**Mobile App Development – Assignment 1 – EMI Calculator**

Introduction

The goal of this assignment was to develop an application which calculates the equated monthly installment (EMI) based on the input of the loan amount, interest rate, and amortization period. This application should also provide the user with an option to go to the TD EMI calculator if they would like more information.

Development Process

The EMI Calculator was created using 10 components which consisted of a toolbar, TextView, TextInputLayout, TextInputEditText, and a button (as shown below). This application only utilized one layout, activity\_main.xml. This is because the requirements of the application were to calculate the EMI and redirect the user to the TD EMI Calculator.

A screenshot of a computer

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**Figure 1: Component Tree**

To calculate the EMI, the application calls on a function called “calculateEMI()” when the calculateEMI button is clicked. This function takes what the user has entered in the loanAmountField, interestRateField, and amortizationField and calculates the monthly payment.

A screen shot of a computer program

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**Figure 2: calculateEMI function and onClickListener for button**

Intents were used to redirect the user to the TD EMI calculator when they click on the hyperlink. First a string variable is set to contain the TD link and then an intent which parses the string and then the startActivity() function is used to open Google Chrome on the device and open the link. The function which contains the intent and how it is called upon can be seen below.

A screen shot of a computer

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**Figure 3: openTDWebsite() function which contains the intent on opening TD website**

A computer screen shot of a program

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**Figure 4: Setting an onClickListener on the TextView to open the hyperlink.**

The assignment code can be found on github: https://github.com/anishp22/EMICalculatorApplication