	طنطا	**جامعة:**	**الهندسة**	**كلية:**

البرنامج:	هندسة الحاسبات والتحكم الآلى - 2023
تخصص المشروع:	Cloud – IOT – Mobile – AI
عنوان المشروع:	**SOBA**

SOBA :A smart greenhouse with IoT (Internet of Things) capabilities and mobile and web applications

تطبيق صوبة: إدارة الصوبات الذكية باستخدام انترنت الأشياء اعتمادا على الحوسبة السحابية عن طريق الموبيل او الويب

الفريق:		
	1. محمد مجدي فؤاد حسب الله	9. أحمد محمد جمال حجازي
	2. أحمد محمد عبدالرحمن يونس	10. أمنية عبد الموجود سيد خليل
	3. إيمان محمد قطب عاشور	11. احمد عادل احمد حسن الكفافي
	4. محمد شحاته النواجي	12. ضياء محمد السيد الطيبي
	5. عدنان عبدالهادي توكل	13. فارس اسماعيل محمد خطاب
	6. محمد ابراهيم يوسف خطاب	14. محمد عبدالفتاح عبدالفتاح الفقي
	7. محمد احمد عبدالرحمن سويلم	15. احمد ابراهيم علي عبدالرازق حسن
	8. أروى وجدان عبدالرحمن محمد	

مشرف المشروع:	Prof. Dr. Amany Mahmoud Sarhan Assoc. Prof. Mohammed Arafa Albadry Dr. Hany Aly El-Ghaish

فكرة المشروع:

A smart greenhouse with IoT (Internet of Things) capabilities and mobile and web applications can significantly improve the efficiency and control of greenhouse operations. The integration of technology allows for remote monitoring, automation, and data-driven decision-making. Here's an outline of the key components and functionalities of such a system:

- Sensors and Actuators
- IoT Gateway
- Cloud Platform
- Mobile and Web Applications
- Data Analysis and Insights
- Machine Learning and AI
- User Management and Security
- Integration with Weather Forecast
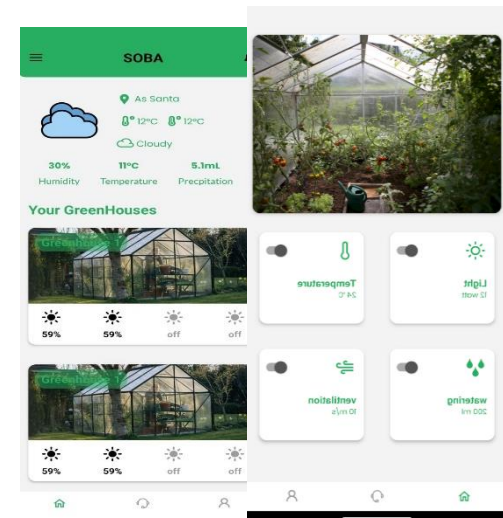
صور من المشروع

Web App	**Hardware model**

Mobile intro app	**Mobile application Home and product screens**

نقاط التميز والتفرد للمشروع إن وجد

- Increased crop yields and quality through precise climate control and optimized resource allocation.
- Control infection & avoid diseases.
- Reduced costs through automation and optimized resource allocation, leading to increased profitability for greenhouse operators.
- Sustainable and environmentally friendly farming practices, helping operators reduce their environmental impact and meet regulatory requirements.
- Real-time monitoring and insights for operators to make informed decisions and improve greenhouse management.

المكونات المستخدمة للبناء:

IOT	Cloud	Mobile
ESP32 Microcontroller	Net Framework	React Native
Control Relays	Blazor Web Framework	Expo
Photovoltaic (PV) module	Docker	JavaScript
digital temperature and humidity sensor DHT11	Entity Framework Core	CSS
	SignalR	FireBase
Light Dependent sensor LDR	Mqtt broker	FCM

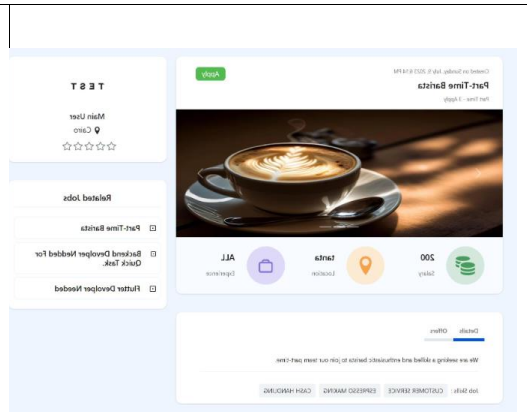|	
Moisture Sensor MH series	**Time series**
PH Sensor	**Database(influxDb)**
Oxygen Sensor	**FCM**
Water level sensor	**Azure**
DC Motor	
DC Water Pump	
DC Fan	

Future Work :-

1. **Enhanced Disease Detection**
2. **Integration of Additional Sensors**
3. **Collaboration and Data Sharing**
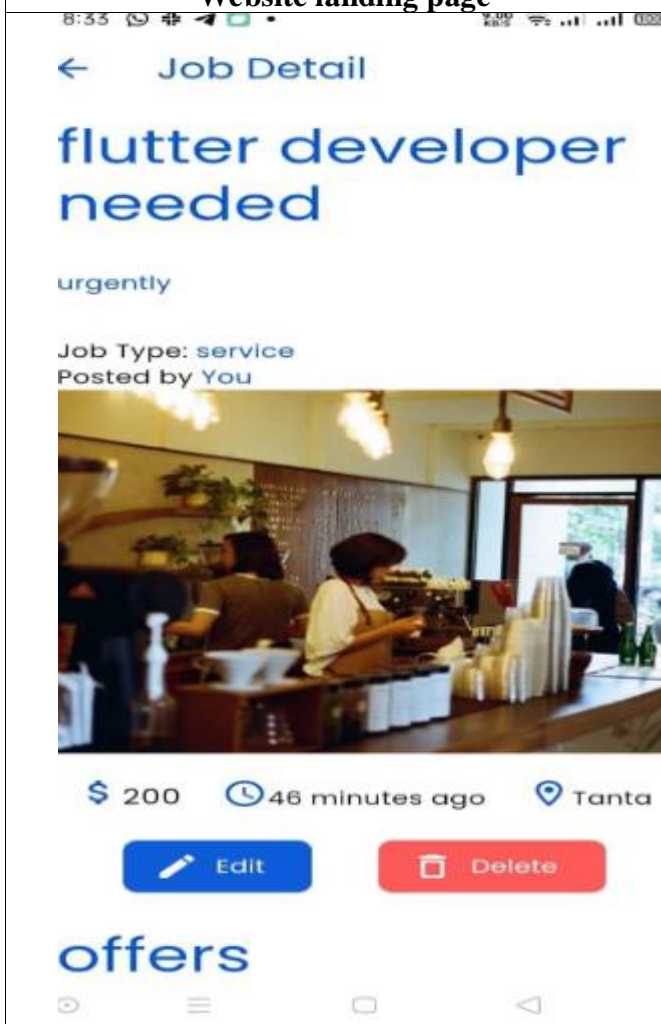4. **Increase the energy efficiency of the machine**
5.

