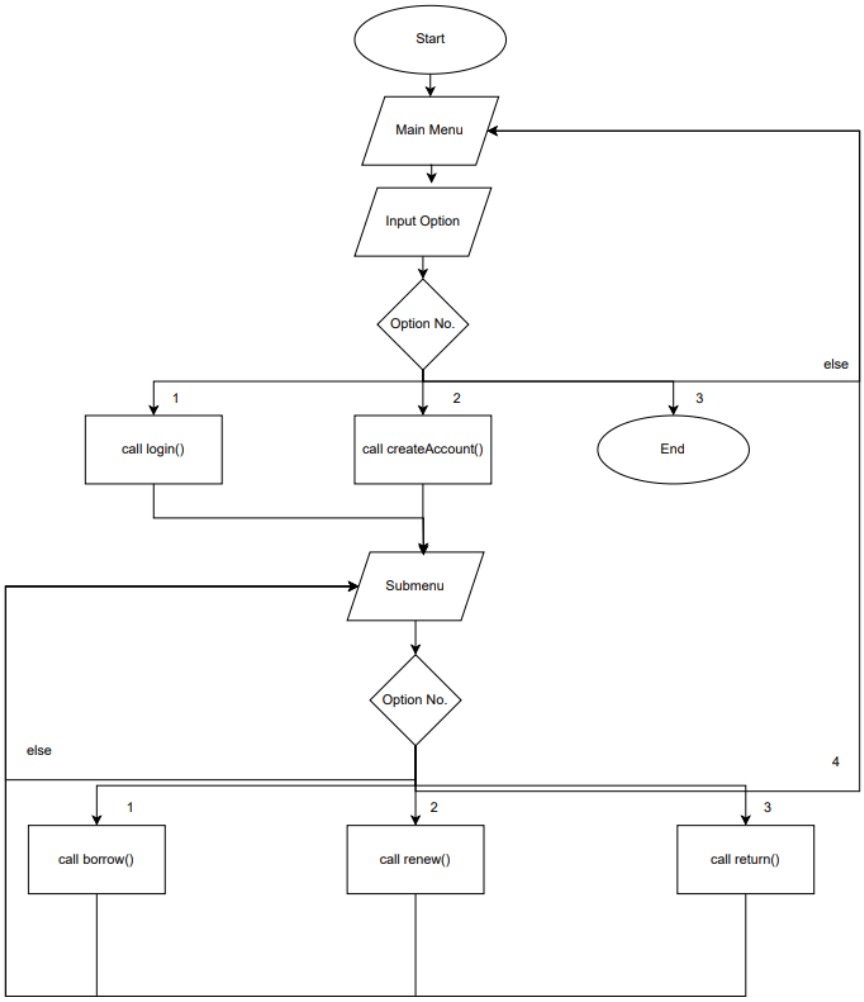
A. John Prince Alonte
B. Library Borrow and Return System
C. You can borrow books, extend borrowing or return books. You can also show all the unreturned books
D. Inputs
    a. Login, Create New Account or Exit? (1, 2, 3)
    b. Username
    c. Password
    d. Author
    e. Title
    f. Publisher
    g. Date Published
    h. Date Borrowed
    i. Borrow, renew, return, read, logout? (1, 2, 3, 4, 5);
    j.
E. Processes
    a. Main Menu
    b. Create new account
    c. Login
    d. Submenu
    e. Borrow
    f. Renew
    g. Return
    h. Read all Unreturned Books
F. Outputs
    a. Programmer: John Prince Alonte
    b. Description: Library System
    c. Date: Date today
    d. Project Title: Final Project
    e. Menu
    f. 1. Login
    g. 2. Create New Account
    h. 3. Exit
    i. Choose option:
    j. Exiting, come back again!
    k. Username:
    l. Password:
    m. Username already exists!
    n. Account created, hello [username], your password is [password]
    o. Invalid Username
    p. Incorrect Password
    q. Welcome [username]!
    r. Submenu
    s. 1. Borrow

t. 2. Renewal
u. 3. Return
v. 4. Read All
w. 5. Log out
x. Input Details of Book to Borrow:
y. Author:
z. Title:
aa. Publisher:
bb. Date Published:
cc. Date Borrowed:
dd. Book Borrowed
ee. Enter ID of book to Renew:
ff. [ID] : [Title]
gg. Invalid ID
hh. Enter new Date Borrowed:
ii. Borrow Renewed!
jj. Enter ID of book to Return:
kk. Book Returned!
ll. Unreturned books are listed below:
mm. [ID] : [Title], [Author], [Date Published], [Publisher], [Date Borrowed]
nn. Logging Out

G. Algorithm
a. Show Main Menu
b. Main Menu Function:
c. Ask for input
d. If 1, call login
e. If 2, call create account
f. If 3, exit and thank user
g. Log in function:
h. Input username
i. If username doesn't exit, warn user, go back to main menu
j. Ask for password
k. If incorrect, warn user and go back to main menu
l. Create New Account function:
m. Input username
n. If already exists, warn user and go back to main menu
o. Ask for password
p. Output username and password
q. Show Submenu
r. Submenu function:
s. Ask for input
t. If 1, call borrow
u. If 2, call renew
v. If 3, call return

w. If 4, call read all unreturned books
x. If 5, call main menu
y. Borrow Function:
z. Ask for author, title, date published, publisher and date borrowed
aa. Save to arrays
bb. Renew function
cc. Output the id and title of all unreturned books
dd. If Id doesn't exist, tell user and go back to submenu
ee. Ask for the new date borrowed
ff. Update the array
gg. Return Function
hh. Output the id and title of all unreturned books
ii. If Id doesn't exist, tell user and go back to submenu
jj. Delete the record
kk. Read Function
ll. Read all the record data of the unreturned books

H. Flow Chart Diagram



I. UI

Programmer: John Prince Alonte

Description: Library System

Date: Date today

Project Title: Final Project

===== MAIN MENU =====
1. Login
2. Create New Account
3. Exit
Choose option: _

If option = 3
Exiting, come back again!

===== LOGIN =====
Username: _
Password: _

If invalid username

Invalid Username!
Returning to Main Menu...

If incorrect password

Incorrect Password!
Returning to Main Menu...

If successful

Welcome [username]!

===== CREATE NEW ACCOUNT =====
Enter Username: _
Enter Password: _

If username exists

Username already exists!
Returning to Main Menu...

If successful

Account created, hello [username]!
Your password is [password]

===== SUBMENU =====
1. Borrow
2. Renewal
3. Return
4. Read All
5. Log Out
Choose option: _

===== BORROW =====
Input Details of Book to Borrow:

Author: _
Title: _
Publisher: _
Date Published: _
Date Borrowed: _

Book Borrowed!
Returning to Submenu...

===== RENEW =====
Unreturned books:
[ID] : [Title]
[ID] : [Title]
...

Enter ID of book to Renew: _

If invalid

Invalid ID!
Returning to Submenu...

If valid

Enter new Date Borrowed: _
Borrow Renewed!
Returning to Submenu...

===== RETURN =====
Unreturned books:
[ID] : [Title]
[ID] : [Title]
...

Enter ID of book to Return: _

If invalid

Invalid ID!
Returning to Submenu...

If valid

Book Returned!

Returning to Submenu...

===== UNRETURNED BOOKS =====
[ID] : [Title], [Author], [Date Published], [Publisher], [Date Borrowed]
[ID] : [Title], [Author], [Date Published], [Publisher], [Date Borrowed]
...

=====Log out=====
Logging Out...
Returning to Main Menu...