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1 Book

Creation: Jan 23, 2026 at 12:27 AM

Last update: Jan 23, 2026 at 12:29 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|------------------|--------------|------------|------|---------|----------------|--|----------|------|
| book_id | int(11) | | No | | auto_increment | | | |
| isbn | varchar(20) | | Yes | NULL | | | | |
| title | varchar(255) | | No | | | | | |
| author | varchar(150) | | No | | | | | |
| genre | varchar(100) | | Yes | NULL | | | | |
| publication_year | int(11) | | Yes | NULL | | | | |
| category_id | int(11) | | Yes | NULL | | -> Category.category_id ON UPDATE CASCADE ON DELETE SET_NULL | | |
| image_path | varchar(255) | | Yes | NULL | | | | |

2 BookTag

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|---------|---------|------------|------|---------|-------|---|----------|------|
| book_id | int(11) | | No | | | -> Book.book_id ON UPDATE CASCADE ON DELETE CASCADE | | |
| tag_id | int(11) | | No | | | -> Tag.tag_id ON UPDATE CASCADE ON DELETE CASCADE | | |

3 Branch

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|-----------|--------------|------------|------|---------|----------------|----------|----------|------|
| branch_id | int(11) | | No | | auto_increment | | | |
| name | varchar(100) | | No | | | | | |
| address | varchar(255) | | Yes | NULL | | | | |

4 BranchStock

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|---------------|---------|------------|------|---------|-------|---|----------|------|
| branch_id | int(11) | | No | | | -> Branch.branch_id ON UPDATE CASCADE ON DELETE CASCADE | | |
| book_id | int(11) | | No | | | -> Book.book_id ON UPDATE CASCADE ON DELETE CASCADE | | |
| total_qty | int(11) | | No | 0 | | | | |
| available_qty | int(11) | | No | 0 | | | | |

5 Camera

Creation: Jan 23, 2026 at 12:32 AM
Last update: Jan 23, 2026 at 12:33 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|-------------|--------------|------------|------|---------|----------------|----------|----------|------|
| camera_id | int(11) | | No | | auto_increment | | | |
| name | varchar(150) | | No | | | | | |
| brand | varchar(100) | | Yes | NULL | | | | |
| model | varchar(100) | | Yes | NULL | | | | |
| description | varchar(255) | | Yes | NULL | | | | |
| image_path | varchar(255) | | No | | | | | |

6 CameraInventory

Creation: Jan 23, 2026 at 12:33 AM

Last update: Jan 23, 2026 at 12:33 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|---------------------|---------|------------|------|---------|----------------|---|----------|------|
| camera_inventory_id | int(11) | | No | | auto_increment | | | |
| library_id | int(11) | | No | | | -> Library.library_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| camera_id | int(11) | | No | | | -> Camera.camera_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| total_units | int(11) | | No | | | | | |
| available_units | int(11) | | No | | | | | |

7 Category

Creation: Jan 23, 2026 at 12:23 AM

Last update: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|-------------|-------------|------------|------|---------|----------------|----------|----------|------|
| category_id | int(11) | | No | | auto_increment | | | |
| name | varchar(50) | | No | | | | | |

8 Inventory

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|------------------|---------|------------|------|---------|----------------|---|----------|------|
| inventory_id | int(11) | | No | | auto_increment | | | |
| library_id | int(11) | | No | | | -> Library.library_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| book_id | int(11) | | No | | | -> Book.book_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| total_copies | int(11) | | No | | | | | |
| available_copies | int(11) | | No | | | | | |

9 item

Table comments: [VIEW](#)

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|------------|--------------|------------|------|---------|-------|----------|----------|------|
| item_id | int(11) | | No | 0 | | | | |
| title | varchar(255) | | No | | | | | |
| creator | varchar(150) | | No | | | | | |
| identifier | varchar(20) | | Yes | NULL | | | | |

10 LabEquipment

Creation: Jan 23, 2026 at 12:34 AM

Last update: Jan 23, 2026 at 12:34 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|-------------|--------------|------------|------|---------|----------------|----------|----------|------|
| lab_id | int(11) | | No | | auto_increment | | | |
| name | varchar(150) | | No | | | | | |
| description | varchar(255) | | Yes | NULL | | | | |
| image_path | varchar(255) | | No | | | | | |