جامعة:	طنطا	كلية:	الهندسة	
البرنامج:	هندسة الحاسبات والتحكم الآلى - 2023			
تخصص المشروع:	Software - (mobile & web app)			
عنوان المشروع:				

Part-time job platform

الفريق:	1. محمد أيمن فاروق عبدالحميد 2. محمود مصباح عبدالعليم 3. مجدي سامي داوود 4. عبدالوهاب محمد عبدالسلام 5. عمر أسامة بهنسي 6. نوران قدري أبويوسف 7. مصطفى حسيني السيد الكفراوي
مشرف المشروع:	**Dr. Hany Elghaiesh**
فكرة المشروع:	

Snap Jobs is a part-time jobs app that enables individuals to offer and find various services, including selling personal items and fulfilling job requests. The user-friendly interface allows users to post job offers or requests, facilitating income generation through skills, resources, or time.

Snap Jobs incorporates ratings, and reviews to ensure transparent and reliable transactions.

It caters to the needs of the modern workforce seeking flexible work arrangements and additional income streams. By connecting job seekers with a wide range of service opportunities, Snap Jobs provides a convenient platform for monetizing assets and finding part-time job options.

With its emphasis on ease of use and diverse service offerings, Snap Jobs aims to become a leading platform in the gig economy, connecting job seekers and service providers effectively.
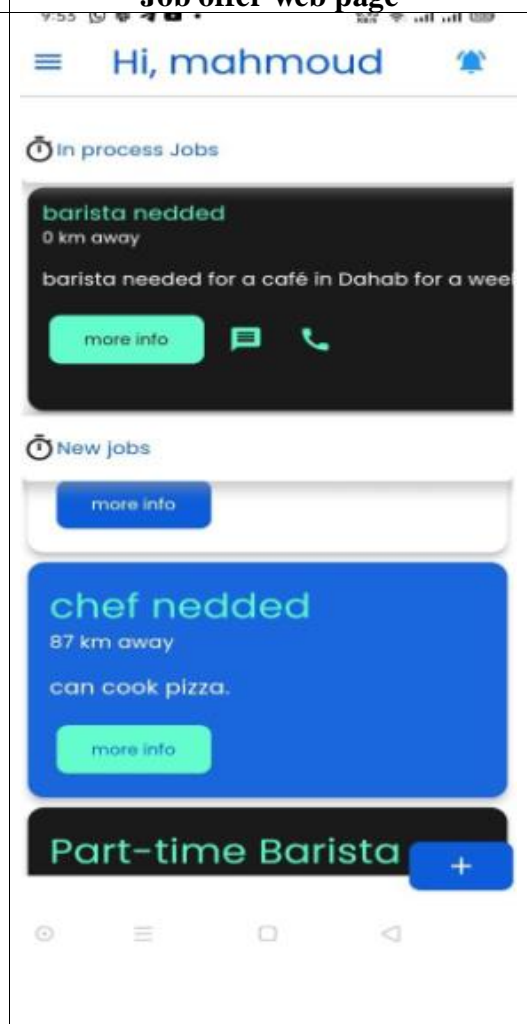
صور من المشروع

Website landing page	Job offer web page

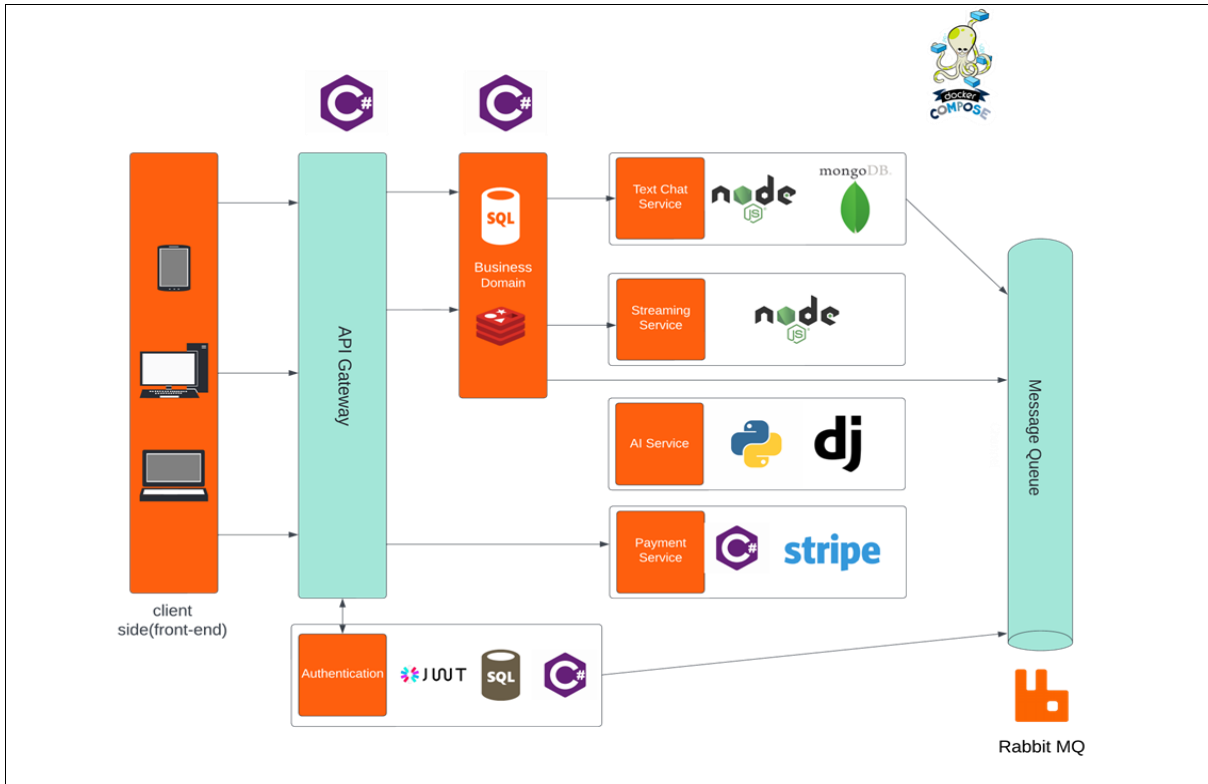| Mobile application job apply screens	Home pageScreen Interface

Bringing new idea and features to the classic VM like
- Service Categories These categories can include services like tutoring, pet care, home cleaning, gardening,
- applicants can negotiate with the job publisher to reach the best possible price
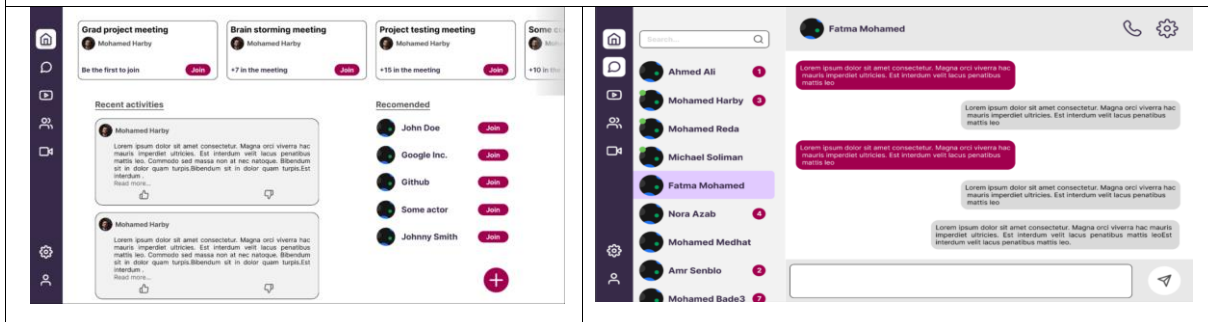- chat gpt acting as acustomr service

Future Work :-
6. Adding new features for example adding payment system
7. Adding security features
8. Partner Collaborations:
   Strategic partnerships with relevant stakeholders,
   such as professional associations, trade unions,
   and local businesses

	الهندسة	كلية:	طنطا	جامعة:

هندسة الحاسبات والتحكم الآلى - 2023	البرنامج:
Software engineering	تخصص المشروع:
Leqaa – Video & Audio Conferencing App	عنوان المشروع:
لقاء تطبيق للمؤتمرات بالصوت والفيديو	
• Mohamed Ibrahim Harby • Micheal Soliman Aziz • Mohamed Medhat Egail • Nora Azab Shehata • Fatema Mohamed El-Refaey • Mohamed Ahmed Badea • Amr Mohsen Senblo • Mohammed Reda Dawoud	الفريق:
Dr. Hany El-Ghaish	مشرف المشروع:
	فكرة المشروع:

The online world is growing day by a day, faster internet speeds, high network traffic, and more human interaction, our app solves the problem of hard communication via providing a P2P communication solution, Our project aims to revolutionize the way people communicate online by providing a cutting-edge peer-to-peer (P2P) communication solution for video and audio conferencing. In a world where online interactions are becoming more prevalent and vital, our app addresses the challenges of traditional communication tools and offers a seamless, and efficient method for connecting people in real-time.

Key features of our P2P communication solution:

- High-Quality Video and Audio: Our app leverages advancements in internet speeds and network technologies to deliver high-quality video and audio streams. Users can experience smooth and clear communication, enhancing the overall conferencing experience.
- Low Latency: By utilizing peer-to-peer architecture, we significantly reduce latency, allowing users to have real-time interactions with minimal delays. This improvement in responsiveness ensures that conversations flow naturally, enabling smooth discussions.
- Scalability: Our app is designed to accommodate a large number of participants in a conference without compromising performance. As network traffic increases, the P2P architecture optimizes the distribution of data, ensuring a reliable connection for everyone involved.

صور من المشروع

System Architecture

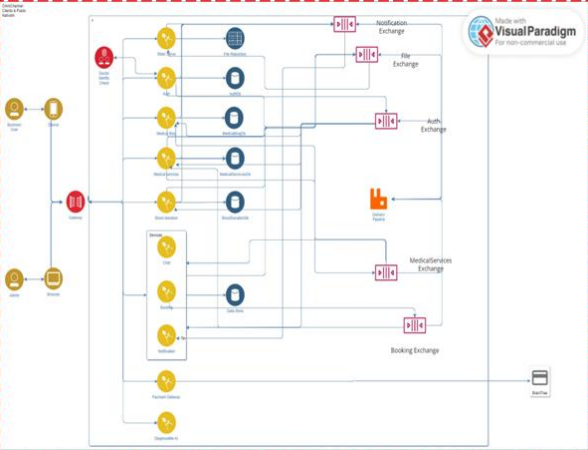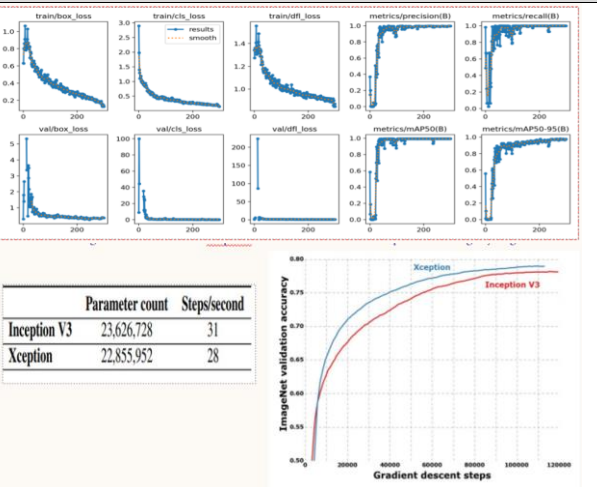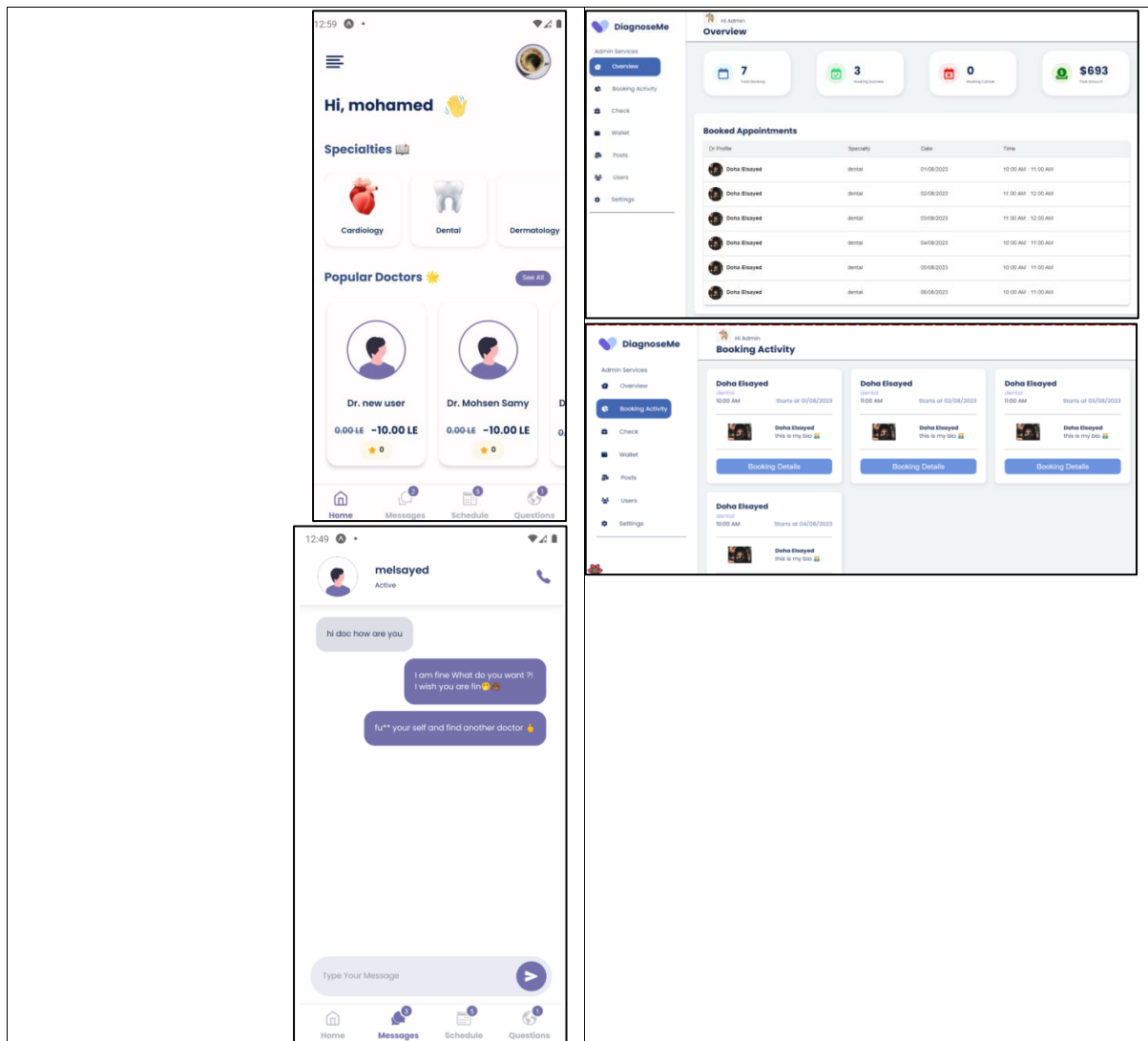| **UI screen 1** | **UI screen 2** |

نقاط التميز والتفرد للمشروع إن وجد

P2P based technology instead of client-server based model.

Future Work :-

1- **Searching service to search the data from entire system databases.**
2- **More AI services like noise cancellation and attendance system.**
3- **File service to manage files instead of storing them in the database**

جامعة:	طنطا	كلية:	الهندسة	
البرنامج:	هندسة الحاسبات والتحكم الآلى - 2023			
تخصص المشروع:	**Smart Services**			
عنوان المشروع:	**DiagnoseMe** A Mobile Diagnostic Application Facilitates Meetings Between Doctors, Patients and Uses AI to Help with Fast Preliminary Diagnosis.			
الفريق:	1. محمد إبراهيم إسماعيل اماره 2. خالد محمود شعبان 3. محمد السعيد الشرقاوي 4. على خالد على عبدالعال 5. محمود احمد شوقي حمزة 6. محمد السيد محمد عبد الله 7. علاء احمد عبده البسيوني			
مشرف المشروع:	**Dr. Hany Al-Ghaish**			
فكرة المشروع:				

In response to the ever-evolving landscape of healthcare, we have developed a groundbreaking medical mobile app designed to revolutionize the way patients and doctors interact. This innovative application aims to address the challenges faced by traditional healthcare systems by harnessing the power of technology to provide convenient and accessible medical services. Through the integration of various features and cutting-edge capabilities, this app strives to empower individuals to take control of their health and seamlessly connect with healthcare professionals.

صور من المشروع

System Architecture	**Ai parts**

| **Mobile application screens** | **Admin Panel screens** |

1- provides video call between doctor and patient.
2- Patients can ask questions and doctors answer them.
3- Doctors can make blogs.
4- chat service between doctors and patients
5- patients can make blood donation requests and they make a chat between each other.
6- Doctors can make checkups after video calls.
7- booking system so the patient can book an appointment and patients pay using the payment system.
8- login and registration system
9- ai services such as diagnose the patient by entering his words and calculate the heart rate by uploading a video for his face
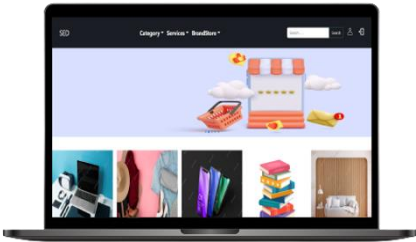
1. **Microservices & Docker**

2. Node.js
3. .NET
4. Rabbit MQ
5. SQL Database
6. React.js
7. React Native
8. MongoDB
9. Flask
10. Exception Model
11. Heart State Classifier
12. Natural Language Processing
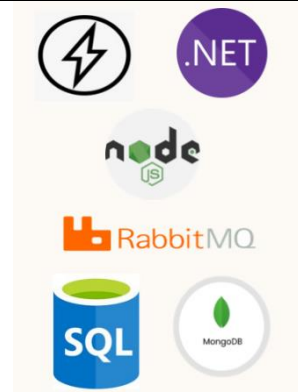
Future Work :-

1. **Adding B2C e-commerce for selling medicines.**
2. **Adding whole section for health care and body building.**
3. **Replace image anti-spoofing model with video anti-spoofing model.**
4. **Adding some plot statistics to display the progress to the admin.**

