

UNIVERSITY OF DAR ES SALAAM



COLLEGE OF INFORMATION AND COMMUNICATION

TECHNOLOGIES (COICT)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GROUP ASSIGNMENT

IS 353

GROUP MEMBERS

S/N	GROUP MEMBERS	REGISTRATION NUMBERS
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i. CRDB BANK

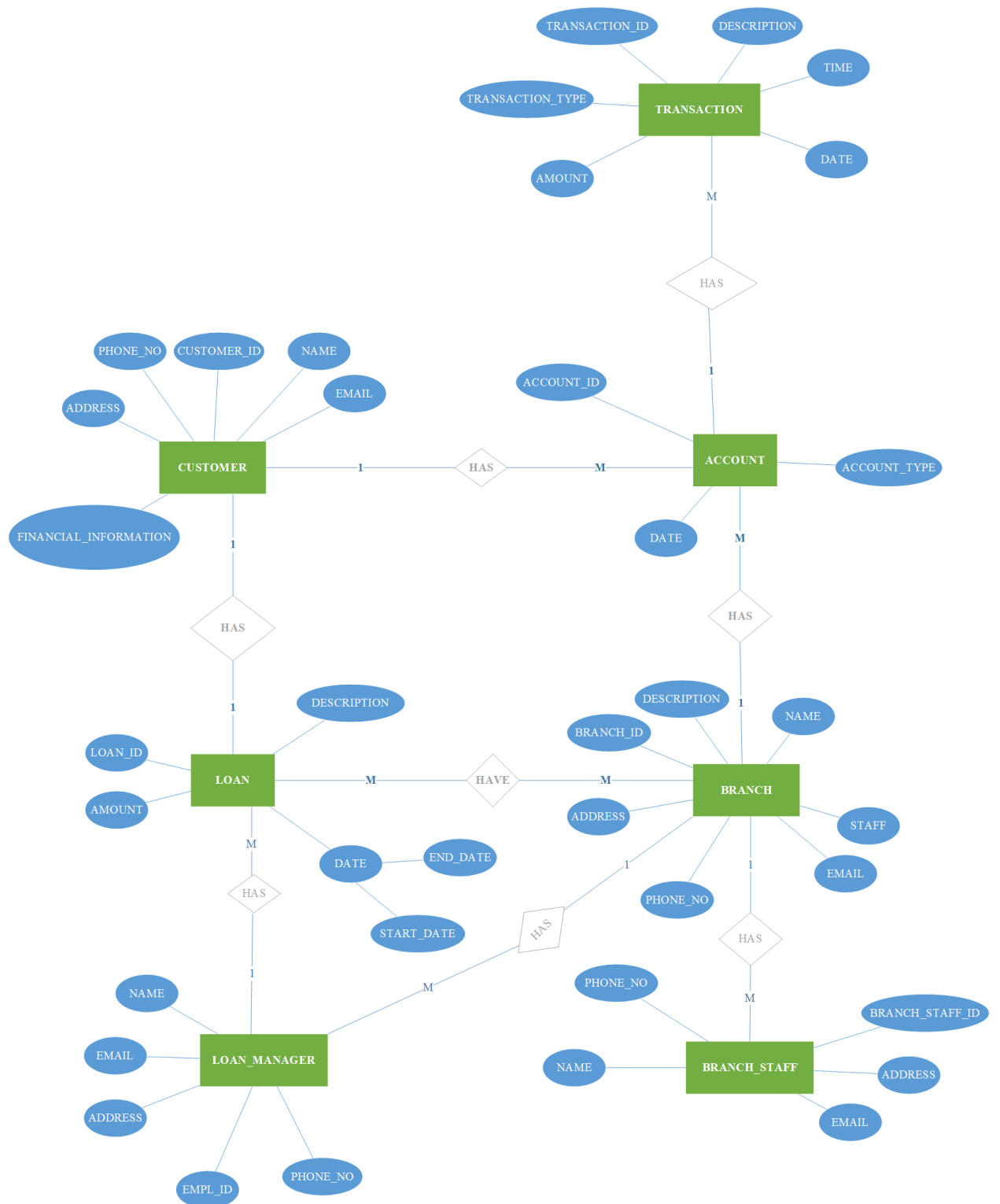
It is an African bank and leading financial services provider in Tanzania. It is the most innovative and preferred financial services partner in the region. It is an organization which involves financial service provider and has 234 branches and 535 ATMs. It offers Tanzania shillings 100 million within 24 hours with interest rate of as low as 16% for payment period of up to 7 years. Documents they need for loan are monthly salary slip, employment ID and you must be a government or private sector employee.

