



Project Design

Library Management System

Created By /

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Class Name : BorrowDB

Method		Input Parameters	Output
createBorrow()		Borrow borrow	int
Description	This method takes borrow data from the user and insert it into the database using SQL insert statement and returns the number of rows affected and if there was an exception it will return zero.		
DeleteBorrow()		int id	int
Description	This method takes the id of the borrow that user wants to delete and delete it from the database and returns the number of rows affected and if there was an exception it will return zero.		
getAllBorrow()		No parameters	ObservableList<Borrow>
Description	This method uses a SQL statement to return the whole data of the borrow table from the database and loop on the result set row by row to put it on an object from the Borrow class and pass it to ObservableList<Borrow>.		
getBorrow()		Int id	ObservableList<Borrow>
Description	This method uses a SQL statement to return the borrow with the id passed by user from the database and loop on this result to put it on an object from the Borrow class and pass it to ObservableList<Borrow>.		
getBorrow()		Date broughtDate	ObservableList<Borrow>
Description	This is the overloaded version of the above method, This method uses a SQL statement to return the list of borrows with the broughtDate passed by user from the database and loop on this result row by row to put it on an object from the Borrow class and pass it to ObservableList<Borrow> at the end of the loop.		

Class Name : Borrow

Method	Input Parameters	Output	Description
getBorrow_id()	void	int	Getter method
getTokenDate()	void	Date	Getter method
getBroughtDate()	void	Date	Getter method
setBorrow_id()	Int id	void	Setter method
setTokenDate()	Date tokenDate	void	Setter method
setBroughtDate()	Date broughtDate	void	Setter method

Class Name : BookDB

Method		Input Parameters	Output
createBook()		Book book	int
Description	This method takes book data from the user and insert it into the database using SQL insert statement and returns the number of rows affected and if there was an exception it will return zero.		
DeleteBook()		int id	int
Description	This method takes the id of the book that user wants to delete and delete it from the database and returns the number of rows affected and if there was an exception it will return zero.		
getAllBook()		No parameters	ObservableList<Book>
Description	This method uses a SQL statement to return the whole data of the book table from the database and loop on the result set row by row to put it on an object from the Book class and pass it to ObservableList<Book>.		
getBook()		Int id	ObservableList<Book>
Description	This method uses a SQL statement to return the book with the id passed by user from the database and loop on this result to put it on an object from the Book class and pass it		

	to ObservableList<Book>.		
getBook()		String name	ObservableList<Borrow>
Description	This is the overloaded version of the above method, This method uses a SQL statement to return the list of books with the name of the book passed by user from the database and loop on this result row by row to put it on an object from the Book class and pass it to ObservableList<Book> at the end of the loop.		
getBookById()		Int id	String
Description	This method takes the id of the book (ISBN) from the user and uses SQL statement to return the name of the book with that id from the database it's used for showing the names of the book in the borrow table instead of the id's to make the project user friendly and easy to use.		
getBookByName()		String Name	int
Description	This method takes the Name of the book from the user and uses SQL statement to return the id(ISBN) of the book with that name from the database. it's used for showing the names of the book in a choice box when creating a borrow instead of selecting the id of the book to make the project user friendly and easy to use.		
bookNames()		No parameters	Resultset
Description	This method returns all the names of books in the database and it's used to show them in a choice box for the user to choose from them when creating a borrow.		

Class Name : Book

Method	Input Parameters	Output	Description
getISBN()	void	int	Getter method

getName()	void	String	Getter method
getPageCount()	void	int	Getter method
setISBN()	Int ISBN	void	Setter method
setName()	String name	void	Setter method
setPageCount()	Int pageCount	void	Setter method

