ECE3166 Advanced Microprocessors
Trimester 2, 2022/2023
Assignment 2

Group No. 10
Project Title: Good Shape Fitness Center

Group Members:	
Student ID	**Student Name**
1181102921	Bashir Tawfig Bashir Abugharsa
1181102334	Marawan Ashraf Eldeib

Item	Description	Marks
1	Submission of *.asm and report.	
2	The *.asm can be compiled and the application can run.	
3	Basic features of the application.	
4	Special features of the application.	
5	Teamwork.	
6	Individual contribution.	
7	On-time submission (*marks deduction only*)	
	Total Marks	

Individual Report for:	
Student ID:	1181102921
Student Name:	Bashir Tawfig Bashir Abugharsa
Course Major:	CE

Description of the project:

The goal of this project is to create an interactive and user-friendly application, utilizing the EMU8086 emulator, specifically designed for Good Shape Fitness Center. The purpose of the application is to facilitate the process of client enrollment in fitness classes and personal training sessions.

This application will serve as a comprehensive guide, displaying all necessary details of the fitness classes offered (Pilates, Kickboxing, Zumba, Aerobics, and Yoga) including their monthly fees. Similarly, it will provide information about personal training instructor fees based on different time schedules, such as hourly, daily, weekly, and monthly.

In order to promote ease of use, the application will allow clients to select the fitness classes or personal training schedules they prefer, directly through the platform. A significant feature of this application is its ability to automatically calculate the total payable amount based on the selections made by the clients.

Moreover, the application has been programmed to account for various promotional discounts offered by the fitness center. These include discounts for enrolling in multiple classes and for new clients. The payable amount will be adjusted accordingly, ensuring transparency in transactions.

Special features:

This project's special features revolve around two primary aspects: an enhanced user interface (UI) and a detailed fee breakdown.

- In terms of the user interface, the application has been meticulously designed to provide an interactive, user-friendly experience. Upon opening the application, clients are greeted with a welcome message, setting a positive tone for their interaction. The UI further engages users by highlighting promotional discounts in a specially designated box. This strategically placed promotional box ensures clients are immediately aware of potential savings and is updated regularly to reflect ongoing offers. Navigating through the application, clients can seamlessly choose classes and services, and view their total payable amount. To complete the user's journey, a thank-you message is displayed at the end of each transaction, fostering a sense of appreciation and reinforcing a positive relationship with the clients.

- Another special feature is the detailed breakdown of the payable fees. This ensures complete transparency and allows clients to understand exactly how their total costs have been calculated. Post selection of classes or services, the application automatically generates a detailed description of the charges. It includes the costs for chosen classes or services, applicable promotional discounts for enrolling in multiple classes, and the new customer discount, if eligible. By providing a clear, itemized breakdown, the application empowers clients with full knowledge of their expenses, allowing them to make informed decisions.

Together, these special features significantly improve the user experience, building customer trust and satisfaction, while simplifying the enrollment and payment process at Good Shape Fitness Center.
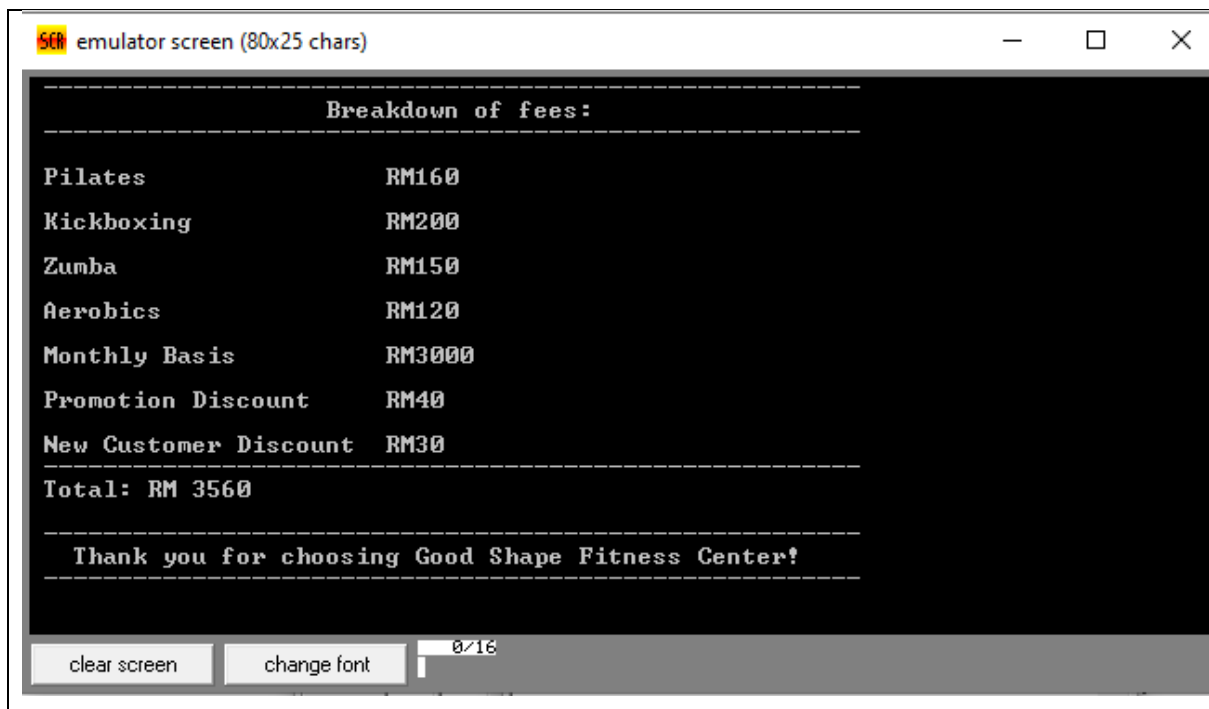
Screenshots:

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                    Breakdown of fees:
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Pilates                 RM160

Kickboxing              RM200

Zumba                   RM150

Aerobics                RM120

Monthly Basis           RM3000

Promotion Discount      RM40

New Customer Discount   RM30
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Total: RM 3560

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   Thank you for choosing Good Shape Fitness Center!
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Highlights of individual contributions:
As part of this project, my primary responsibility was to develop the feature that provides a detailed breakdown of fees. This involved creating an algorithm that itemized the costs for each selected class and personal training session, offering users a clear understanding of their expenses. I also handled user input for the selection of personal training and determining if a customer is new or existing. Moreover, I was in charge of calculating the total cost after integrating all selected services and applicable discounts. My work helped ensure our application's transparency and smooth interaction with customers.