**LIBRARY DATABASE MANAGEMENT SYSTEM**

*SQL PROJECT*

*DONE IN- MICROSOFT SQL SERVER*

*BY-SHRUTI GUPTA*

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**DESCRIPTION**

The concept behind this project is to create a library management system that is capable to issue books and let consumers check different books and their titles categorically. It keeps track of all the details about the books in the library, their price, status, and the total number of books available in the library. The user will find this automated system easy instead of using the manual writing system.

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**TABLES**

Primary key

Attribute

Foreign key

The tables which make the relational database are-

1. **Publisher-**

|  |  |  |
| --- | --- | --- |
| Publisher\_name | Publisher\_address | Publisher\_phone |
| Alfred A. Knopf | The Knopf Doubleday Group Domestic Rights, 1745 Broadway, New York, NY 10019 | 212-940-7390 |
| Bantam | 375 Hudson Street, New York, NY 10014 | 212-366-2000 |
| Bloomsbury | Bloomsbury Publishing Inc., 1385 Broadway, 5th Floor, New York, NY 10018 | 212-419-5300 |
| Chalto & Windus | 375 Hudson Street, New York, NY 10014 | 212-366-2000 |
| Chilton Books | Not Available | Not Available |
| DAW Books | 375 Hudson Street, New York, NY 10014 | 212-366-2000 |
| George Allen & Unwin | 83 Alexander Ln, Crows Nest NSW 2065, Australia | +61-2-8425-0100 |
| Harcourt Brace Jovanovich | 3 Park Ave, New York, NY 10016 | 212-420-5800 |
| Harper and Row | HarperCollins Publishers, 195 Broadway, New York, NY 10007 | 212-207-7000 |
| Pan Books | 175 Fifth Avenue, New York, NY 10010 | 646-307-5745 |
| Picador USA | 175 Fifth Avenue, New York, NY 10010 | 646-307-5745 |
| Scholastic | 557 Broadway, New York, NY 10012 | 800-724-6527 |
| Shinchosa | Oga Bldg. 8, 2-5-4 Sarugaku-cho, Chiyoda-ku, Tokyo 101-0064 Japan | +81-3-5577-6507 |
| Signet Books | 375 Hudson Street, New York, NY 10014 | 212-366-2000 |
| Viking | 375 Hudson Street, New York, NY 10014 | 212-366-2000 |
| W.W. Norton | W. W. Norton & Company, Inc., 500 Fifth Avenue, New York, New York 10110 | 212-354-5500 |

1. **Book-**

|  |  |  |
| --- | --- | --- |
| **book\_ID** | book\_title | **bookpublisher\_Name** |
| 1 | The Name of the Wind | DAW Books |
| 2 | It | Viking |
| 3 | The Green Mile | Signet Books |
| 4 | Dune | Chilton Books |
| 5 | The Hobbit | George Allen & Unwin |
| 6 | Eragon | Alfred A. Knopf |
| 7 | A Wise Mans Fear | DAW Books |
| 8 | Harry Potter and the Philosophers Stone | Bloomsbury |
| 9 | Hard Boiled Wonderland and The End of the World | Shinchosa |
| 10 | The Giving Tree | Harper and Row |
| 11 | The Hitchhikers Guide to the Galaxy | Pan Books |
| 12 | Brave New World | Chalto & Windus |
| 13 | The Princess Bride | Harcourt Brace Jovanovich |
| 14 | Fight Club | W.W. Norton |
| 15 | Holes | Scholastic |
| 16 | Harry Potter and the Chamber of Secrets | Bloomsbury |
| 17 | Harry Potter and the Prisoner of Azkaban | Bloomsbury |
| 18 | The Fellowship of the Ring | George Allen & Unwin |
| 19 | A Game of Thrones | Bantam |
| 20 | The Lost Tribe | Picador USA |

1. **Library branch**

|  |  |  |
| --- | --- | --- |
| branch\_ID | branch\_name | branch\_address |
| 1 | Sharpstown | 32 Corner Road, New York, NY 10012 |
| 2 | Central | 491 3rd Street, New York, NY 10014 |
| 3 | Saline | 40 State Street, Saline, MI 48176 |
| 4 | Ann Arbor | 101 South University, Ann Arbor, MI 48104 |

1. **Borrower**

|  |  |  |  |
| --- | --- | --- | --- |
| CardNo | borrower\_name | borrower\_address | borrower\_phone |
| 100 | Joe Smith | 1321 4th Street, New York, NY 10014 | 212-312-1234 |
| 101 | Jane Smith | 1321 4th Street, New York, NY 10014 | 212-931-4124 |
| 102 | Tom Li | 981 Main Street, Ann Arbor, MI 48104 | 734-902-7455 |
| 103 | Angela Thompson | 2212 Green Avenue, Ann Arbor, MI 48104 | 313-591-2122 |
| 104 | Harry Emnace | 121 Park Drive, Ann Arbor, MI 48104 | 412-512-5522 |
| 105 | Tom Haverford | 23 75th Street, New York, NY 10014 | 212-631-3418 |
| 106 | Haley Jackson | 231 52nd Avenue New York, NY 10014 | 212-419-9935 |
| 107 | Michael Horford | 653 Glen Avenue, Ann Arbor, MI 48104 | 734-998-1513 |