	جامعة:	طنطا	كلية:	الهندسة	

البرنامج:	هندسة الحاسبات والتحكم الآلى - 2023
تخصص المشروع:	eCommerce mobile application and website
عنوان المشروع:	موقع الكتروني وتطبيق للهاتف لبيع واستبدال والتبرع بالمنتجات SED (Sell, Exchange, and Donate)
الفريق:	1. محمد شحاتة تركي الجرف 2. محمد عادل السيد عبد الخالق 3. محمود عبد الحليم حافظ عبد المجيد 4. عبد الرحمن عزت سعد محمود بشير 5. محمود محمد عبد الغفار العمروسي 6. عبد الله رجب عبد السلام قطب المعداوي
مشرف المشروع:	د. محمود الشويمي
فكرة المشروع:	

This project aims to introduce mobile and web applications for eCommerce that facilitate the selling, exchanging, and donating of goods.This website facilitates communication between users through chat or calls to help them achieve their goals. The application allows users to browse products from various categories and provides detailed information about each product to help users determine if it meets their requirements.

This project utilizes a database to store all information about products and users, which can be easily retrieved at any time to facilitate the search process.

The major goal of this project is to provide users with an easy way to buy, exchange, or donate products and help one another using the internet, which facilitates communication and brings them closer together.

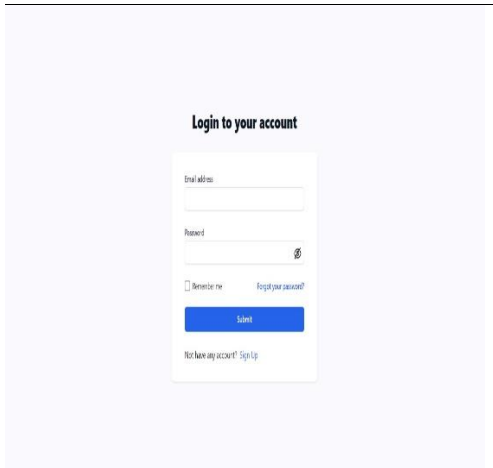| من اهم صور المشروع |
|---|

Home Screen

Chat Screen

- التبرع والاستبدال بين المستخذين بعضهم البعض
- التخطيط لإضافة خاصيه البحث عن طريق صوره

كود البروجيكت:

- [MoShehata7920/SED: SED (Sell, Exchange and Donate). (github.com)](https://github.com)

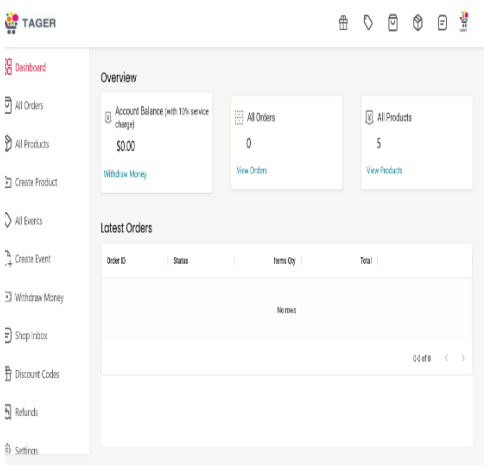|		
جامعة:	طنطا	**كلية:** الهندسة
البرنامج:	هندسة الحاسبات والتحكم الآلى - 2023	
تخصص المشروع:	e-commerce	
عنوان المشروع:	**TAGER** **Tager – A Platform To Buy And Sell Goods** **تاجر – منصة للبيع والشراء**	
الفريق:	1. Amir Alaa-Eldine Abd Alazeam 2. Abdelaziz Abdelstar Ebrahim 3. Omar Hamdy Mobarak 4. Mohammed Gamal Zakaria 5. Mohammed Adel El-Ansary 6. Mohamed AbdElsalam 7. Mohamed Abdelfatah Hamad 8. Mahmoud Mulham Al-Rashidi	
مشرف المشروع:	Dr. Mohammed A Attia	

فكرة المشروع:

In recent years, E-commerce websites have become widely used and turned into one of the largest and most popular ways to buy and sell any items online. With the covid-19 pandemic being an even bigger factor in making online shopping soar in popularity due to people being isolated at home and having no other way to get their commodities.

In this project, we aim to make an online shopping website to make the experience of purchasing and selling goods easy, convenient and efficient for both the buyer and the seller.

Tager is an e-commerce website that allows direct communication between the buyer and the seller, where the main goal is connecting them in a manner that is easy, efficient, and beneficial for both parties.
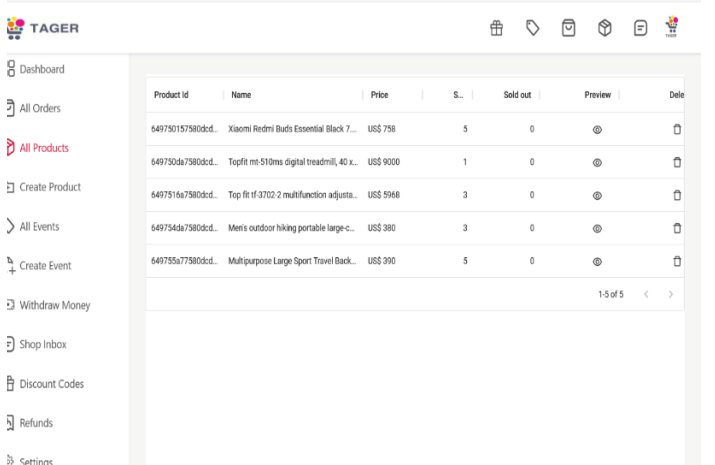
صور من المشروع

Login page	Product Details Page
Seller Dashboard	Seller All Products

Future Work :-

- **Mobile Application**

  While working on this project, we had hoped to create a mobile application accompanying the web application. However, due to time constraints, we were unable to fulfil that objective and it is something that we will continue working on in the future.

