

Shahd Fayez Kassem

SOFTWARE ENGINEERING STUDENT

32-B Ahmed Lotfy El-Sayed El-Mesha El-Haram | 01128155753 | Birthdate:
06/02/2003 | Email: Shahd2003fayez@gmail.com | LinkedIn:
<https://www.linkedin.com/in/shahd-fayez-b150491ba/> | GitHub:
<https://github.com/shahd77fayez/>

Personal Profile

Enthusiastic and dedicated software engineering student with a strong foundation in programming principles and a passion for problem-solving. Currently pursuing a Bachelor's degree in Computer Science with a focus on software development. Adept at collaborating with peers on coding projects, with experience in languages such as Python, Java, and C++. Proven ability to grasp complex concepts quickly and apply them to real-world applications. Eager to leverage my education and hands-on experience to contribute to innovative software solutions and continue learning in a dynamic development environment.

Education

Cairo University Faculty of Computer and Artificial Intelligence **10/2020 - Present**

Department: Software Engineering | GPA: 2.93

Dar El-Tarbiah IGCSE Agouza **6/2018 - 6/2020**

Percentage: 92%

University Projects

Weather App

- Flutter Weather Forecast App: Entry-Level Project
 - Designed a user-friendly interface with a search box and city selection feature, demonstrating early proficiency in app layout.
- API Integration and Real-Time Weather Display:
 - Utilized the OpenWeatherMap API to dynamically retrieve weather data based on user-selected cities.
 - Implemented a "View Weather" button that initiates API requests and presents real-time weather information in the app's UI.
- Firebase Integration for User Engagement:
 - Demonstrated the ability to incorporate Firebase's sign-up and login functionalities into the app.
- Weather App Development with Flutter:
 - Illustrated initial steps in Flutter app development, displaying the capability to construct basic user interfaces and interact with APIs.
 - Highlighted foundational skills in state management, API integration, and user authentication.
- State Management with BLoC Pattern:
 - Implemented the BLoC (Business Logic Component) pattern to manage app state and user interactions effectively.
- Skills Demonstrated: Flutter, API Integration, Firebase:
 - Showcased expertise in creating a simple Flutter app, integrating external APIs for real-time data, implementing Firebase for authentication, and employing BLoC for state management.

AI-Akeel | Java EE

- Platform Overview
 - AI-Akeel Company operates an online order management platform.
 - Users can place online orders from a list of registered restaurants.
 - The platform handles order tracking and delivery charges to customers.
- User Access
 - Users can access the platform through a dedicated web application.
- Restaurant Features
 - Registered restaurants can manage specific orders through the platform.
 - The platform provides tools for restaurant staff to oversee and manage orders.
- Technology Stack
 - Front-end development uses JavaScript, HTML, and CSS.
 - Java EE Red Hat JBoss Plugin and API are used for backend development.
 - SQL is employed for the database management.

Checkers Game

- Game Concept: Algorithm-Driven Game Mode Selection
 - Developed a dynamic game concept involving player choice and AI algorithms.
 - Created a game offering three modes: Player vs. Player (PVP), Player vs. Computer (PVC), and Computer vs. Computer (CVC).
 - Integrated advanced AI decision-making algorithms to enhance gameplay.
- Algorithm Selection and Difficulty Customization:
 - Implemented player-driven algorithm selection, allowing users to choose between "Minimax" and "Minimax with Alpha-Beta Pruning."
 - Incorporated adjustable difficulty levels to cater to various player skills and preferences.
- Technical Implementation: Python and Algorithm Integration:
 - Utilized Python as the primary programming language for game development.
 - Seamlessly integrated the Minimax and Minimax with Alpha-Beta Pruning algorithms to drive strategic decision-making within the game.
- Strategic Decision-Making: Enhancing User Experience:
 - Elevated user engagement by incorporating AI-driven strategic choices into the gameplay.
 - Offered players a diverse range of experiences by combining different game modes and algorithmic approaches.

DesignTopia

- DesignTopia: Innovative Home Design Assistance Platform:
 - Developed an intuitive frontend application tailored for exceptional User Interface (UI) and User Experience (UX) design.
- Adobe XD for Seamless Wireframing:
 - Utilized Adobe XD to meticulously create wireframes, fostering a structured and visually appealing user interface.
 - Demonstrated a keen understanding of UI/UX principles to create an engaging and user-friendly environment.

Fawary System

- Fawary System: Innovative Solution with Design Patterns and API Integration
 - Spearheaded the development of the Fawary System, a groundbreaking project that combined design patterns, API integration, UML modeling, and Java programming language.

- UML Modeling for Clear System Visualization:
 - Employed UML (Unified Modeling Language) to create comprehensive visual representations of the system's structure, behavior, and interactions.
- Java Programming Excellence:
 - Leveraged Java programming language to develop robust and dynamic components of the Fawary System.

Airplane Reservation System

- Airplane Reservation System: Streamlined Booking Solution with C# and SQL Integration
 - Led the development of an advanced Airplane Reservation System, utilizing C# programming language and SQL Server for a robust and efficient solution.
- C# Programming Expertise:
 - Demonstrated proficiency in C# programming by designing and implementing intricate system functionalities, ensuring optimal user experience and system performance.
- SQL Server Integration for Data Management:
 - Employed SQL queries to handle reservations, user profiles, and flight schedules, ensuring accurate and real-time information.

Gram-Schmidt

- Python Programming Expertise:
 - Developed an innovative Gram-Schmidt Vector Problem Solver using the Python programming language and the Tkinter library for graphical user interface (GUI).
- Tkinter GUI for Enhanced User Experience:
 - Enabled users to input vectors, trigger calculations, and visualize results through a well-structured graphical interface.
- Mathematical Problem Solving Made Accessible:
 - Designed the application to address mathematical challenges related to vector orthogonality and spanning, making these concepts more accessible to users.
 - Delivered an application that bridges the gap between mathematical theory and practical applications.

Skills & abilities

- Programming Languages
 - C++ - Java - HTML&CSS – SQL - JavaScript - PHP – Python – C#
- Operating Systems
 - Linux
- Other
 - OOP – Data Structure - Algorithms – Problem Solving – UI/UX – Flutter

Languages

- Arabic: As First Languages
- English: As Second Languages

Courses

- Red Hat Application Development: Programming in Java EE 7.0
- Red Hat System Administration I(RH124)
- ISTQB Foundation Level: Orange Digital center
- Web Development: FWD
- CCNA: ICG Company
- Flutter: Udemy Abdullah Mansour

EXTRACURRICULAR ACTIVITIES

SCCI

Role: Participant

- Technical and Soft Skills Integration:
 - Provides participants with a comprehensive blend of technical skills and soft skills necessary for thriving in a competitive job market.
 - Offers sessions throughout the year to impart practical knowledge and enhance interpersonal abilities.
- Workshops and Conferences:
 - Conducts a series of workshops spread over an eight to nine-week period, ensuring thorough understanding and information digestion.
 - Culminates in a three-day conference, integrating diverse learning experiences and practical insights.

ICPC 2023

Interests

Reading – Playing Tennis - Riding Horses