ISYS224 Assignment 2: Q&A

It is natural for an assignment of this nature to be somewhat underspecified in certain aspects. The current document is intended to consolidate the questions raised by students (and replies to them), as well as their suggestions. This is a living document, and will be expanded as deemed necessary. It was last updated on Sunday 21ˢᵗ October, 2018, at 20:10.

1. Q: The numbering of components in the assignment is not consistent across different tasks. Must we follow it?

   A: You can use slightly different style. You may want to approximately follow the style provided in the file: `Assn2_document_template.pdf`. This is based on one suggested by a current student of ISYS224 (with their consent). You may use any word processing tool for this purpose; but the file you submit must be in the pdf format.

2. Q: In Part 3(a) of Task 2, are we not required to also reduce the loan amount by the amount being repaid (apart from reducing the balance of the `from_account` by the said amount)?

   A: Yes! The Part 3(a) of Task 2 should read:

   > *the balance is accordingly reduced in the account identified by (`from_BSB`, `from_accountNo`), as is the balance in the account associated with* `to_loan`.

   The Assignment specs will be annotated so that the changes being made to it can be easily seen in context.

3. Q: Can you explain in simple language what the following means: *The repayment towards a loan must be made from an account such that at least one of the borrower individually (or jointly with some other entities) holds the account from which the money is being drawn?* A:

   It simply means that *a borrower can pay off towards any of his/her loans from any of his/her accounts.*

4. Q: Can we change the parameters (names, number, order) of the procedure `Repay_loan(from_BSB, from_accountNo, to_loan, amount)`?

A: Please don't. That will make assessment of that procedures very cumbersome

5. Q: It appears that the sample data that populate the tables through the provided script are not enough for properly carrying out the required tests. Would you provide more data?

   A: There is no plan to provide more data. Students would need to insert some more (appropriate) rows in certain tables to adequately test their programs. It is a learning experience to figure out what data will be relevant to test which program.

6. Q: The sample data indicates that the outstanding loan balance in loan accounts (money that customers owe to the bank) are recorded as "positive" balances. This does not align with the real world practice (as reflected in our bank statements).

   A: The data provided is only indicative of the sort of data you would have in the tables. The "correctness" of the whole database is not guaranteed by the rows inserted through the sample script. One would expect that as long as the whole loan is not paid off, the balance in the loan account would be negative; if the customer "repays" more than the outstanding loan, the amount will become positive. (Otherwise we cannot represent when a loan is overpaid, which would be problematic.)

7. Q: The schema shows a one to many relationship between account and loan (i.e. an account can have more than one loan). is that correct, or an oversight on your part?

   A: It is an oversight. The relationship between loan and account is intended to be 1-1. More specifically, every loan must be associated with exactly one account, where as an account can be associate with a maximum of one loan. There are a couple of other issues with the schematic diagram as well. Corrections to the diagram will be annotated and posted on Monday.

8. Q: What is the difference between the `LoanAmount` in the `Loan` table, and the balance in the loan account associated with that loan?

A: The `LoanAmount` is the original loan amount borrowed by the borrower (with respect to that loan). The balance in the loan account associated with that loan is the remaining amount of loan that needs to be paid before the loan is cleared.

9. Q:

A: