

CSE 483 Midterm 1

Olcay Taner YILDIZ

For each question, Xml Design, Strings.xml, Variable naming will be graded with 5 points.

I. QUESTION (BODY MASS INDEX) (30 POINTS)

The formula for calculating the BMI is

$$BMI = \frac{weightInKilograms}{heightInMeters \times heightInMeters} \quad (1)$$

Create a BMI calculator application that allows users to enter their weight and height, then calculates the user's body mass index. The application should also display the following information:

BMI Values

Underweight	less than 18.5
Normal	between 18.5 and 24.9
Overweight	between 25 and 29.9
Obese	30 or greater

II. QUESTION (MORTGAGE CALCULATOR) (35 POINTS)

Create a mortgage calculator application that allows the user to enter a purchase price, down payment amount and a monthly interest rate. Based on these values, the application should calculate the loan amount (purchase price minus down payment) and display the monthly payment

$$Payment = loan \times \frac{InterestRate}{1 - \frac{1}{(1+InterestRate)^{12 \times years}}} \quad (2)$$

for 10, 20 and 30 year loans. Allow the user to select a custom loan duration (in years) by using a SeekBar and display the monthly payment for that custom loan duration.

III. QUESTION (FAVORITE MOVIES) (35 POINTS)

Create a favorite movies application that allows users to save their favorite movies to be watched (film name, release date). Users can then conveniently plan their favorite movies. The users can also search IMDB for their movies by pressing the name of the film. The search string is

<http://www.imdb.com/find?q=>