Mohamad Muhab Joumaa

Male, 22 years old, born July 18, 2001

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mohaboko31@gmail.com

Lives: Krasnodar
Citizenship: Syria, work permit available: Russia Not ready to move, ready for business trips

Desired position and salary

Software Engineer

Specializations:
— Programmer, developer
Employment: full time, part time, project work, internship Work schedule: full time, flexible schedule, remote work
Desired travel time to work: does not matter

Work experience - 1 year 5 months

May 2023 - May 2023
1 month

Application for company finances on Windows

Developer

The Windows forms application was developed in C# .Net for managing the finances of a company. A PostgreSQL database was used on a local PgAdmin server with this application via the NpgSQL library. The application manages the company's departments, expenses, and costs, and Excel reports can be exported for specified expenses.

April 2023 — May 2023
2 months

Android app as a zoo guide Developer

Mobile application on the Android platform, developed in the Kotlin programming language. This application acts as a guide to the virtual zoo, for viewing the main sections and subsections and information about the animals in each subsection. It is possible to add, delete and change any section or information about any animal.

April 2023 — April 2023
1 month

Text game in Clojure and Prolog programming language Developer

A text game written in the functional programming language Clojure, running on a Telnet server. It has been developed and enhanced by adding a graphical user interface based on Java Swing to enhance the player's experience and provide efficiency and speed. A bot has also been developed that acts as a virtual player in the Prolog programming language if the player prefers to play with the machine rather than with real players. The project has already been uploaded to the GitHub repositories.

January 2023 — February 2023
2 months

3ds max project

Modeler

A simple solar house design includes furniture, sofa, painting, library, floor, walls and vase.

December 2022 — January 2023
2 months

Dice game running on a local network Developer - Tester

A dice game that operates over a local network between a group of players, with a maximum of 8 and a minimum of 2 players. For the network engine, there is a special program that plays the role of a server to control players' computers and determine and coordinate the queue of players. And one more special program that takes on the role of a regular computer (client), and all computers, including the server, are connected to the same local network. The server program first searches for computers connected to it on the local network and presents them to players with an IP address, when the number of computers becomes equal to 8, the search stops, in addition, it is possible to stop the search when the number of players is less than eight. Data is transferred between connected computers in real time via sockets. The concepts and principles of parallel programming and multi-threading have been used extensively and accurately in this game. There is a thread for the game's GUI and several other threads that constantly run in the background without affecting the main game thread, where there is a thread to update players' online status, another thread to receive data, and another thread to send data. The concept of serialization has also been used where data is sent after being serialized and converted into binary format and data is also received after being deserialized and converted to its original state for use and display. Data in the game is an object for a specific class, whose task is to store and collect the necessary data until it is sent. The connection status of the players and the balance they have earned as a result of rolling the dice are displayed on the screen for all players in parallel. A local SQLite database is used in the server application to store player scores. There is a complete set of documentation of the entire software development life cycle for this project because this project is custom made. This project was tested using the JUnit framework. All UML and IDEF0 diagrams are developed for this project.

November 2022 — November 2022
1 month

Django project for managing an educational institution (school for example)

Web developer

Django project with SQLite database to store and collect data. A management project for any educational institution in which there are students, teachers, subjects and the progress of each student and teacher. This project has a simple, sufficient interface in HTML/CSS/JS for management functions. There are functions to create student and teacher accounts, view their data, modify their data and delete accounts. In addition, there is a function for resetting your account password via email.

May 2022 — June 2022
2 months

PC and Web application for managing MySQL databases

Developer

Application for managing MySQL databases with a graphical interface. This application is made from scratch in Java JDBC, and there is a WEB version of it using sqlite3 and Python ipywidgets and a version using HTML, JavaScript, Python CGI and XAMPP server. You can do all CURD functions with this application.

