**SEMESTER PROJECT TOPICS BIT**

1. Sample E levy system
2. RMU Budget Management System

**PROJECT DESCRIPTIONS**

**TASK ONE EXPLAINED:**

You have been approached by the Bank of RMU to help them with the integration of the new E-levy charges to their already existing banking system. They need a means to make the correct taxations and keep the records as well for their monthly senior management meetings. Owing to the nature of the E-levy and the constraints involved, you will need to register a small sample of their clients to run the trial phase. The registration requires the name of the individual, their bank account number, whether they have a linked mobile money account to the bank account and any other relevant fields you think they need to help you achieve your task. Once a user logs in, they have the option to perform a transaction (bank account to other bank account, bank account to same mobile money account, bank account to other mobile money account) and also view their transaction history. Addition of an e levy calculator is also welcome. The relevant E levy charge should be calculated and stored in a database as well as the records of the transaction, including the date of the transaction. Generate the following reports:

1. Number of transactions from bank account to same mobile money account in a month of your choice
2. The sum of all charges (E levy charge) in a month of your choice
3. The number of transactions from bank account to different bank account where the E levy charge was less than 20ghc.
4. Users who have bank accounts with no connected mobile money account.

**TASK TWO EXPLAINED:**

The RMU Accounts unit is responsible for handling the budgets of the school. This is done on a departmental level. The activities of the Accounts unit to achieve this task is divided into three main segments. The Budgeting segment, Reporting and Expenditure. Under Budgeting, you are required to create an interface together with relevant databases so that Expenditure lines which each come with their unique codes and category (CAPEX, Personal Emolument, Operational) are stored. An accounts officer acting as an admin is responsible for adding up these Expenditure lines, viewing the requests put in by the various departments, editing these requests from the departments after the annual budget meetings (setting the approved amount from senior management), and adjusting the lines as and when necessary (increasing or decreasing an expenditure line based on requests put in for expenditure).

Under Expenditure the various departments will put in a request using a pre-defined template. These requests must be stored in a database. The accounts officer should be able to approve or disapprove a request. Additionally, there should be alerts when a department exceeds their allocated amount for that specific Expenditure line (the alert should highlight the transaction in red). When a payment goes through, there should be an interface where the admin can insert the record.

Reports include but are not limited to the following:

1. Summary of the Budget (this shows all the departmental Expenditure lines) and gives the total sum
2. The final approved budget after the admin has made all necessary adjustments
3. Variation (a report of amount budgeted for a specific line against the amount approved during expenditure)

**NB: All analysis done should be properly documented.**