1. **Book loans**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **loans\_ID** | **book\_ID** | **Branch\_ID** | Card\_No | date\_out | due\_date |
| 1 | 1 | 1 | 100 | 01-01-2018 | 02-02-2018 |
| 2 | 2 | 1 | 100 | 01-01-2018 | 02-02-2018 |
| 3 | 3 | 1 | 100 | 01-01-2018 | 02-02-2018 |
| 4 | 4 | 1 | 100 | 01-01-2018 | 02-02-2018 |
| 5 | 5 | 1 | 102 | 03-01-2018 | 03-02-2018 |
| 6 | 6 | 1 | 102 | 03-01-2018 | 03-02-2018 |
| 7 | 7 | 1 | 102 | 03-01-2018 | 03-02-2018 |
| 8 | 8 | 1 | 102 | 03-01-2018 | 03-02-2018 |
| 9 | 9 | 1 | 102 | 03-01-2018 | 03-02-2018 |
| 10 | 11 | 1 | 102 | 03-01-2018 | 03-02-2018 |
| 11 | 12 | 2 | 105 | 12-12-2017 | 12-01-2018 |
| 12 | 10 | 2 | 105 | 12-12-2017 | 12-01-2017 |
| 13 | 20 | 2 | 105 | 03-02-2018 | 03-03-2018 |
| 14 | 18 | 2 | 105 | 05-01-2018 | 05-02-2018 |
| 15 | 19 | 2 | 105 | 05-01-2018 | 05-02-2018 |
| 16 | 19 | 2 | 100 | 03-01-2018 | 03-02-2018 |
| 17 | 11 | 2 | 106 | 07-01-2018 | 07-02-2018 |
| 18 | 1 | 2 | 106 | 07-01-2018 | 07-02-2018 |
| 19 | 2 | 2 | 100 | 07-01-2018 | 07-02-2018 |
| 20 | 3 | 2 | 100 | 07-01-2018 | 07-02-2018 |
| 21 | 5 | 2 | 105 | 12-12-2017 | 12-01-2018 |
| 22 | 4 | 3 | 103 | 09-01-2018 | 09-02-2018 |
| 23 | 7 | 3 | 102 | 03-01-2018 | 03-02-2018 |
| 24 | 17 | 3 | 102 | 03-01-2018 | 03-02-2018 |
| 25 | 16 | 3 | 104 | 03-01-2018 | 03-02-2018 |
| 26 | 15 | 3 | 104 | 03-01-2018 | 03-02-2018 |
| 27 | 15 | 3 | 107 | 03-01-2018 | 03-02-2018 |
| 28 | 14 | 3 | 104 | 03-01-2018 | 03-02-2018 |
| 29 | 13 | 3 | 107 | 03-01-2018 | 03-02-2018 |
| 30 | 13 | 3 | 102 | 03-01-2018 | 03-02-2018 |
| 31 | 19 | 3 | 102 | 12-12-2017 | 12-01-2018 |
| 32 | 20 | 4 | 103 | 03-01-2018 | 03-02-2018 |
| 33 | 1 | 4 | 102 | 12-01-2018 | 12-02-2018 |
| 34 | 3 | 4 | 107 | 03-01-2018 | 03-02-2018 |
| 35 | 18 | 4 | 107 | 03-01-2018 | 03-02-2018 |
| 36 | 12 | 4 | 102 | 04-01-2018 | 04-02-2018 |
| 37 | 11 | 4 | 103 | 15-01-2018 | 15-02-2018 |
| 38 | 9 | 4 | 103 | 15-01-2018 | 15-02-2018 |
| 39 | 7 | 4 | 107 | 01-01-2018 | 02-02-2018 |
| 40 | 4 | 4 | 103 | 01-01-2018 | 02-02-2018 |
| 41 | 1 | 4 | 103 | 02-02-2017 | 02-03-2018 |
| 42 | 20 | 4 | 103 | 03-01-2018 | 03-02-2018 |
| 43 | 1 | 4 | 102 | 12-01-2018 | 12-02-2018 |
| 44 | 3 | 4 | 107 | 13-01-2018 | 13-02-2018 |
| 45 | 18 | 4 | 107 | 13-01-2018 | 13-02-2018 |
| 46 | 12 | 4 | 102 | 14-01-2018 | 14-02-2018 |
| 47 | 11 | 4 | 103 | 15-01-2018 | 15-02-2018 |
| 48 | 9 | 4 | 103 | 15-01-2018 | 15-02-2018 |
| 49 | 7 | 4 | 107 | 19-01-2018 | 19-02-2018 |
| 50 | 4 | 4 | 103 | 19-01-2018 | 19-02-2018 |
| 51 | 1 | 4 | 103 | 22-01-2018 | 22-02-2018 |