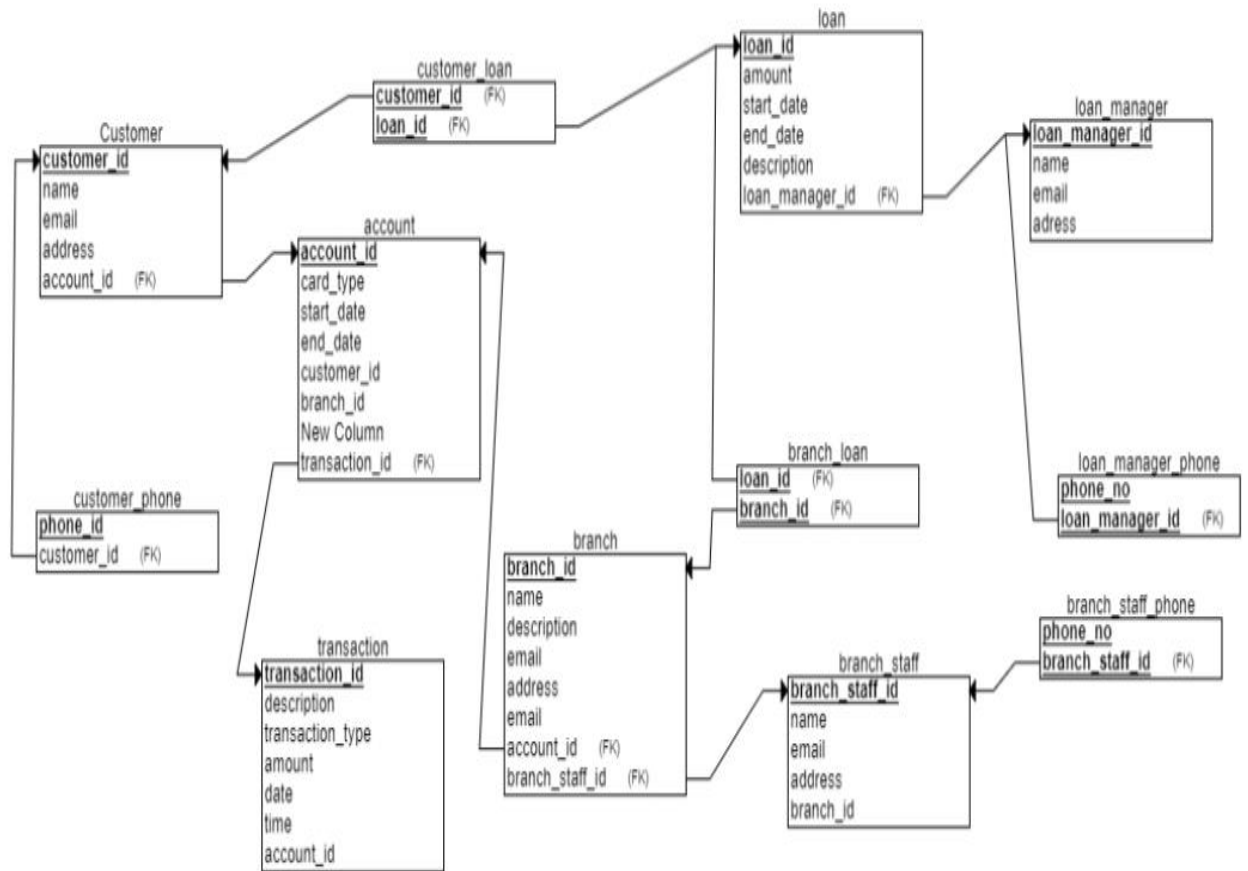
CRDB bank has different type of account such as savings account, salary account, scholar account, current account as well as fixed deposit account, they make different insurance such as fire insurance, personal accident policy, money insurance as well as credit insurance. Product offer savings product, loan products, trade finance, investments and credit cards.