- **Analytics and Data Analysis Tools**

  Gathering and analysing data is of paramount importance to achieve customer satisfaction and drive business growth. Analytics and analysis tools play a vital role in providing valuable insights into customer behaviour, optimizing marketing strategies, improving website performance, and enhancing the overall user experience. We hope to implement these features at a later date.
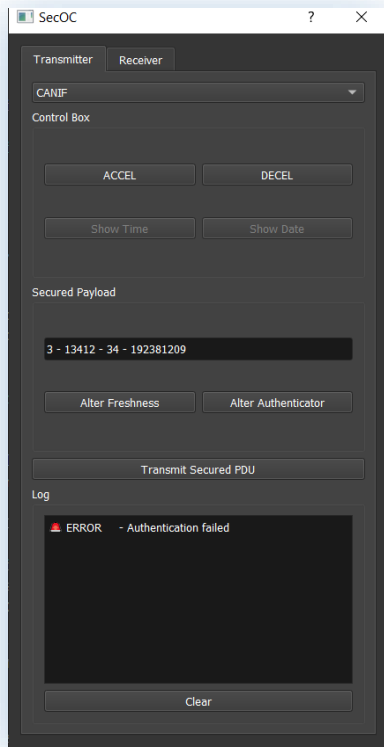
- **Notifications**

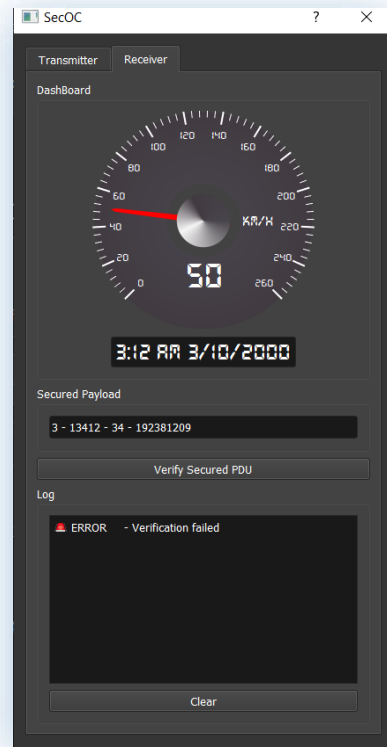There are 3 types of notifications: Push, Email and In-App notifications

Organized by the Dimensions Student Organization on February 4-6 at Banha.

	كلية: الهندسة	**طنطا**	**جامعة:**
	هندسة الحاسبات والتحكم الآلى - 2023		**البرنامج:**
	Automotive Embedded systems		**تخصص المشروع:**
	تنفيذ وحدة تأمين الإتصال بين اللوح الإلكترونية للاوتوزار Implementation of AUTOSAR SecOC Module		**عنوان المشروع:**
	1. Abdallah Alaa Ali Salem 2. Galal Nasser Mohamed Elfeky 3. Ziad Ashraf Kamel Gamalelden 4. Hussein AbdAlsalam Hassan Elsaka 5. Hossam Sayed Ahmed Mohamed Aboabla 6. Mohammed Abdelsattar Abdelsattar Aboelniel		**الفريق:**
	د. وائل العوضي		**مشرف المشروع:**
			فكرة المشروع:

This is a bachelor's graduation project that aims to implement the AUTOSAR software module (SecOC) concerned with providing effective information security on in-vehicle networks, addressing the rising concerns surrounding malicious attacks. By supplementing the existing AUTOSAR package, SecOC introduces a set of communication encryption and verification standards specifically designed for telematics buses.

Our team has accomplished the following tasks:
- We developed and integrated a **SecOC** module that supports **Direct** and **TP** protocols for transmission and reception.
- We implemented stubs for several communication layers, including **COM**, **PduR**, **CSM**, and lower layers such as **CanIF**, **CanTP**, and **SoAd**.
- We designed and implemented a **GUI** for the **Rasberry Pi** platform using **PySide2** and **Qt Designer**.
- We established our project environment using **Cmake**.
- We ensured compliance with **Misra C** standards during the code development process.
- We used **GTest** to test our code.
- We tracked our code using the **git version control system.**
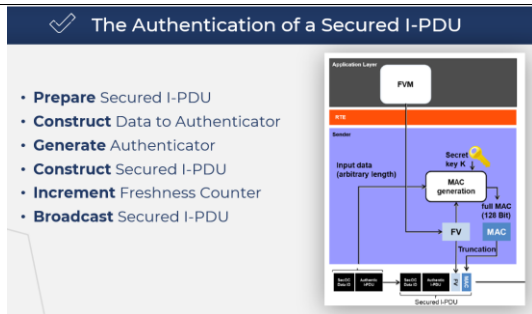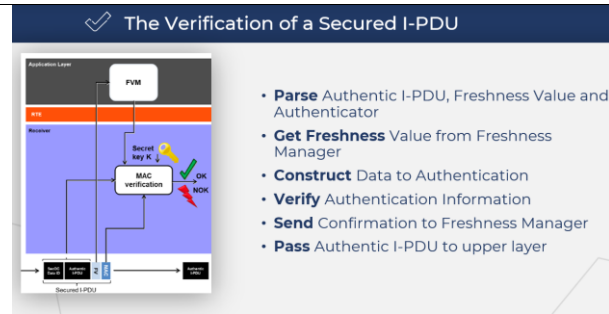- **70 files - 11532 lines**

صور من المشروع

GUI – Transmitter tab	GUI – Receiver tab
The Authentication of a secured I-PDU	The verification of a secured I-PDU

<div dir="rtl">

نقاط التميز والتفرد للمشروع إن وجد

</div>

- Our project utilized industry-standard practices and tools, such as AUTOSAR and MISRA C

<div dir="rtl">

المكونات المستخدمة للبناء:

</div>

2x Raspberry pi 3 B+

Our Project was sponsored by **APPRAID TECH**

Graduation Book:
https://drive.google.com/file/d/1a-fjA6bA_IQp1f8UUPA6I_Vl5Sqxim9I/view?usp=drive_link

Project Repository:
https://github.com/HosamAboabla/Autosar_SecOC

GUI demonstration:
https://drive.google.com/file/d/15s4cfum-vkNos60n3j1fyCAwxwQRRD7F/view

	الهندسة	**كلية:**	طنطا	**جامعة:**		

البرنامج:	هندسة الحاسبات والتحكم الآلى – 2023
تخصص المشروع:	eCommerce mobile application and website
عنوان المشروع:	موقع الكتروني وتطبيق للهاتف لبيع واستبدال والتبرع بالمنتجات SED (Sell, Exchange, and Donate)
الفريق:	1. محمد شحاتة تركي الجرف 2. محمد عادل السيد عبد الخالق 3. محمود عبد الحليم حافظ عبد المجيد 4. عبد الرحمن عزت سعد محمود بشير 5. محمود محمد عبد الغفار العمروسي 6. عبد الله رجب عبد السلام قطب المعداوي
مشرف المشروع:	د. محمود الشويمي
فكرة المشروع:	

This project aims to introduce mobile and web applications for eCommerce that facilitate the selling, exchanging, and donating of goods. This website facilitates communication between users through chat or calls to help them achieve their goals. The application allows users to browse products from various categories and provides detailed information about each product to help users determine if it meets their requirements.