1. **Book copies**

|  |  |  |  |
| --- | --- | --- | --- |
| **CopiesID** | **BookID** | **BranchID** | No\_Of\_Copies |
| 1 | 1 | 1 | 5 |
| 2 | 2 | 1 | 5 |
| 3 | 3 | 1 | 5 |
| 4 | 4 | 1 | 5 |
| 5 | 5 | 1 | 5 |
| 6 | 6 | 1 | 5 |
| 7 | 7 | 1 | 5 |
| 8 | 8 | 1 | 5 |
| 9 | 9 | 1 | 5 |
| 10 | 10 | 1 | 5 |
| 11 | 11 | 1 | 5 |
| 12 | 12 | 1 | 5 |
| 13 | 13 | 1 | 5 |
| 14 | 14 | 1 | 5 |
| 15 | 15 | 1 | 5 |
| 16 | 16 | 1 | 5 |
| 17 | 17 | 1 | 5 |
| 18 | 18 | 1 | 5 |
| 19 | 19 | 1 | 5 |
| 20 | 20 | 1 | 5 |
| 21 | 1 | 2 | 5 |
| 22 | 2 | 2 | 5 |
| 23 | 3 | 2 | 5 |
| 24 | 4 | 2 | 5 |
| 25 | 5 | 2 | 5 |
| 26 | 6 | 2 | 5 |
| 27 | 7 | 2 | 5 |
| 28 | 8 | 2 | 5 |
| 29 | 9 | 2 | 5 |
| 30 | 10 | 2 | 5 |
| 31 | 11 | 2 | 5 |
| 32 | 12 | 2 | 5 |
| 33 | 13 | 2 | 5 |
| 34 | 14 | 2 | 5 |
| 35 | 15 | 2 | 5 |
| 36 | 16 | 2 | 5 |
| 37 | 17 | 2 | 5 |
| 38 | 18 | 2 | 5 |
| 39 | 19 | 2 | 5 |
| 40 | 20 | 2 | 5 |
| 41 | 1 | 3 | 5 |
| 42 | 2 | 3 | 5 |
| 43 | 3 | 3 | 5 |
| 44 | 4 | 3 | 5 |
| 45 | 5 | 3 | 5 |
| 46 | 6 | 3 | 5 |
| 47 | 7 | 3 | 5 |
| 48 | 8 | 3 | 5 |
| 49 | 9 | 3 | 5 |
| 50 | 10 | 3 | 5 |
| 51 | 11 | 3 | 5 |
| 52 | 12 | 3 | 5 |
| 53 | 13 | 3 | 5 |
| 54 | 14 | 3 | 5 |
| 55 | 15 | 3 | 5 |
| 56 | 16 | 3 | 5 |
| 57 | 17 | 3 | 5 |
| 58 | 18 | 3 | 5 |
| 59 | 19 | 3 | 5 |
| 60 | 20 | 3 | 5 |
| 61 | 1 | 4 | 5 |
| 62 | 2 | 4 | 5 |
| 63 | 3 | 4 | 5 |
| 64 | 4 | 4 | 5 |
| 65 | 5 | 4 | 5 |
| 66 | 6 | 4 | 5 |
| 67 | 7 | 4 | 5 |
| 68 | 8 | 4 | 5 |
| 69 | 9 | 4 | 5 |
| 70 | 10 | 4 | 5 |
| 71 | 11 | 4 | 5 |
| 72 | 12 | 4 | 5 |
| 73 | 13 | 4 | 5 |
| 74 | 14 | 4 | 5 |
| 75 | 15 | 4 | 5 |
| 76 | 16 | 4 | 5 |
| 77 | 17 | 4 | 5 |
| 78 | 18 | 4 | 5 |
| 79 | 19 | 4 | 5 |
| 80 | 20 | 4 | 5 |

1. **Book Authors**

|  |  |  |
| --- | --- | --- |
| **author\_ID** | **book\_ID** | author\_name |
| 1 | 1 | Patrick Rothfuss |
| 2 | 2 | Stephen King |
| 3 | 3 | Stephen King |
| 4 | 4 | Frank Herbert |
| 5 | 5 | J.R.R. Tolkien |
| 6 | 6 | Christopher Paolini |
| 7 | 6 | Patrick Rothfuss |
| 8 | 8 | J.K. Rowling |
| 9 | 9 | Haruki Murakami |
| 10 | 10 | Shel Silverstein |
| 11 | 11 | Douglas Adams |
| 12 | 12 | Aldous Huxley |
| 13 | 13 | William Goldman |
| 14 | 14 | Chuck Palahniuk |
| 15 | 15 | Louis Sachar |
| 16 | 16 | J.K. Rowling |
| 17 | 17 | J.K. Rowling |
| 18 | 18 | J.R.R. Tolkien |
| 19 | 19 | George R.R. Martin |
| 20 | 20 | Mark Lee |