ii. The kind of data they store in their operational database are;

S/N	DATA	DESCRIPTION
1	Customer Details	Name, Email, Address, Account Number, Phone Number
2	Transaction Information	Description, Amount, Start Date, End Date, Time, Type, Identification
3	Branch Details	Name, Email, Address, Phone Number, Staff, Description, Identification
4	Loan Information	Description, Amount, Start Date, End Date, Identification
5	Account Details	Card Type, Start Date, Expiry Date, Identification

iii. MySQL functional relational database schema

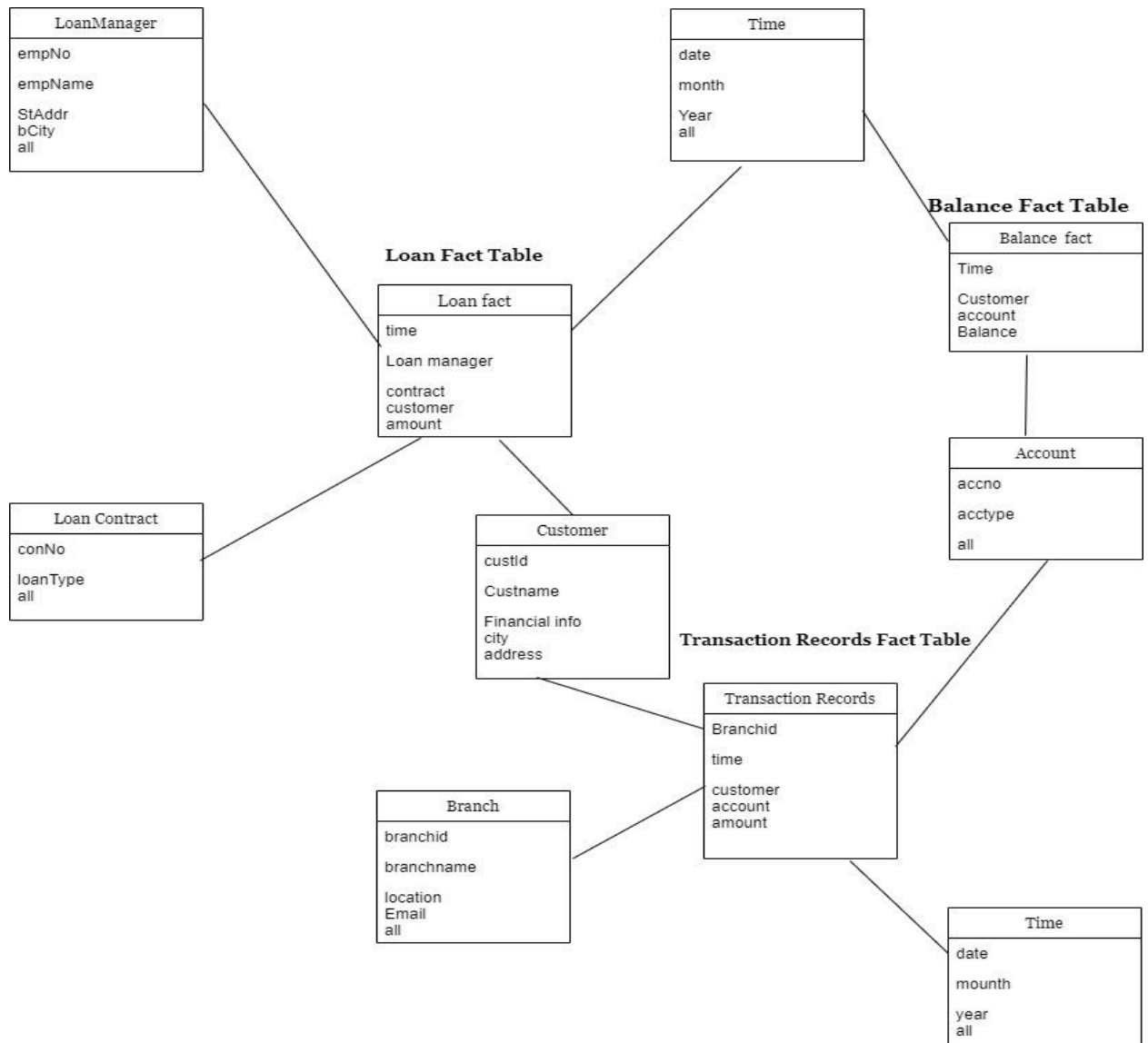




iv.

S/N	DATA STORED IN WH	SOURCES OF DATA
1	Loan Manager	Branch
2	Customer detail	Customer, Account
3	Loan Contract	Branch
4	Time records	Transaction, Customer, Branch
5	Account information	Customer, Branch, Account

v. Fact Tables corresponding Dimensions and Measures in their DW



vi. Queries

- a. Find the names of all branches in the loan relation

```
SELECT branch_name FROM loan;
```

In those cases where we want to force the elimination of duplicates, we insert the keyword distinct after select. We can rewrite the preceding query as

```
SELECT DISTINCT branch_name FROM loan;
```

- b. Find all loan numbers for loans made at the Park Street branch with loan amounts greater than Rs. 100000.

```
SELECT loan_number FROM loan WHERE branch_name = 'Park Street' AND amount > 100000 ;
```