March 2022 — April 2022
2 months

Interface web studio

Programmer-developer

A short period of work in the development of web and desktop applications

February 2022 — March 2022
2 months

Network application and bot on PC for email Developer

Bot application on a computer with GUI. This bot to know about the class schedule of all courses via email using imap, pop3, smtp and http. Class schedule data

are stored in a non-relational key-value NoSQL database in a JSON file, where there is a special class with several functions for storing and querying data. This application is made entirely from scratch in Java. This is not a simple bot, it can indicate keywords and their location in the request sent to it. It also determines whether the user wants to know the class schedule for all days of the red or black week or for a specific day or date, or even learn about the subject teacher and lecture times. Except that the program uses threads to receive requests sent by email and automatically respond to them immediately. The app also has a section for displaying messages sent to the user's email and displaying information about that message such as date, subject, sender and recipient, as well as a section for sending email with the option to attach files. This application uses Java Mail API and Java sockets. Moreover, email protocols are handled here from scratch and not by using any external library or framework.

March 2022 — March 2022
1 month

Computer video game description website

Developer

A website that automatically adjusts to the screen sizes of different computers and phones. This website uses Ajax technology. This site is made using HTML5, CSS3, JavaScript, jQuery, Font Awesome and Bootstrap.

May 2021 — August 2021
4 months

Computer 2D/3D online game with a social network with various properties

Developer

A computer game with a social network with various properties and its website. This is a single player online 2D/3D game with large and varied functionality such as camera, voice messages and voice control. The game is made using JavaFX, Java AWT, Java Swing, OpenGL GLUT, HTML/CSS/JavaScript, Pascal. The game features complex 3D models of the game's characters, partially created using Blender and then imported, rendered and controlled through Interactive Mesh. It is possible to change the screen resolution and number of frames per second through the game settings. The game also uses a MySQL database and a Backblaze server. There is also a network section for finding other players and communicating with them using text and voice messages, as well as photos and emoticons. The messages section displays whether the player is currently online, if not, the date and time of the last connection, and also shows whether the player is typing a message to send now “typing...” or recording a voice message “recording...” " The game used an external font (not the default Windows font), and this font was slightly modified to add some emoji that could be included in messages sent to players. There is a Neo4j AuraDB database dedicated to player-to-player messages to easily save and display messages between players. It is also possible to block or unblock certain players through the settings. Another feature is that the player can add stories to his personal account, which is an image or GIF (animated picture), like on Instagram and WhatsApp, where all players can see the published story within 24 hours. Players can see the latest results of all other players. The player can also delete or change their history. There are several ways to send a complaint or feedback to a developer, such as sending an email to the developer from within the game or sending an SMS. The game also contains a computer speech system, where you can enable this feature through the settings. This system reads texts in the game in a human voice in English. It is also possible to download and change the player's personal photos at any time by opening the computer's camera, if there is one, and then taking a photo through the camera and saving it in JPG format, or by downloading any image stored on the computer that a special program in the game can access access, select a profile picture and

download it. You can also take screenshots of the game window directly using a special button. When registering a new account on the game network, the password is automatically encrypted in two stages: this password is hashed using MD5 and the value is stored in the database, the password is sent to a special class so that an encryption algorithm is applied to the password. There is also a class for checking the validity of email when registering a new account. There is also a special section for news about the game. In addition to a "forgot password" section explaining how to play. In the game settings you can control the game music and user account data. In addition to options related to a player's online privacy, he can choose whether to make his online status visible to everyone or not. There is also a simple online store where you can download several add-ons for the game's characters for free. The game has a separate program whose main task is to detect the presence of updates or new versions of the game in order to issue a notification to the player that there is a new version of the game and it needs to be downloaded if the player wants to do so. Downloading a new version is not done by opening a website or external program, this program automatically downloads the new version and replaces the old version with it. This program also determines the new version number, where it will be stored in megabytes, and the exact time required and remaining to download it. Its functions are similar to the download manager program, but it only applies to the game. This program was written using the Java NET API library. This game is made completely from scratch. This game's engine was written from scratch, as were physics, geometry, linear algebra, shadows, collision, lighting, etc. This game used a lot of external technologies, libraries and frameworks. Besides communication between Java and C++ via JNI. The game's social network uses a two-tier architecture. At the moment, the project is only on the Windows operating system, but it can be easily transferred to other operating systems, since the base of the game itself is made in Java and this is a multiplatform language.