11 LabInventory

Creation: Jan 23, 2026 at 12:35 AM
Last update: Jan 23, 2026 at 12:35 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|------------------|---------|------------|------|---------|----------------|--|----------|------|
| lab_inventory_id | int(11) | | No | | auto_increment | | | |
| library_id | int(11) | | No | | | -> Library.library_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| lab_id | int(11) | | No | | | -> LabEquipment.lab_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| total_units | int(11) | | No | | | | | |
| available_units | int(11) | | No | | | | | |

12 Library

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|------------|--------------|------------|------|---------|----------------|----------|----------|------|
| library_id | int(11) | | No | | auto_increment | | | |
| name | varchar(150) | | No | | | | | |
| address | varchar(255) | | No | | | | | |
| postcode | varchar(20) | | No | | | | | |

13 Loan

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|--------------|----------|------------|------|---------------------|----------------|---|----------|------|
| loan_id | int(11) | | No | | auto_increment | | | |
| user_id | int(11) | | No | | | -> User.user_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| inventory_id | int(11) | | No | | | -> Inventory.inventory_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| loan_date | date | | No | | | | | |
| due_date | date | | No | | | | | |
| return_date | date | | Yes | NULL | | | | |
| created_at | datetime | | No | current_timestamp() | | | | |

14 LoginAudit

Creation: Jan 23, 2026 at 12:36 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|----------------|--------------|------------|------|---------------------|----------------|--|----------|------|
| login_id | int(11) | | No | | auto_increment | | | |
| user_id | int(11) | | No | | | -> User.user_id ON UPDATE RESTRICT ON DELETE CASCADE | | |
| login_time | datetime | | No | current_timestamp() | | | | |
| success | tinyint(1) | | No | | | | | |
| failure_reason | varchar(255) | | Yes | NULL | | | | |

15 Reservation

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|------------------|-------------|------------|------|---------------------|----------------|---|----------|------|
| reservation_id | int(11) | | No | | auto_increment | | | |
| user_id | int(11) | | No | | | -> User.user_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| book_id | int(11) | | No | | | -> Book.book_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| reservation_date | date | | No | | | | | |
| status | varchar(20) | | No | | | | | |
| created_at | datetime | | No | current_timestamp() | | | | |

16 SportsEquipment

Creation: Jan 23, 2026 at 12:36 AM

Last update: Jan 23, 2026 at 12:36 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|-------------|--------------|------------|------|---------|----------------|----------|----------|------|
| sports_id | int(11) | | No | | auto_increment | | | |
| name | varchar(150) | | No | | | | | |
| description | varchar(255) | | Yes | NULL | | | | |
| image_path | varchar(255) | | No | | | | | |

17 SportsInventory

Creation: Jan 23, 2026 at 12:36 AM

Last update: Jan 23, 2026 at 12:36 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|-------------------------|---------|------------|------|---------|----------------|--|----------|------|
| sports_inventor y_id | int(11) | | No | | auto_increment | | | |
| library_id | int(11) | | No | | | -> Library.library_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| sports_id | int(11) | | No | | | -> SportsEquipment.sports_id ON UPDATE RESTRICT ON DELETE RESTRICT | | |
| total_units | int(11) | | No | | | | | |
| available_units | int(11) | | No | | | | | |

18 Tag

Creation: Jan 23, 2026 at 12:23 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|--------|-------------|------------|------|---------|----------------|----------|----------|------|
| tag_id | int(11) | | No | | auto_increment | | | |
| name | varchar(50) | | No | | | | | |

19 User

Creation: Jan 23, 2026 at 12:36 AM

Last update: Jan 23, 2026 at 12:36 AM

| Column | Type | Attributes | Null | Default | Extra | Links to | Comments | MIME |
|---------------|--------------|------------|------|---------------------|----------------|----------|----------|------|
| user_id | int(11) | | No | | auto_increment | | | |
| name | varchar(100) | | No | | | | | |
| email | varchar(150) | | No | | | | | |
| password_hash | varchar(255) | | No | | | | | |
| phone | varchar(30) | | Yes | NULL | | | | |
| role | varchar(20) | | No | | | | | |
| created_at | datetime | | No | current_timestamp() | | | | |
| last_login_at | datetime | | Yes | NULL | | | | |

