

School Library System - Database Schema

This document contains the database schema design for a School Library System. It defines the entities (tables), their attributes (columns), primary keys, unique constraints, and relationships (foreign keys).

```
Table Department {  
  dept_id int [pk]  
  name varchar [unique]  
}
```

```
Table Student {  
  student_id int [pk]  
  name varchar  
  email varchar [unique, not null]  
  department_id int [ref: > Department.dept_id]  
}
```

```
Table Author {  
  author_id int [pk]  
  name varchar  
}
```

```
Table Category {  
  category_id int [pk]  
  name varchar [unique]  
}
```

```
Table Book {  
  book_id int [pk]  
  title varchar  
  isbn varchar [unique]  
  author_id int [ref: > Author.author_id]  
  category_id int [ref: > Category.category_id]  
}
```

```
Table BookCopy {  
  copy_id int [pk]  
  book_id int [ref: > Book.book_id]  
  status varchar  
}
```

```
Table Librarian {  
  librarian_id int [pk]
```

```
name varchar
email varchar [unique]
}
```

```
Table Borrowing {
borrow_id int [pk]
student_id int [ref: > Student.student_id]
book_copy_id int [ref: > BookCopy.copy_id]
librarian_id int [ref: > Librarian.librarian_id]
borrow_date date
return_date date
}
```

```
Table Fine {
fine_id int [pk]
borrow_id int [ref: > Borrowing.borrow_id]
amount decimal
status varchar
}
```