This project utilizes a database to store all information about products and users, which can be easily retrieved at any time to facilitate the search process. The major goal of this project is to provide users with an easy way to buy, exchange, or donate products and help one another using the internet, which facilitates communication and brings them closer together.

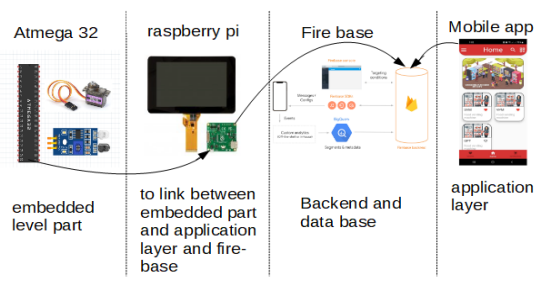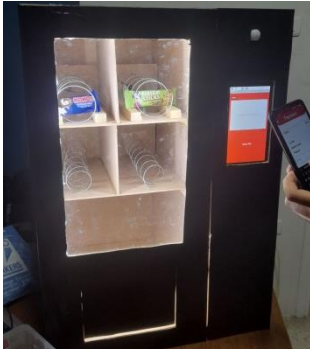|	صور المشروع

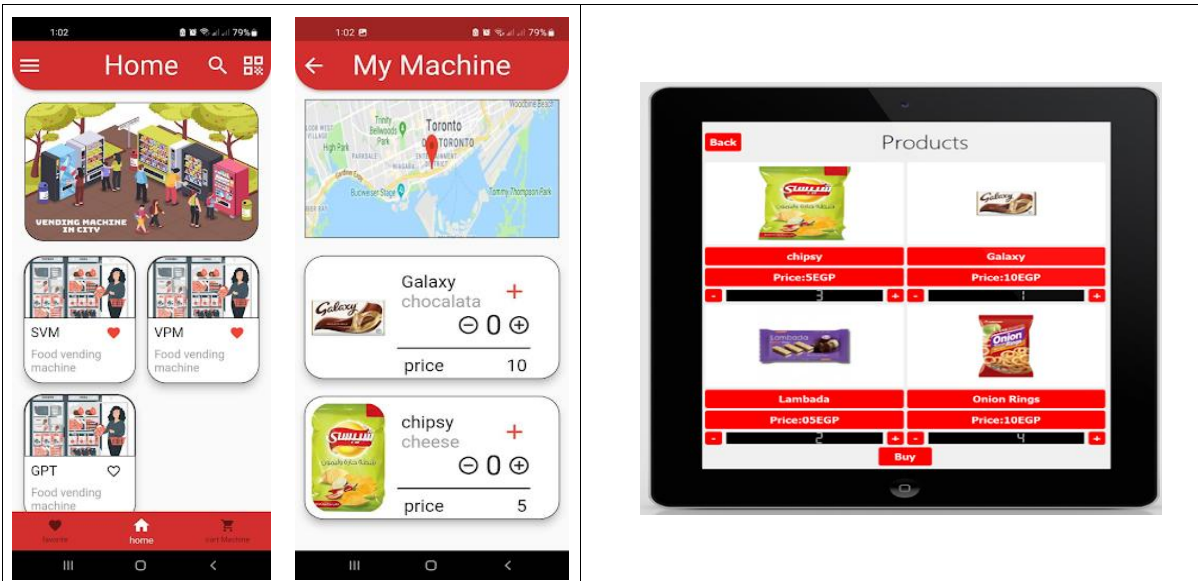
Home Screen

Chat Screen

نقاط التميز والتفرد للمشروع إن وجد

- التبرع والاستبدال بين المستخذين بعضهم البعض
- التخطيط لإضافة خاصيه البحث عن طريق صوره

كود المشروع:

[MoShehata7920/SED: SED (Sell, Exchange and Donate). (github.com)](https://github.com)

جامعة:	طنطا	كلية:	الهندسة		
البرنامج:		هندسة الحاسبات والتحكم الآلى - 2023			
تخصص المشروع:		Embedded Systems - IOT			
عنوان المشروع:		**Svm |**			
		Smart Vending Machine with speech recognition model and mobile application			
		آلة البيع الذكية مع نموذج التعرف على الكلام وتطبيق للهاتف المحمول			
الفريق:		9. علي خالد علي سويلم 10. يوسف اشرف عبد الغفار سالم 11. محمد أيمن صبحى الشاذلى 12. احمد محمد احمد حامد 13. زياد خالد محمد ابراهيم 14. فاطمه الزهراء السيد ابوخضره 15. صلاح سليمان حسين سليمان 16. علي محمد محمد بدر			
مشرف المشروع:		**Dr. Basma GH Elkilany**			

فكرة المشروع:

In these days, the world is moving greatly towards digitalism in payment operations during buying and selling, So we thought about creating a network of smart vending machines connected to the Internet, Which appears in the phone application that comes with this idea, Which in turn not only displays the locations of vending machines and the best root to reach them but also the products that they contain inside, In addition to preparing his order with products that the customer wants to buy remotely from the wanted machine so that he processing it immediately upon his arrival in front of the machine, In addition to completes all payment operations through the application. This is in addition to the smart machine interface which through the customer can make his order whether using GUI in the touch screen or through the machine's voice commands, then he scans the quick response code (QR code) generated in the machine screen using his phone to pay for order and then complete the purchasing process to get his products

صور من المشروع

System Architecture	The Vending Machine Hardware model

| Mobile application Home and product screens	Products page UI On Machine touch Screen Interface

Bringing new idea and features to the classic VM like

- **Adding speech recognition model as interface to the machine**
- **Adding a solid designed GUI interface to machine Taking into account the UI and UX**
- **Adding a mobile app to the process to preorder products remotely and locate the machines**
- **Adding digital payment methods to the process using the app and QR code from the machine**

