

Assessment 2 – Student Grades Program

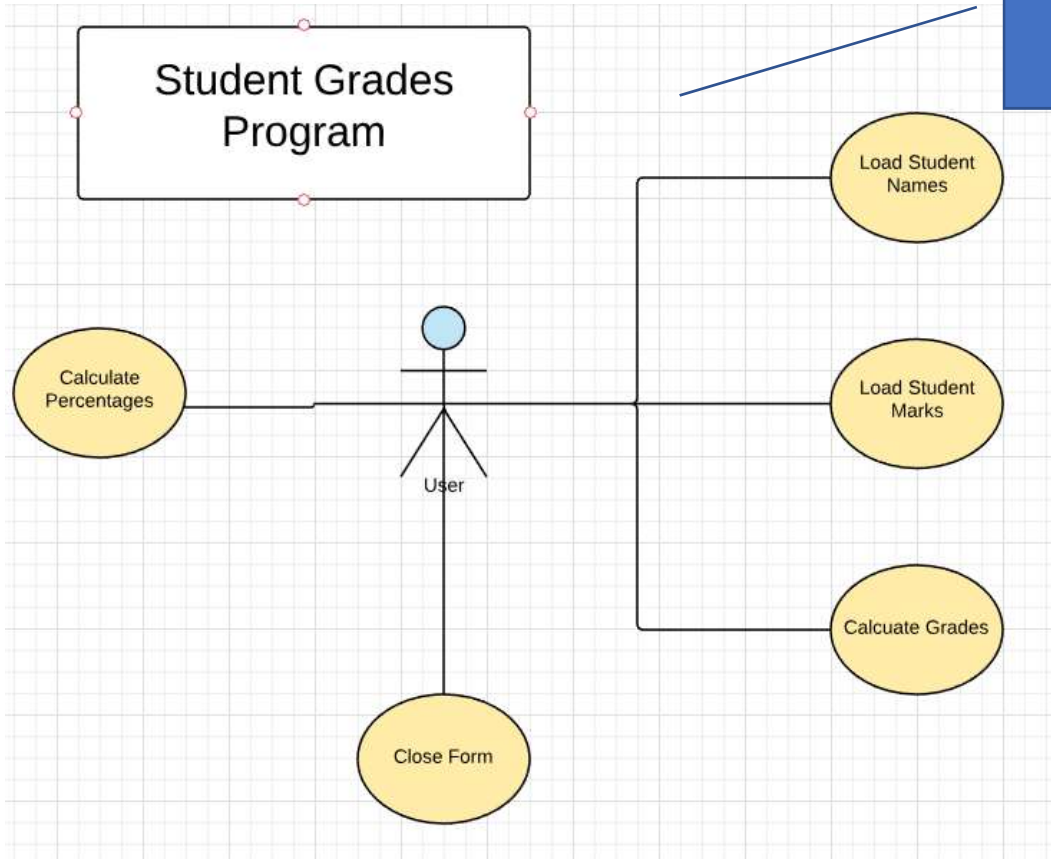
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P2: Program Design

User Interface

The screenshot shows a window titled "Derek's Student Grades Calculator". It contains four text input areas at the top: "Student Names" (with "Sam", "Nathan", "Bob"), "Student Marks" (with "40", "70", "90"), "Student Grades" (with "P", "M", "D"), and "Grade Percentages" (with "F = 10%", "P = 20%", "M = 50%", "D = 20%"). Below these are four buttons: "Load Student Names", "Load Student Marks", "Calculate Grades", and "Calculate Percentages". At the bottom right is an "Exit" button.

Use Case Diagram



Can you spot the missing use case?

Use Case Descriptions

Load Student Names: When the user clicks on the **Load Names Button** the user will be prompted to select a csv names file, and when they click ok button the file of names will be opened, read in and added to the names list box

Load Student Marks: Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae;.

Calculate Grades: Sed ac mauris tempus, volutpat est et, finibus tellus. In dapibus erat non ornare sodales. Vestibulum a leo vestibulum, luctus dolor at, euismod nulla. Donec vestibulum quis dui ut porttitor.

Calculate Percentages: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam et pretium mauris. Etiam eget lacus et ex laoreet eleifend at pulvinar turpis.

Close Form: Sed ac mauris tempus, volutpat est et, finibus tellus. In dapibus erat non ornare sodales. Vestibulum a leo vestibulum, luctus dolor at, euismod nulla. Donec vestibulum quis dui ut porttitor.

Program Structure

```
Public Class StudentGradesForm
```

```
    Dim name As String  
    Dim mark As Integer  
    Dim grade As String
```

```
    Dim filename As String
```

```
    Dim percentF As Integer  
    Dim percentP As Integer  
    Dim percentM As Integer  
    Dim percentD As Integer
```

```
    Private Sub LoadStudentNames(sender As Object, e As EventArgs) Handles  
NamesButton.Click
```

```
    End Sub
```

```
    Private Sub LoadStudentMarks(sender As Object, e As EventArgs) Handles  
MarksButton.Click
```

```
    End Sub
```

```
    Private Sub CalculateGrades(sender As Object, e As EventArgs) Handles  
GradesButton.Click
```

```
    End Sub
```

```
    Private Sub CalculatePercentages(sender As Object, e As EventArgs) Handles  
CalculateButton.Click
```

```
    End Sub
```

```
    Private Sub ExitApplication(sender As Object, e As EventArgs) Handles  
Button4.Click
```

```
    End Sub
```

End Class