

ReadMore Community Library Catalogue Search

UNF

CATALOGUE(cata_call_no, cata_title, (author_id, author_fname, author_lname), (subject_id, subject_desc), cata_contents, publisher_id, publisher_name, cata_published_date, cata_edition, cata_page_no, cata_language, cata_note, (isbn_no, isbn_covertime))

1NF

CATALOGUE(cata_call_no, cata_title, cata_contents, publisher_id, publisher_name, cata_published_date, cata_edition, cata_page_no, cata_language, cata_note)

CK: cata_call_no

AUTHOR_CALL(cata_call_no, author_id, author_fname, author_lname)

CK: cata_call_no, author_id

SUBJECT_CALL(cata_call_no, subject_id, subject_desc)

CK: cata_call_no, subject_id

ISBN (isbn_no, cata_call_no, isbn_covertime)

CK: isbn_no

Partial dependencies:

author_id -> author_fname, author_lname

subject_id -> subject_desc

2NF

CATALOGUE(cata_call_no, cata_title, cata_contents, publisher_id, publisher_name, cata_published_date, cata_edition, cata_page_no, cata_language, cata_note)

AUTHOR_CALL(cata_call_no, author_id)

SUBJECT_CALL(cata_call_no, subject_id)

ISBN (isbn_no, cata_call_no, isbn_covertime)

AUTHOR (author_id, author_fname, author_lname)

SUBJECT (subject_id, subject_desc)

Transitivity dependency:

publisher_id -> publisher_name

3NF

CATALOGUE(cata_call_no, cata_title, cata_contents, publisher_id, cata_published_date, cata_edition, cata_page_no, cata_language, cata_note)

AUTHOR_CALL(cata_call_no, author_id)

SUBJECT_CALL(cata_call_no, subject_id)

ISBN (isbn_no, cata_call_no, isbn_covertime)

AUTHOR (author_id, author_fname, author_lname)

SUBJECT (subject_id, subject_desc)
PUBLISHER (publisher_id, publisher_name)

Full Dependencies:

cata_call_no -> cata_title, cata_contents, publisher_id, cata_published_date, cata_edition,
cata_page_no, cata_language, cata_note
isbn_no -> isbn_covertime, cata_call_no
author_id -> author_fname, author_lname
subject_id -> subject_desc
publisher_id -> publisher_name

ReadMore Community Library Borrowers Quarterly Report

UNF

BORROWER (borrower_id, borrower_fname, borrower_lname, borrower_class_type,
borrower_status, (branch_code, bookcopy_id, branch_name, loan_datetime,
loan_due_back, loan_return_datetime, loan_fine_amnt, loan_date_fine_paid))

1NF

BORROWER (borrower_id, borrower_fname, borrower_lname, borrower_class_type,
borrower_status)

Candidate Key:

borrower_id

LOAN (branch_code, bookcopy_id, loan_datetime, branch_name,
loan_return_datetime, loan_due_back, loan_fine_amnt, loan_date_fine_paid,
borrower_id)

Candidate Key:

branch_code, bookcopy_id, loan_datetime

Partial dependency:

branch_code -> branch_name

2NF

BORROWER (borrower_id, borrower_fname, borrower_lname, borrower_class_type,
borrower_status)

LOAN (branch_code, bookcopy_id, loan_datetime, loan_return_datetime,
loan_due_back, loan_fine_amnt, loan_date_fine_paid, borrower_id)

BRANCH (branch_code, branch_name)

Transitivity dependency:

NONE

3NF

BORROWER (borrower_id, borrower_fname, borrower_lname, borrower_class_type, borrower_status)

LOAN (branch_code, bookcopy_id, loan_datetime, loan_return_datetime, loan_due_back, loan_fine_amnt, loan_date_fine_paid, borrower_id)

BRANCH (branch_code, branch_name)

Full Dependency:

borrower_id -> borrower_fname, borrower_lname, borrower_class_type, borrower_status

branch_code, bookcopy_id, loan_datetime -> loan_return_datetime, loan_due_back, loan_fine_amnt, loan_date_fine_paid, borrower_id

branch_code -> branch_name

3NF Collected Relations

1. CATALOGUE(cata_call_no, cata_title, cata_contents, publisher_id, cata_published_date, cata_edition, cata_page_no, cata_language, cata_note)
2. AUTHOR_CALL(cata_call_no, author_id)
3. SUBJECT_CALL(cata_call_no, subject_id)
4. ISBN (isbn_no, cata_call_no, isbn_covertime)
5. AUTHOR (author_id, author_fname, author_lname)
6. SUBJECT (subject_id, subject_desc)
7. PUBLISHER (publisher_id, publisher_name)
8. BORROWER (borrower_id, borrower_fname, borrower_lname, borrower_class_type, borrower_status)
9. LOAN (branch_code, bookcopy_id, loan_datetime, loan_return_datetime, loan_due_back, loan_fine_amnt, loan_date_fine_paid, borrower_id)
10. BRANCH (branch_code, branch_name)

Attribute Synthesis

NONE

Final 3NF Relations

CATALOGUE(cata_call_no, cata_title, cata_contents, publisher_id, cata_published_date, cata_edition, cata_page_no, cata_language, cata_note)

AUTHOR_CALL(cata_call_no, author_id)

SUBJECT_CALL(cata_call_no, subject_id)

ISBN (isbn_no, cata_call_no, isbn_covertime)

AUTHOR (author_id, author_fname, author_lname)

SUBJECT (subject_id, subject_desc)

PUBLISHER (publisher_id, publisher_name)

BORROWER (borrower_id, borrower_fname, borrower_lname, borrower_class_type, borrower_status)

LOAN (branch_code, bookcopy_id, loan_datetime, loan_return_datetime, loan_due_back, loan_fine_amnt, loan_date_fine_paid, borrower_id)

BRANCH (branch_code, branch_name)