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| --- | --- |
| DATA ELEMENT NAME: | srNo |
| ALIASES: | None |
| DESCRIPTION: | PRIMARY KEY , srNo stands for Serial number of book and each book have unique srNo. |
| FORMAT: | Integer(9),Auto generated |
| DATA FLOWS: | User,Status,BookCheckoutReturn,Search&Browse |
| REPORTS: | Reservation List, Book Checkout List,SearchList |

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| --- | --- |
| DATA ELEMENT NAME: | bookName |
| ALIASES: | none |
| DESCRIPTION: | Describes the name of the book |
| FORMAT: | (Alphanumeric)VARCHAR,20 CHARACTERS |
| DATA FLOWS: | Status,BookCheckoutReturn,Search&Browse |
| REPORTS: | Reservation List, Book Checkout List,SearchList |

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| --- | --- |
| DATA ELEMENT NAME: | bookCover |
| ALIASES: | none |
| DESCRIPTION: | It defines the front page of the Book |
| FORMAT: | Image(BLOB) |
| DATA FLOWS: | Search&Browse |
| REPORTS: | BOOK DESCRIPTION |

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| --- | --- |
| DATA ELEMENT NAME: | donerName |
| ALIASES: | none |
| DESCRIPTION: | It defines the name of Doner of the Book |
| FORMAT | Varchar,20 characters |
| DATA FLOWS | Search&Browse,Book description |
| REPORTS: | BOOK DESCRIPTION |

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| --- | --- |
| DATA ELEMENT NAME: | category |
| ALIASES: | genere |
| DESCRIPTION: | category=genere+standard+language+subject,it helps in filtering books |
| FORMAT | Varchar ,15 characters |
| DATA FLOWS | Search&Browse |
| REPORTS: | Search list |

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| --- | --- |
| DATA ELEMENT NAME: | standard |
| ALIASES: | none |
| DESCRIPTION: | It defines the class of students for whom book is published |
| FORMAT | String(char),15 characters |
| DATA FLOWS | Search&Browse,bookDescription |
| REPORTS: | Book class list |

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| --- | --- |
| DATA ELEMENT NAME: | subject |
| ALIASES: | none |
| DESCRIPTION: | It defines the subject name of the book |
| FORMAT | String(char),10 characters |
| DATA FLOWS | Search&Browse,bookDescription |
| REPORTS: | Book subject list |

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| --- | --- |
| DATA ELEMENT NAME: | language |
| ALIASES: | none |
| DESCRIPTION: | It defines book written in which language |
| FORMAT | String(char),10characters |
| DATA FLOWS | Search&Browse,bookDescription |
| REPORTS: | Book language list |

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| --- | --- |
| DATA ELEMENT NAME: | adminKey |
| ALIASES: | none |
| DESCRIPTION: | Every admin have a unique admin key ,only an admin can generate adminKey for another admin |
| FORMAT | Alphanumeric(char),5 characters |
| DATA FLOWS | AdminCorner |
| REPORTS: | Admin list |

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| --- | --- |
| DATA ELEMENT NAME: | userId |
| ALIASES: | none |
| DESCRIPTION: | Auto generated and unique.Every user have unique userId |
| FORMAT | Integer,size:20 |
| DATA FLOWS | AdminCorner, SystemStatus,BookCheckoutReturn |
| REPORTS: | Checkout List,active List,totalUser List,admin list,transaction list,reservation list |

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| --- | --- |
| DATA ELEMENT NAME: | Password |
| ALIASES: | none |
| DESCRIPTION: | Encrypted,it must have lower case,uppercase,number and special symbol  Not contain space inbetween. |
| FORMAT | AlphaNumeric(varchar),15 characters |
| DATA FLOWS | userLogin |
| REPORTS: | Forgot password |

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| --- | --- |
| DATA ELEMENT NAME: | dateOfReservation |
| ALIASES: |  |
| DESCRIPTION: | It records the date in which reservation is done and reservation follow first come first serve rule. |
| FORMAT | DD/MM/YYYY |
| DATA FLOWS | Checkout ,reservation , |
| REPORTS: | Reservation list |