Class Name : StudentDB

Method		Input Parameters	Output
createStudent()		Student student	int
Description	This method takes student data from the user and insert it into the database using SQL insert statement and returns the number of rows affected and if there was an exception it will return zero.		
DeleteStudent()		int id	int
Description	This method takes the id of the student that user wants to delete and delete it from the database and returns the number of rows affected and if there was an exception it will return zero.		
getAllStudents()		No parameters	ObservableList<Student>
Description	This method uses a SQL statement to return the whole data of the student table from the database and loop on the result set row by row to put it on an object from the student class and pass it to ObservableList<Student>.		
getStudent()		Int id	ObservableList<Student>
Description	This method uses a SQL statement to return the student with the id passed by user from the database and loop on this result to put it on an object from the student class and pass it to ObservableList<Book>.		
getStudent()		String name	ObservableList<Borrow>
Description	This is the overloaded version of the above method, This method uses a SQL statement to return the list of students		

	with the name of the student passed by user from the database and loop on this result row by row to put it on an object from the student class and pass it to ObservableList<Student> at the end of the loop.	
getStudentById()	Int id	String
Description	This method takes the id of the student from the user and uses SQL statement to return the name of the student with that id from the database it's used for showing the names of the student in the borrow table instead of the id's to make the project user friendly and easy to use.	
getStudentByName()	String Name	int
Description	This method takes the Name of the student from the user and uses SQL statement to return the id of the student with that name from the database. it's used for showing the names of the student in a choice box when creating a borrow instead of selecting the id of the student to make the project user friendly and easy to use.	
studentNames()	No parameters	Resultset
Description	This method returns all the names of students in the database and it's used to show them in a choice box for the user to choose from them when creating a borrow.	
getTypeById()	Int id	String
Description	This method takes the id of the Type from the user and uses SQL statement to return the name of the types with that id from the database it's used for showing the names of the types in the book table instead of the id's to make the project user friendly and easy to use.	
getTypeByName()	String Name	int
Description	This method takes the Name of the type from the user and uses SQL statement to return the id of the type with that name from the database. it's used for showing the names of the type in a choice box when creating a book	

	instead of selecting the id of the type to make the project user friendly and easy to use.	
typesNames()	No parameters	Resultset
Description	This method returns all the names of types in the database and it's used to show them in a choice box for the user to choose from them when creating a book.	

Class Name : Student

Method	Input Parameters	Output	Description
getStudent_id()	void	int	Getter method
getDateOfBirht()	void	Date	Getter method
getGender()	void	String	Getter method
getClassroom()	void	int	Getter method
SetStudent_id()	Int id	void	Setter method
setDateOfBirht()	Date DOB	void	Setter method
setGender()	String gender	void	Setter method
setClassroom()	Int classroom	void	Setter method

Class Name : AuthorDB

Method	Input Parameters	Output
createAuthor()	Author author	int
Description	This method takes author data from the user and insert it into the database using SQL insert statement and returns the number of rows affected and if there was an exception it will return zero.	
DeleteAuthor()	int id	int
Description	This method takes the id of the author that user wants to	

	delete and delete it from the database and returns the number of rows affected and if there was an exception it will return zero.	
getAllAuthor()	No parameters	ObservableList<Author>
Description	This method uses a SQL statement to return the whole data of the author table from the database and loop on the result set row by row to put it on an object from the Author class and pass it to ObservableList<Author>.	
getAuthor()	Int id	ObservableList<Author>
Description	This method uses a SQL statement to return the author with the id passed by user from the database and loop on this result to put it on an object from the Author class and pass it to ObservableList<Author>.	
getAuthor()	String name	ObservableList<Author>
Description	This is the overloaded version of the above method, This method uses a SQL statement to return the list of authors with the name of the author passed by user from the database and loop on this result row by row to put it on an object from the Author class and pass it to ObservableList<Author> at the end of the loop.	
getAuthorById()	Int id	String
Description	This method takes the id of the Author from the user and uses SQL statement to return the name of the author with that id from the database it's used for showing the names of the author in the book table instead of the id's to make the project user friendly and easy to use.	

Class Name : Author

Method	Input Parameters	Output	Description
getAuthor_id()	void	int	Getter method
setAuthor_id ()	Int author_id	void	Setter method

Class Name : Type

Method	Input Parameters	Output	Description
getType_id()	void	int	Getter method
getName()	void	String	Getter method
setAuthor_id ()	Int author_id	void	Setter method
setName()	String name	void	Setter method

Class Name : FullName

Method	Input Parameters	Output	Description
getName()	void	String	Getter method
getSurName()	void	String	Getter method
setName ()	String name	void	Setter method
setSurName()	String surName	void	Setter method

