



University of Colombo
Faculty of Technology
Department of Information and Communication Technology
IC 2204 – Software Engineering
Level 2 – Semester 1

Assignment 2 (Individual)

Create a banking application (Java or Python) to deposit, withdraw cash and calculate the monthly repayment for a loan.

On each month there will be an interest calculated on the deposits of the account.

For the loan calculator the following details should be provided by the user: the capital amount and the number of months where the loan will be applied. The interest rate (per annum) for the loan will be chosen according to the number of months entered by the user. There can be loans on four schemes: 3 years, 5 years, 7 years and more than 7 years. The interest rate increases in the ascending order of the years where the loan is applied. Eg: The interest rate for a 3-year and 5-year loan can be 15% and 20% accordingly.

(**You may choose the interest rates as per your choice)

Afterwards, it is required to test your solution using a compatible unit testing framework with the programming language you chose. You may use suitable testing strategies introduced at the lecture. Test against the expected output from the program and the actual output given by your program. Mention whether your test has passed/ failed for the valid and invalid inputs given by the user.

Create a brief report by attaching the screenshots of the code segments, outputs of the program and the tests (unit and integration). For integration testing you can combine several units and test whether you get the expected output.

Note: There should be sufficient textual content, describing what you have done in your program. If the relevant outputs are not clearly described marks will be reduced. The reports will be checked for plagiarism. Copied content will reduce marks or not be considered as a submission.

Submission Guidelines

Submission Deadline: **On or before Sunday, 20th November 2022 at 11.55 pm (No late submissions are entertained)**

You may contact the Lecturer or the Instructor for further clarifications.