

ASSINGMENT 02

GUI DESIGN TASK

EC 2010 - COMPUTER PROGRAMMINNG

ARAFATH M.S.M

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GROUP A

SEMESTER 2

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GUI SCREEN

The screenshot shows a window titled "Fixed Deposit Interest Calculator". Inside the window, there are three input fields labeled "Deposit Amount", "Deposit Period", and "Deposit Maturity", each with a dropdown arrow to its right. Below these fields is a blue-outlined button labeled "Calculate". Underneath the "Calculate" button, the words "Interest Rate", "Interest", and "Total at Maturity" are displayed in bold black text.

Fixed Deposit Interest Calculator

Deposit Amount

Deposit Period

Deposit Maturity

Calculate

Interest Rate

Interest

Total at Maturity

Fixed Deposit Interest Calculator

Deposit Amount	<input type="text" value="100000"/>
Deposit Period	<input type="text" value="2"/>
Deposit Maturity	<input type="text" value="Monthly"/>
<input type="button" value="Calculate"/>	
Interest Rate	5.91 %
Interest Earned(Monthly)	492.5 LKR
Total at Maturity	100000 LKR

Fixed Deposit Interest Calculator

Deposit Amount	<input type="text" value="100000"/>
Deposit Period	<input type="text" value="2"/>
Deposit Maturity	<input type="text" value="Maturity"/>
<input type="button" value="Calculate"/>	
Interest Rate	6.25 %
Interest Earned	12890.625 LKR
Total at Maturity	112890.625 LKR

CODE FOR GUI TASK 02

```
private: double Maturity(int period, double deposit){
    double intrestRates[5] = { 5.5, 6.25, 7, 7.5, 8 };           int i = 0 ;
    double intrestRate = 0;
    while (true)
    {
        if (i == period) {                               intrestRate =
intrestRates[i];
                                                break;
        }
        ++i;
    }
    double powerValue = 1;   for (int i = 0; i <=
period; ++i)
    {
        powerValue *= ((intrestRate / 100)+1);
    }
    double compoundInterest = deposit * (powerValue - 1);      return
compoundInterest;
}
private: double Monthly(int period, double deposit){   double intrestRates[5] = {5.4,
5.91, 6.37,6.58, 6.75};   double compoundInterest = 0;
    for (int i = 1; i <= period; ++i)
    {
        if (i == period) {
            compoundInterest = (intrestRates[i] / 100) * deposit;
            break;
        }
    }
    return compoundInterest/12;
}
private: void Function(int period, double deposit, int maturity){   double intrestRatesMaturity[5] = { 5.5,
6.25, 7, 7.5, 8 };
    double intrestRatesMonthly[5] = { 5.4, 5.91, 6.37,6.58, 6.75 };   switch (maturity)
{
    case 0:
        this->label5->Text = "Interest Earned(Monthly)";
        this->label7->Text = Convert::ToString(intrestRatesMonthly[period] + "
%");
        this->label8->Text = Convert::ToString(Monthly(period, deposit) + "
LKR");
        this->label9->Text = Convert::ToString(deposit + " LKR");
        break;
    case 1:
        this->label5->Text = "Interest Earned";
        this->label7->Text = Convert::ToString(intrestRatesMaturity[period] + "
%");
}
```

```
        this->label8->Text = Convert::ToString(Maturity(period, deposit) + "
LKR");
        this->label9->Text = Convert::ToString(deposit + Maturity(period,
deposit) + " LKR");
        break;
    }
}
private: System::Void button1_Click(System::Object^ sender, System::EventArgs^ e) {
    String^ Deposit = this-
>textBox1->Text; double deposit = Convert::.ToDouble(Deposit); int period = this->comboBox1->SelectedIndex;
int maturity = this->comboBox2->SelectedIndex;
    Function(period, deposit, maturity);
}
```