AMORTIZATION SCHEDULE CALCULATOR APPLICATION REPORT

Financial Services Information Systems CO7218: Assignment 2

University of Leicester Department of computer Science 2017

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Report

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INTRODUCTION

Amortization according to Investopedia is "The paying off of debt with a fixed repayment schedule in regular installments over a period of time for example with a mortgage or a car loan".

This concise report explains the Amortization Schedule Calculator application developed for calculating monthly or annually loan repayment over a specified period of time using the Equal Total Payment method. This calculator determines the Payment amount, it also determines how much of the payment amount will go towards the principal and how much will go towards interest. And as well as the remaining balance.

The report will briefly explain how the calculator works, the technology used to build the application and the structure of the application and how it can be run.

HOW THE APPLICATION WORKS

Simply input the Loan Amount, the Interest Rate, the Number of Payment required, and specify the frequency of payment by clicking on Monthly or Annually. And then click calculate a table will display with all the relevant output. Further calculations can be found on the UI that explains all the calculations and the formulas used to perform the calculations.

TECHNOLOGY USED TO BUILD THE APPLICATION

The Amortization Schedule Calculator is a web application, it is built using HTML5, CSS3 and JavaScript. Html was used to build the interface, css3 was used to design the interface and JavaScript was used to implement the business logic of the calculator i.e. all the calculations involved.

Structure of the Application and how to run it

To run the application all the files must be placed in the same folder.

Step 1: Unzip the assignment2.zip file, then open the assignment2 folder

Step 2: Open the index.html with a browser, preferably Google chrome, or Firefox.

NB: for a better user experience, it is recommended that the index.html file be run in google chrome browser. And internet connection is recommended, to be able to execute cdn bootstrap files.

The application consists with these files

- 1. index.html: this is the html file that contains the markup language used to build the user interface
- 2. style.css: this is the file that contains the custom styles for the user interface.
- 3. bootstrap.min.css: this is the bootstrap file used to style the user interface
- 4. script.js: this is the JavaScript file used to code the business logic off the calculator, in the JavaScript file all the features of the calculator are handled. Features like calculation of the schedule loan repayment, the dynamic creation of the table, and other features. For more details on the code in the JavaScript file one should investigate the file by opening it in the text editor of choice. The code is well commented.