Mohamed Mahmoud Hussein Ahmed

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Education:

Ain Shams University, Egypt.   2025

- Faculty of Engineering – Computer Engineering and Software Systems

Skills:

Tools and Technologies:

- Flutter
- Embedded Systems
- Data Structures and Algorithms
- OOP
- Design Patterns
- git/GitHub

- Dart
- Java
- Python
- C++
- C
- Arduino C

Languages

- Arabic: Mother tongue
- English: Fluent

Courses:

Flutter Academy – GDSC Academy – Bamboo Geeks	2022
Kotlin Academy – GDSC Academy – Bamboo Geeks	2022
The Complete 2021 Flutter Development Bootcamp with Dart – Udemy	2022
Agile Software Engineering – Ain Shams University	2022
Software Testing, Verification, and Validation – Ain Shams University	2021
Software Engineering – Ain Shams University	2020
Full Embedded Systems Diploma	2020

The diploma covered the following topics:

- Basic Concepts of Embedded Systems. • C Programming. • Data Structures.
- AVR Micro-controllers interfacing.   • C for Embedded applications (Embedded C).
- Real Time OS (RTOS). • Software Engineering. • Embedded Tools. • Hardware Labs.

Easy to Advanced Data Structures – Udemy	2020
C++ from beginner to beyond – **Udemy**	2020
Python for beginners – Microsoft developer	2020
The complete android developer course, build 14 apps - Udemy	2019
CS50 introduction to computer science – Harvard University - edX	2018
Training of Trainers (TOT) – **Anwar Resala org**	2016

Experience and Achievements:

Co-founder and Head of mobile app development – Slash.	2023 - present
Freelancer Flutter developer	2023 - present
Ranked to top 100 globally – Google's Solution Challenge.	2023
Ranked to top 5 solutions **–** Google's DevFest Cairo '22 Hackathon	**2022**
Partner and Co-organizer – Google's DevFest Cairo '22	2022
Lead – Google Developer Student Clubs – Ain Shams University for Engineering	2022 - 2023
Participant **–** Google hash code	**2020**
Founder and CEO – Geeks Hub	Oct 2019 – present

- A community-based co-working space and makerspace

Founder, Manager, and instructor – EngStein Academy	June 2018 – present

- Robotics and Programming academy
- Taught 10000+ students, ages from 8 to 54 years old.

Trainee – The Arab Contractors	2018

- 20 days hands-on automotive training

Participant in innovation Camp – iHub	2017

- Best design. • RC car. • rescuing robot. • medical pill-dispenser.

Extracurricular activities:

Lead – Google Developer Student Clubs – Ain Shams University for Engineering	2022 - 2023
Positions at Pirates Egypt – Student Activity	2017 - 2019

- Programming / robotics instructor •   Academic director •   Awarded as the best instructor in 2018.

Participant – **business development workshop – iSprint (iHub**)	2019

- Participated in a 2 months' workshop on how to build and run your own startup

Marketing Manager – **Resala Charity Org. Sohag Branch.**	2015 – 2017
Volunteer – **Ressala Charity Organization.**	2011 – Present

Projects:

Slash. - Flutter application   2023
Led the development of a Flutter app for Slash, a one-stop destination for discovering Egypt's finest local brands. The app features a user-friendly interface, robust search and filtering capabilities, and a secure payment system. My contributions to the project included:

- developing the app's user interface
- Implementing state management and routing
- Integrating with our back-end services, and third-party services such as Google Auth and Firebase app monitoring and testing tools
- Optimizing the app's performance for different devices
- Working with a team of developers to release the app on time and within budget

Tazaker - Flutter application   2023

Led the development of a Flutter app for Tazaker, a Saudi Arabian ticket booking platform for football events. The app allows users to browse upcoming events, filter them by club, date, or tournament, and book tickets to desired events. The app also features a user-friendly interface, secure payment system, and real-time ticket availability updates. My contributions to the project included:

- Designing and developing the app's user interface
- Implementing state management and routing
- Integrating with third-party APIs such as the Saudi Football Federation API
- Optimizing the app's performance for different devices
- Working with a team of developers to release the app on time and within budget

Healthy and Happy - Flutter application   2023
"Healthy and Happy" was designed to promote physical and mental health,
Built to participate in the Google's solution challenge 2023 and ranked to top 100 globally.
main features:

- Calories tracking by taking a picture of your meal.
- Sleep, stress level, and physical activity tracking.
- Online sessions with mental health professionals
- Sleep, stress level, and physical activity tracking and evaluation tests
- A social platform for community

- Workout and nutrition tips
- Pedometer

Books exchange - Flutter application   2022

Developed a cross-platform social networking app for book enthusiasts, enabling them to:
- Browse/search for books in their area.
- exchange books with other app users.
- Network with like-minded individuals (chat, follow, add friends).
- Post their own books for exchange.

Body-Mass index (BMI) calculator and interpreter - Flutter application   2022

Self-balanced AVL-tree   2022
Developed a self-balancing AVL-tree implementation in C++ as part of a university course on Data Structures and Algorithms. This project deepened my understanding of dynamic memory allocation, pointers, linked lists, and recursion.

Sorting Algorithms Analyser   2021
Developed a comprehensive C++ application, "Sorting Algorithms Visualizer," that empowers users to explore and compare the performance of various sorting algorithms through interactive visualizations. The app provides a user-friendly interface for selecting different sorting algorithms, inputting data sets, and observing the sorting process in real time.
Users can analyze the efficiency of each algorithm by comparing their execution times and visualizing their performance comparison charts.

Software company management system   2020
Desktop application built with Java and JavaFX to provide:
- Login and register with different user roles **.**
- Assign and monitor tasks of each employee**.**
- Initiate a SW project and update project details**.**
- Initiate meetings and email reminders

Sub-ventilator (splitter) for COVID-19 patients.   2020

- Made for COVID-19 patients to increase the No. of patients that a normal ventilator can serve.
- measures and controls and assures that each patient will get ventilated properly, with two infection filters and air flow control systems.

Medical pill-dispenser   2019
- Utilizes ATmega32 micro-controller.
- Sends daily feedback to their doctor.
- makes sure the patient takes medicine on time.
- contacts the patient's family in case of any emergency.

Arduino projects: 2018 -- 2020
- Rescuing / fire-fighting robot.
- Auto-parking car.
- Talking glove (sign-language to voice).
- Covid-19 sub-ventilator.
- Maze-solving robot.
- Remote-controlled car.
- Blind stick (to help people with sight disabilities avoid obstacles).