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| --- | --- |
| DATA ELEMENT NAME: | query |
| ALIASES: | none |
| DESCRIPTION: | Student can comment regarding need and importance of book or and other query |
| FORMAT | Text(varchar),20Characters |
| DATA FLOWS | Admin corner,reservation, |
| REPORTS: | Query list |

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| --- | --- |
| DATA ELEMENT NAME: | activeUsers |
| ALIASES: | None |
| DESCRIPTION: | It defines no of active users in current time |
| FORMAT | Integer,size:5 |
| DATA FLOWS | Admin corner |
| REPORTS: | Active user list |

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| --- | --- |
| DATA ELEMENT NAME: | totalUsers |
| ALIASES: | none |
| DESCRIPTION: | It stores the total numbers of users registered |
| FORMAT | BigInteger ,size:10 |
| DATA FLOWS | Admin corner |
| REPORTS: | Status report,registration report |

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| --- | --- |
| DATA ELEMENT NAME: | bookIssued |
| ALIASES: | none |
| DESCRIPTION: | It represents the number of book issued on that time |
| FORMAT | Integer ,8 |
| DATA FLOWS | Admin corner,checkout,status |
| REPORTS: | Status report,checkout report |

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| --- | --- |
| DATA ELEMENT NAME: | bookAvailable |
| ALIASES: | None |
| DESCRIPTION: | It represents the no of book available in the book bank |
| FORMAT | Integer,8 |
| DATA FLOWS | Status,checkout |
| REPORTS: | Status report,checkout list |

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| --- | --- |
| DATA ELEMENT NAME: | totalBooks |
| ALIASES: | none |
| DESCRIPTION: | totalBooks=bookAvailable |
| FORMAT | bigInteger,10 |
| DATA FLOWS | Admin corner |
| REPORTS: | Status report |

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| --- | --- |
| DATA ELEMENT NAME: | tId |
| ALIASES: | none |
| DESCRIPTION: | tId stands for transaction Id .PRIMARY KEY.it uniquely defines each transaction of book in the book bank |
| FORMAT | BigInteger,20 Characters |
| DATA FLOWS | BookIssue,BookDonate,BookReturn |
| REPORTS: | Issue List,Donate List,Book Return List |

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| --- | --- |
| DATA ELEMENT NAME: | tType |
| ALIASES: | none |
| DESCRIPTION: | It defines the Transaction type i.e issue,donate,return |
| FORMAT | String,10 Characters |
| DATA FLOWS | Transaction,Status |
| REPORTS: | Transaction list |

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| --- | --- |
| DATA ELEMENT NAME: | name |
| ALIASES: |  |
| DESCRIPTION: | name=firstName+lastName,It define name of the user |
| FORMAT | String |
| DATA FLOWS | Issue ,Return,Reservation and Donation |
| REPORTS: | Issue Detail,Return Detail and Donate detail |

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| --- | --- |
| DATA ELEMENT NAME: | profilePic |
| ALIASES: | none |
| DESCRIPTION: | Represents the Profile Picture of user |
| FORMAT | IMAGE(BLOB),Size:1MB |
| DATA FLOWS | viewProfile,adminCorner |
| REPORTS: | Profile detail |

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| --- | --- |
| DATA ELEMENT NAME: | contactNo |
| ALIASES: | None |
| DESCRIPTION: | It represents the Contact Number for Communication |
| FORMAT | NUMBER(BigInteger),10 Characters |
| DATA FLOWS | viewProfile,adminCorner |
| REPORTS: | Profile detail,contactList |

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| --- | --- |
| DATA ELEMENT NAME: | joinDate |
| ALIASES: | None |
| DESCRIPTION: | It represents the date of Joining the Vidya Book Bank |
| FORMAT | DD/MM/YYYY |
| DATA FLOWS | viewProfile,adminCorner |
| REPORTS: | Profile detail |