13. **Vending Machine Hardware Body**
14. **ARM Atmega32 and Raspberry pi 4b**
15. **MG90S Servo motor**
16. **SR501 PIR and Infrared IR sensor**
17. **A 7" touchscreen display**
18. **HW-597 USB to TTL module**
19. **USBasp AVR programmer**
20. **Microphone and Speaker**
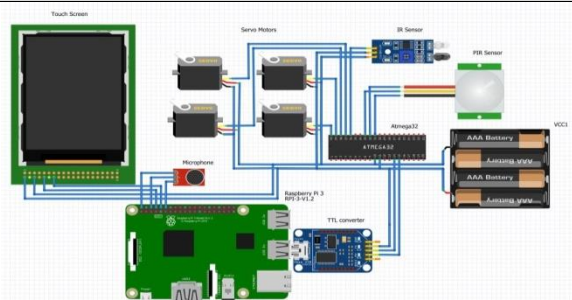
Future Work :-

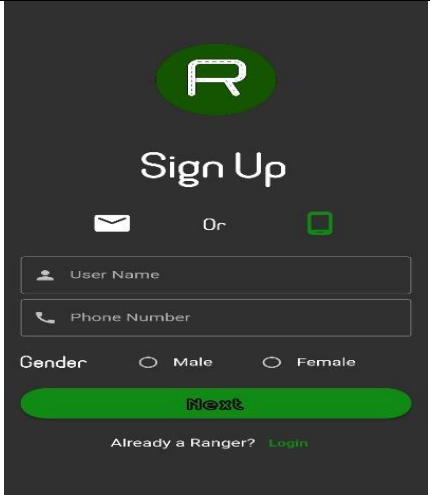5. **Adding new features for example adding cooling system**
6. **Increase the energy efficiency of the machine**
7. **Adding security features**
8. **Adding Remote monitoring and control for troubleshooting and SW updates**
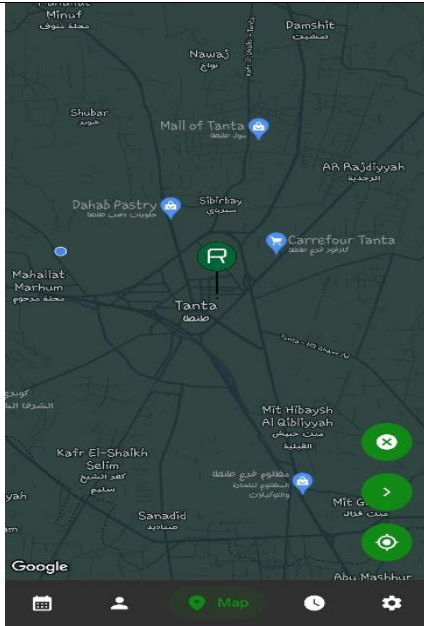
Competition :-

With this Idea we managed to participate in Maker Hackathon 2023 competition organized by the Dimensions Student Organization on February 4-6 at Banha.

جامعة:	طنطا	كلية:	الهندسة	
البرنامج:	هندسة الحاسبات والتحكم الآلى - 2023			
تخصص المشروع:	التعلم العميق و تطبيقات الهاتف المحمول			
عنوان المشروع:	فحص الجلد باستخدام تقنيات التعلم العميق **Derma Checker using Deep Learning Technique**			
الفريق:	1. ابراهيم محمد زكي الرشيدي 2. حسن علي حسن عطية 3. مصطفي محمد سعد حسن 4. غدير احمد الصلحاوي 5. مصطفي عبدالناصر عبدالسيد الكومي 6. فادي سمير نبيل حنا 7. محمد حامد عطية السوساني			
مشرف المشروع:	د. مروة بدر			
فكرة المشروع:				

Mobile Application integrated with Deep Learning model that can checks if suspicious area is a skin cancer or not, And which type of skin cancer.

صور من المشروع

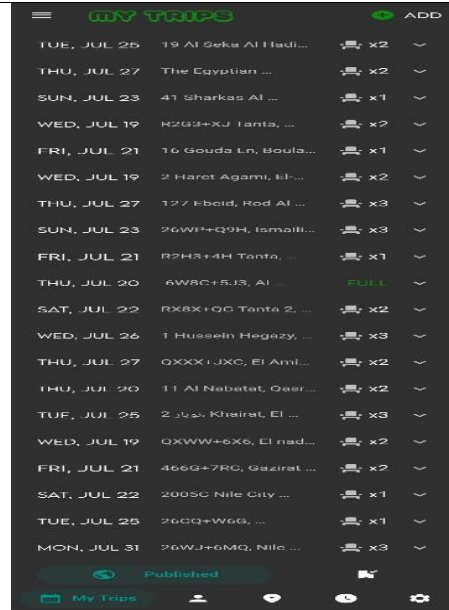

The Detection Integration Model

The Model we chose	**The Cancer Type Integration Model**

	نقاط التميز والتفرد للمشروع إن وجد
	• استخدام اللغة العربية و الانجليزية • وجود الوضع المظلم • بجانب الفحص وجود خدمات أخرى

Future Work

- **Book Appointments Online**
- **Full Cycle Money Transactions**
- **Test and Scans**
- **Recommendation System**
- **Medical Record**
- **Dermatologist Platform**

	الهندسة	**كلية:**	**طنطا**	**جامعة:**	

هندسة الحاسبات والتحكم الآلى - 2023	**البرنامج:**
تطوير تطبيقات الموبايل	**تخصص المشروع:**
تطبيق بيكاب لحجز مشاوير	**عنوان المشروع:**
Pick Up Application for Booking a Ride	
1. بشير إبراهيم السعيد محمد 2. سعيد احمد يحيى عمار 3. عمر محمد الشحات الزواوى 4. علاء على شعبان عويس 5. على سليمان صابر محمد 6. محمد عبد الحكم عبد الفتاح الديب 7. محمد احمد حامد مبارك	**الفريق:**
أ.د/ السيد سلام	**مشرف المشروع:**

فكرة المشروع:

Pick up is an application for a passenger to book a ride with a ranger going his way with his own car for a nominal fare. We used Flutter technology to develop our application. Our application also uses the Google Maps services to accurately determine the location of both the ranger and passenger and the route they are going. The application solves the problem of ordering a ride with expensive fare, and the problem of drivers that travel daily with one or more empty seats in their rides while some people going the same route can't find a ride.

صور من المشروع

Setting your route and publish the trip online	**Sign up page**

A map to accurately determine the route	**Search for trips on your way as a passenger and book your desired trip**

نقاط التميز والتفرد للمشروع إن وجد
• سهولة حجز الرحلات • حجز الرحلات بأجرة رمزية غير باهظة • توافر العديد من الرحلات في اوقات مختلفة لنفس الطريق
Future work *** Live mode** *** Mutual ratings** *** On road** *** Blocking**