

Library Management System

CLASS XII

, 2024

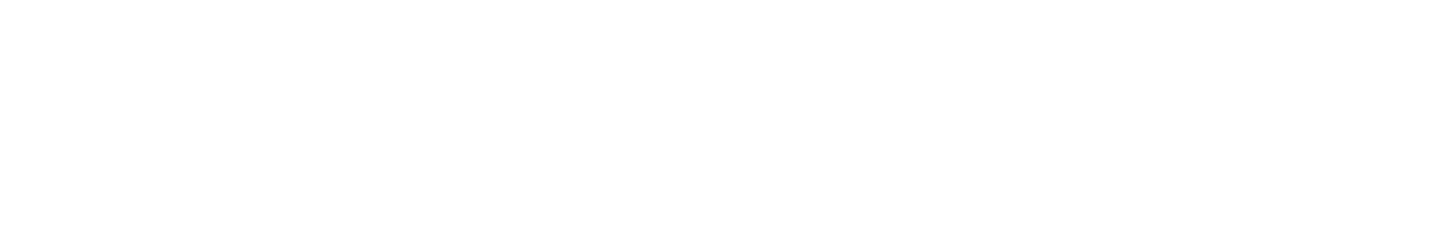
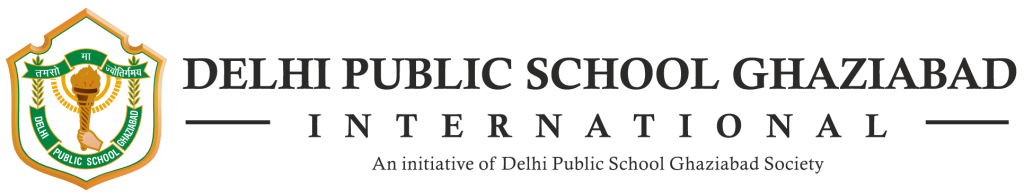
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INFORMATICS PRACTICES PROJECT FILE

SUBMITED TO

-

RAJEEV SIR



Aniket Dixit

DPSG INTERNATIONAL

|

GHAZIBAD

Certificate

This is to certify that Master Aniket Dixit studying in the

DPSGI Ghaziabad of standard XII has completed the Informatics Practices (Python) Project. Aniket has developed a Python-based Library Management System (LMS) project under the guidance of Rajeev Sir during the academic year 2023-24

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INTERNAL EXAMINER

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EXTERNAL EXAMINER

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PRINCIPAL

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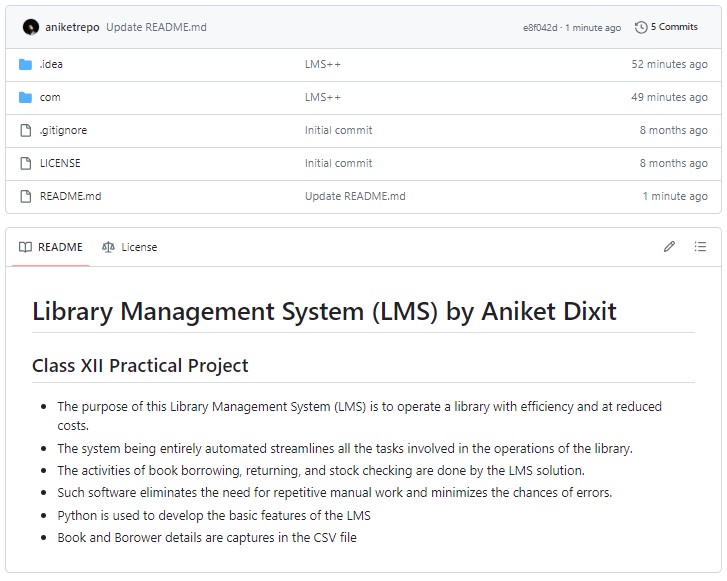
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# Project Repo Structure

The following GitHub repo snapshot provides a bird-eye view of the LMS project.

