

Faculty of Computing and Technology - University of Kelaniya

CSCI 12063 – Web Programming

Assignment 2

Submit on or before 17th January 2021

Question 01

Student Grade Calculator

Student Results

Student No.	Mathematics	English	Sinhala	Total	Average	Grade
ST-00045	45	45	45	135	45	S
ST-00001	47	100	100	247	82	A

Figure 1- Grade Calculator

You are required to develop a **Grade Calculator** based on the marks that entered by the user. There are four different fields, student ID, marks of three subjects Mathematics, English and Science.

- I. All fields are required to be filled before calculating the final grade. If the required fields are not filled, then you should display an appropriate error message.
- II. Student ID should be validated using regular expression, and if the user enters an invalid student ID you should display an error message.
- III. All the marks should be numbers. User should not be able to enter non-numeric characters to the marks fields.
- IV. When user click the 'ENTER' button, if all data is valid, then student ID, marks of subjects, total mark of three subjects, average mark of the student and his/her grade should be added into the 'Students Result' table.
- V. Consider the following criteria to assign the Grade.

Marks Range	Grade
>=75	A
65 - 74	B
55 - 64	C
40 - 54	S
<40	F

VI. At the end of each record insertion, the form should be reset.

Question 02

PDF Uploader

No file chosen

Upload: 3 - JS Forms and Objects.pdf
Type: application/pdf
Size: 1798.21875 Kb
Stored in: upload/3 - JS Forms and Objects.pdf

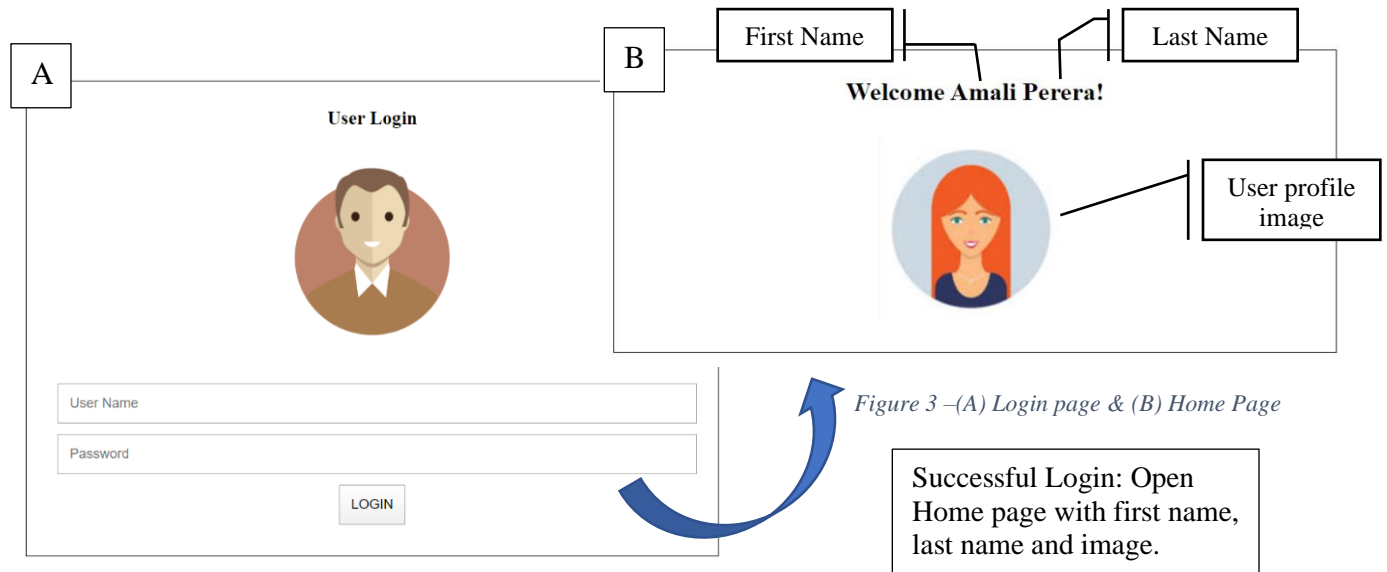
Figure 2 – PDF File Uploader

You are required to develop a ‘PDF Uploader’ that allows to upload PDF files which is less than 2 MB.

- I. If user upload a non-PDF file or larger file (>2MB), you should display an appropriate error message.
- II. If all the conditions are satisfied, then you should save the file in ‘Upload’ directory. If the file already exists, then you should display an error message. Otherwise, Display the saved location, file name, file type and size of the file in the page as shown in the figure 2.

Question 03

You are required to develop a **Login** page and a **Home** page as shown in the figure 3.



- I. Create a database called **customerdb**, then create a table called **tblusers** which contains the login details of users (*Username, Password, First Name, Last Name, and Image Path*).
Note: Records for the table have been provided in the Resource folder (*tblusers_records.csv*).
- II. Create the **Login** page with two text fields that accept username and the password (Figure 3-A). Both fields are **mandatory**.
- III. Once user click LOGIN button, verify the user by retrieving the records from the database. If the user enters an invalid username or password, you should display an error message using an alert box.
- IV. If the user is verified, then redirect to the **Home** page. Home page should display a welcome message by concatenating user's name as shown in the figure 3 – B. Below the welcome message, there is an image that loads the user's Image
Note: Images have been provided in the Resource folder (*./Images/dbimages* folder).