AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY DHAKA-1208, BANGLADESH.



Department of Computer Science and Engineering Spring 2019

Program: Bachelor of Science in Computer Science and Engineering

Course No: CSE 4126

Course Title: Distributed Database Lab

Project Checkpoint

Date of Submission: 30/09/2019

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Lab Group : A2

Project Name: Bank Management System Using Distributed Database.

Relations:

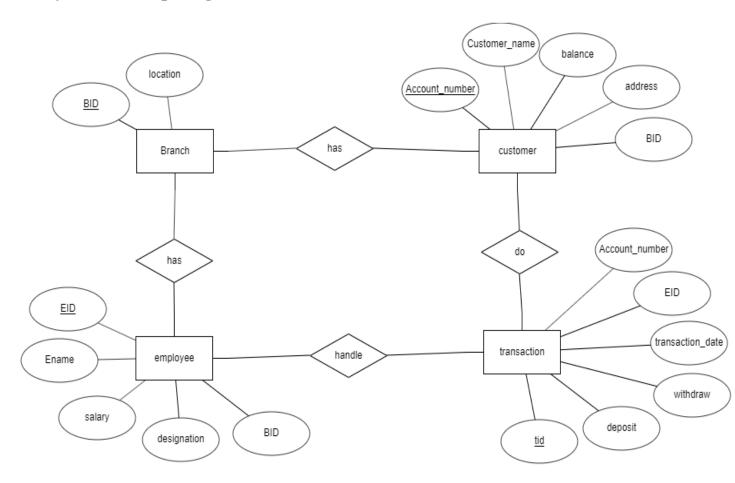
Branch (BID: integer, location: string).

Employee (EID: integer, Ename: string, salary: integer, designation: string, BID: integer).

Customer (<u>Account_number</u>: integer, Customer_name: string, balance: integer, address: string, BID: integer).

Transaction (<u>TID:</u> integer, deposit: integer, withdraw: integer, transaction_date: string, EID: integer, Account_number: integer).

Entity-Relationship Diagram:



Project progress till now:

- 1. All the relations have been created as database tables.
- 2. Appropriate data has been inserted into each tables.
- 3. Database link can be created between the laptops of the group members.
- 4. To maintain the integrity of the 'Customer' table whenever any data is inserted into 'Transaction' table two triggers have been created and they are functioning properly.
- 5. A procedure has been created which is used to horizontally fragment the 'Employee' table on the basis of 'salary' attribute which is functioning properly.
- 6. A trigger has been created which maintains the integrity of the 'Transaction' table whenever 'EID' attribute of 'Employee' table is updated. This trigger also maintains the integrity of the two fragments of 'Employee' table accordingly.
- 7. Another trigger maintains the integrity of the two fragments of 'Employee' table whenever the 'salary' attribute of 'Employee' table is changed.
- 8. Local mapping transparency can be implemented in the system.