- c. Find the loan number of those loans with loan amounts between Rs. 100000 and Rs. 500000

```
SELECT loan_number FROM loan WHERE amount BETWEEN 100000 AND 500000;
```

or

```
SELECT loan_number FROM loan WHERE amount >= 100000 AND amount <= 500000;
```

- d. For all customers who have a loan from the bank, find their id, loan numbers and loan amount

```
SELECT customer_id, borrower.loan_number, amount FROM borrower, loan WHERE borrower.loan_number = loan.loan_number;
```

- e. Find the customer id, loan numbers, and loan amounts for all loans at the Park Street branch

```
SELECT customer_id, borrower.loan_number, amount FROM borrower, loan WHERE borrower.loan_number = loan.loan_number AND branch_name = 'Park Street';
```

REFERENCES;

1. std::ctime
2. ^ Ben-Ari, M., "Principles of Concurrent and Distributed Programming", Prentice Hall, 1990. ISBN 0-13-711821-X. Ch16, Page 164
3. ^ Martin, James (1965). Programming Real-time Computer Systems. Englewood Cliffs, NJ: Prentice-Hall Inc. p. 4. ISBN 978-0-13-730507-0.
4. ^ Krishna Kant (May 2010). Computer-Based Industrial Control. PHI Learning. p. 356. ISBN 9788120339880. Retrieved 2015-01-17.
5. ^ Shin, K.G.; Ramanathan, P. (Jan 1994). "Real-time computing: a new discipline of computer science and engineering" (PDF). Proceedings of the IEEE. 82 (1): 6–24. CiteSeerX 10.1.1.252.3947. doi:10.1109/5.259423. ISSN 0018-9219.
6. Euromicro Technical Committee on Real-time Systems