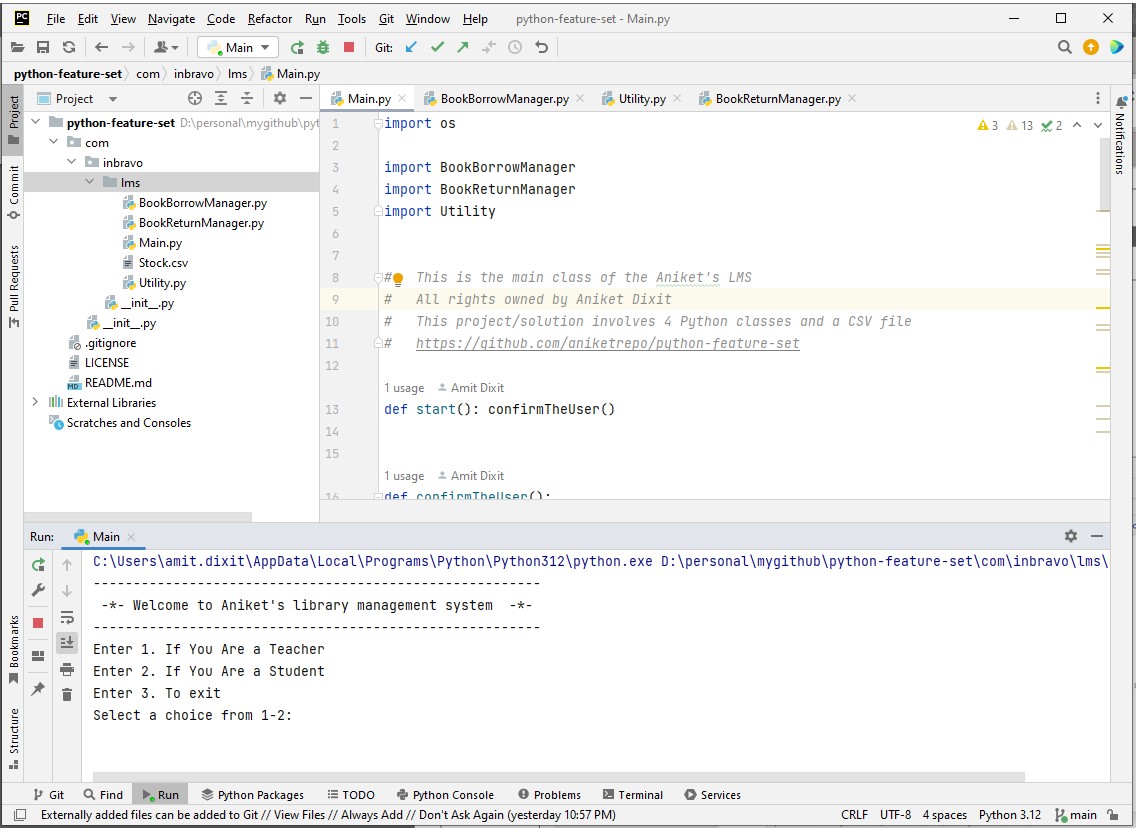


The following codebase is available at my GitHub repo: [https://github.com/aniketrepo/pythonfeature-set](https://github.com/aniketrepo/python-feature-set)

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# IDE View of the LMS Codebase

The following PyCharm IDE snapshot provides a bird-eye view of the LMS codebase.



# 

# Python Files of the LMS Codebase

There are 4 Python files developed within the LMS codebase.

|  |  |
| --- | --- |
|  | File: Main.py |
|  | GitHub Link: [lms/com/inbravo/lms/Main.py at main · aniketrepo/lms (github.com)](https://github.com/aniketrepo/lms/blob/main/com/inbravo/lms/Main.py) |
|  |  |
|  | |

|  |  |
| --- | --- |
|  | File: BookBorrowManager.py |
|  | GitHub Link[: python-feature-set/com/inbravo/lms/BookBorrowManager.py at main · aniketrepo/python-feature-set (github.com)](https://github.com/aniketrepo/python-feature-set/blob/main/com/inbravo/lms/BookBorrowManager.py) |
|  |  |

File: BookReturnManager.py



GitHub Link[: python-feature-set/com/inbravo/lms/BookReturnManager.py at main · aniketrepo/python-feature-set (github.com)](https://github.com/aniketrepo/python-feature-set/blob/main/com/inbravo/lms/BookReturnManager.py)

|  |
| --- |
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|  |  |
| --- | --- |
|  | File: Utility.py |
|  | GitHub Link[: python-feature-set/com/inbravo/lms/Utility.py at main · aniketrepo/python-feature-set (github.com)](https://github.com/aniketrepo/python-feature-set/blob/main/com/inbravo/lms/Utility.py) |
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# LMS Solution Input/Output Details

LMS solution is developed in Python language. I have used some of the online available references to understand the control flow and developed a similar Python class structure and functions.

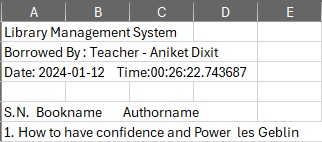
|  |  |
| --- | --- |
| Feature | Description |
| Confirm the user Type | Main.py is the entry class. The following text is printed when you execute it: |
| Show the  Library  Usage  Options  (Book  Borrow/  Return/  Listing) | The user must confirm its type before performing any LMS features. After the confirmation by entering Either 1 OR 2, it shows the following text: |
| Library  Usage  Options  (Book  Borrow) | If the user enters option 2. It asks for the User's Details (First and Last Name). Then it provides some book options to choose from |
|  |  |
| Library  Usage  Options  (Book  Return) | If the user enters option 3. It asks for the User's Name (First Name). Then it provides the details of the borrowed book and performs the book return option |
| Library  Usage  Options  (Book  Listing) | If the user enters option 1. It asks for the User's Name (First Name). Then it provides the details of the borrowed book and performs the book return option |

# Table/ Backend Data Structure

The following table structure is used to store the Book Titles



The following table structure is used to store the Book Borrower Details:



# Bibliography

To develop this LMS project following references are used:

 GitHub Python project references: <https://github.com/search?q=library+management+system+python&type=repositories>

 Google.com

 Informatics Practices by Preeti Arora