February 2021 — February 2021
1 month

Advanced snake game on PC and Android Developer

Advanced snake game Snake on the computer. The game is programmed so that the snake's body consists of individual parts that can be controlled using a double LinkedList data structure. This algorithm was written from scratch in Java.

November 2020 — November 2020
1 month

PC application for registering student data Developer

An application with a beautiful graphical interface for recording data about students of an educational institution. The interface is designed using only JavaFX plus CSS. The HashMap data structure is used to store and retrieve data. The application contains a main menu for the user, which in turn contains two options, namely searching for a specific student and the ability to enter new student data. Searching is done using a drop-down list, a combo box that displays the names of all registered students, and then clicking on a name to display that student's information in multiple fields. It has already been possible to avoid errors such as entering data for an already registered student, preventing duplicate data and validating entered data before saving, with the ability to quickly and easily switch between interfaces.

Education

Higher

2024

Kuban State University, Krasnodar

Computer technologies and applied mathematics, Mathematical support and administration of information systems (mathematician-programmer)

2019

High school diploma
Scientific section

Advanced training courses

2019

TOEFL in English
ETS

2017

Training for the Informatics Olympiad
Syrian Directorate of Excellence and Creativity

key skills

Knowledge of languages

Arab- Native
English— B2 — Intermediate-advanced
German— A1 — Initial Russian— B1 —
Medium French— A1 — Initial

Skills

JDBC MySQL C/C++ JavaScript HTML CSS jQuery Python
Neo4j AuraDB PostgreSQL UML OpenGL Java SE Docker Java
Mathematics Artificial intelligence Software development Git C# JUnit
Mockito MVC Multithread Programming OOP Pascal Bootstrap
Data structures Computer Game Development SQLite

Additional Information

About me

Stack used at work:
- Java.
- Java Core.
- JavaFX.
- Java AWT.
- Java Swing.
- Java Collections.
- Java Sockets.
- JDBC.
- Java Applets.
- Java Servlets.
- JUnit framework.
- Mochito framework.
- Java Concurrency.
- InteractiveMesh library in Java.
- MPJ library in Java.
- Clojure.
- Prolog.
- OOP.
- C/C++.
- MPI library in C.
- Assembler NASM, MASM, TASM, GAS, 8086.
- C++ Concurrency.
- STL.
- C#.
- C# windows forms.
- Matlab.

- Docker.
- Bash script/Linux.
- OpenGL.
- GLM library in C++.
- OpenGL GLUT.
- OpenGL GLU.
- Graphics library graphics.h in C++.
- MySQL.
- Oracle.
- SQLite.
- Microsoft SQL Server.
- PostgreSQL.
- SQL.
- Neo4j AuraDB.
- APOC library for Neo4j.
- MongoDB.
- Google Colab.
- phpMyAdmin.
- Pascal.
- Python.
- Python Ipywidgets.
- Python Tkinter.
- Python CGI.
- Django (basic).
- NumPy.
- TensorFlow.
- Pandas.
- Matplotlib.
- HTML.
- CSS.
-SVG.
- Font awesome.
- Bootstrap.
- JavaScript.
- Ajax.
- jQuery.
- ChartJS.
- PHP (basic).
- XML/XSLT.
- JSON.
- Git/Github (basic).
- Application protocols imap, pop3, smtp, http.
- XAMPP server.
- Microsoft PowerPoint.
- Development of computer games.
- Application development for Windows.
- Development of Android applications in Java/Kotlin (beginner).
- Information theory.
- Algorithms and Data Structures.
- Turing and Markov machines.
- Calculation methods.
- Linear algebra.
- Mathematical Analysis I & II.
- Geometry and topology.
- Functional analysis.
- Partial differential equations.
- Diagrams and diagrams in UML language via StarUML and functional diagrams via BPwin.

- Knowledge in neural network algorithms.
- There is an American TOEFL certificate in English of the year 2019.
- Already participated in a number of programming competitions.