

ECE3166 Advanced Microprocessors
Trimester 2, 2022/2023
Assignment 2

Group No. 10 Project Title: Good Shape Fitness Center
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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 (<i>marks deduction only</i>)	
Total Marks		

Individual Report for:	
Student ID:	1181102334
Student Name:	Marawan Ashraf Eldeib
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.

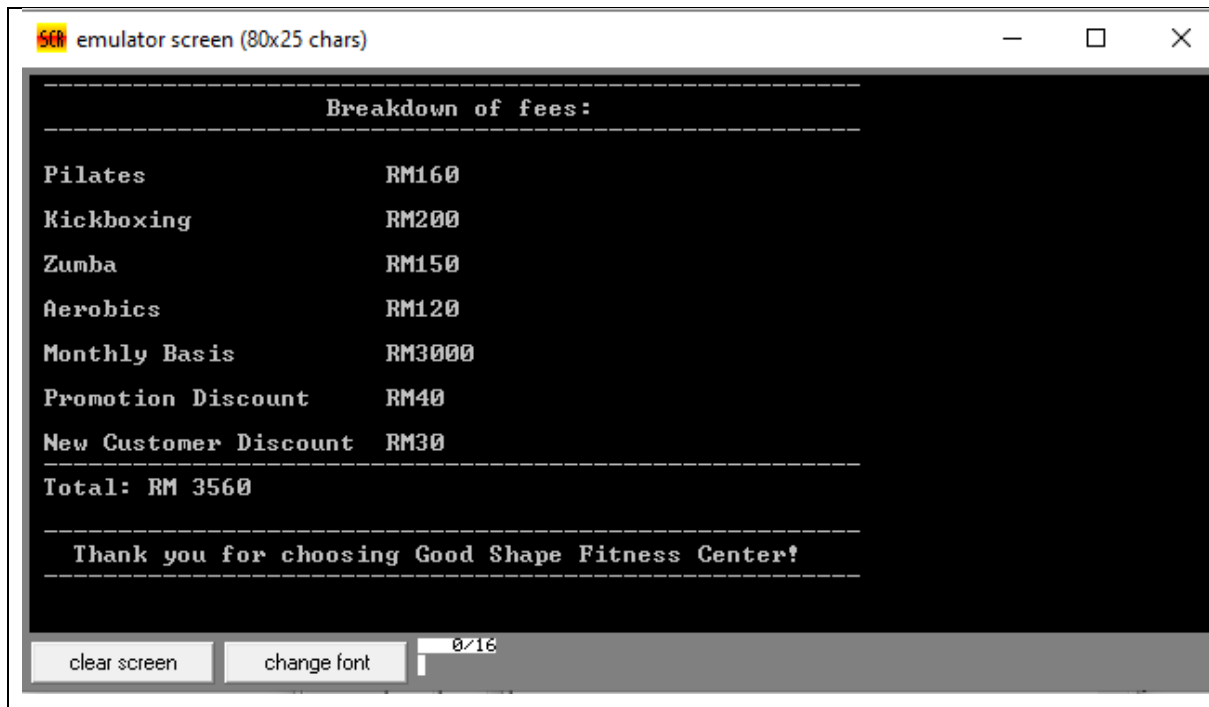
Screenshots:

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Welcome to Good Shape Fitness Center!
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*Enroll more and save more* promotion
Enroll in 2 classes and receive a discount of RM10.
Enroll in 3 classes and receive a discount of RM20.
Enroll in 4 classes or more and receive a discount of RM40.

Please select the fitness classes you want to enroll in:
1-Pilates      RM160
2-Kickboxing   RM200
3-Zumba        RM150
4-Aerobics     RM120
5-Yoga         RM100

Enter the number of classes you want to enroll in: _
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Highlights of individual contributions:

My main role in this project was to enhance the user interface. I designed an intuitive UI that offers a seamless navigation experience for our clients as they go through the enrollment process. I also developed the function that allows users to select fitness classes, making it easy for them to choose their preferred options. Another significant part of my work was creating the module that calculates discounts based on the client's selection and whether they are a new or existing customer. My contributions aimed at improving user experience and simplifying the cost calculation process in our application.