Mohamed **Ben Hmida**
iOS Developer

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Skills

Programming Languages :	iOS(Swift,SwiftUI),Flutter(Dart),Android(Java,Kotlin) ,C++/C,Python, HTML+PHP+CSS+JS
Backend :	Firebase,Agora Chat SDK,Comet Chat SDK,Zego Cloud SDK
Mobile :	Combine, RxSwift, RxCocoa , Swinject, Resolver, SwiftUI , UIKit, Getx , Provider, Bloc, Cubit,Fast-Lane,SonarQube,SwiftLint
Databases :	CoreData ,SQLite,MySQl
Tools & IDE :	Git, Github, Gitlab, Jira, Confluence, Xcode, Android Studio, VS Code, IntelliJ, Eclipse
Operating systems :	Windows, Mac OS, Linux/Ubuntu,Raspbian
Methodologies :	Agile, Scrum
Architectures :	MVC , MVVM, Clean Architecture
Boards :	Arduino,PIC,STM32,Esp32 ,Raspberry Pi ,DSP ,FPGA

Other skills

> TeamWork ,Leadership
> Various technical knowledge
> Clean coding
> Quick learner
> Architecture design
> Autonomy Team spirit
> Communication
> Multitasking

Formation

2021 - 2023	**Professional Master in Embedded Systems** Higher Institute of Computer Science and Multimedia of Gabes
2014 - 2017	**Bachelor's degree, Embedded systems and mobile** Higher Institute for Technological Studies of Medenine

Languages

English	● ● ● ● ○
French	● ● ● ○ ○
Arabic	● ● ● ● ●

Certification

Aout 2024	**BackBase iOS Developer certificate**
Jun 2024	**iOS, Swift & SwiftUI - Complete iOS App Development** HTTPS://WWW.UDEMY.COM/CERTIFICATE/UC-BE696BC2-F621-4C39-BD0C-C04435237FDA/
Jan 2022	**Scrum Fundamentals Certified SFC : Scrum Study** HTTPS://WWW.SCRUMSTUDY.COM/CERTIFICATION/VERIFY?TYPE=SFC&NUMBER=892495

Professional experience

since Jun 2024 — **iOS Developper at One Tech Bussiness Solutions**

Context : **Libyan islamic bank : Retail banking - business banking - onboarding**

Tasks :
> Developed and maintained the iOS application for retail and business banking.
> Led the adoption and build phase of BackBase , ensuring seamless integration of custom client features.
> Integrated BackBase SDK for robust and secure banking functionalities.
> Managed app distribution and testing using AppCenter.
> Employed RxSwift and RxCocoa for reactive programming, enhancing app responsiveness and user interaction. Utilized Resolver for Dependency Injection, facilitating the integration of custom banking journeys.
> Implemented rigorous code quality checks using SwiftLint and SonarQube, ensuring the maintainability and scalability of the codebase.
> Streamlined the deployment process using Fastlane, automating the release pipeline to TestFlight and the App Store, and reducing time-to-market.

`iOS(Swift)` `UIKit` `Xcode` `BackBase SDK` `Firebase SDK` `AppCenter` `RxSwift` `RxCocoa` `Resolver` `TestFlight` `AppStore` `SwiftLint` `SonarQube` `Fastlane`

Jun 22 -May 24 | **iOS Developper at Phylia Technology**

Context : | **Entertainment Application**
Tasks : |
- ❯ Implementing Clean MVVM Architechture using Combine.
- ❯ Consumption of REST web services in JSON format for API processing.
- ❯ Integrating third party libraries and sdk's using CocoaPods.
- ❯ Enhance security by implementing measures using the C native intern library for secure API consumption
- ❯ Expanding login options by integrating Facebook SDK,Google Sign In
- ❯ Integrating Agora Chat SDK, Firebase SDK to create chatroom module using realtime database and store data using Firestore
- ❯ Integrating Agora.io SDK to develop realtime group voice chatting
- ❯ Integrating Crashlytics and Analytics SDKs to detect crashes and exception in the application to ensure good quality releases
- ❯ Ensure data persistance using CoreData
- ❯ Enhance the efficiency of memory usage within the application by implementing optimization techniques.
- ❯ Integrate Grand Central Dispatch (GCD) into the application to manage concurrency efficiently.
- ❯ Publishing application to TestFlight

`iOS(Swift)` `UIKit` `Xcode` `Firebase SDK` `Facebook SDK` `GoogleSignIn` `Crashlytics` `Analytics` `Realtime Database` `Firestore` `Agora Voice SDK` `Agora Chat SDK` `TestFlight` `GCD` `CoreData` `Combine` `AlamoFire` `Instruments` `Comet Chat SDK` `Zego Cloud SDK`

Context : | **Online commerce and wholesale app**
Tasks : |
- ❯ Implementing Clean MVVM Architechture using Combine.
- ❯ Consumption of REST web services in JSON format for API processing.
- ❯ Using CoreData for data persistance
- ❯ Integrating Crashlytics and Analytics SDKs to detect crashes and exception in the application to ensure good quality releases
- ❯ Linking existing UiKit Views in SwiftUI Views using Coordinator and UIView Representable.
- ❯ Publishing application to TestFlight

`iOS(Swift)` `SwiftUI` `UiKit` `Xcode` `Firebase SDK` `Crashlytics` `Analytics TestFlight` `Coordinator` `Git` `CoreData` `Combine` `AlamoFire`

Sept- Juin 2021 | **Mobile Developper at Ilef Info Services (DB Consulting)**

Context : | **Designing and building B2B app with Flutter from scratch**
Tasks : |
- ❯ Analysis and specification of needs.
- ❯ Modeling the different requirements in UML .
- ❯ Building the Architecture of the Project and the Database Structure .
- ❯ Writing the Documentation of the project
- ❯ Creating Components Animations.
- ❯ Consumption of REST web services in JSON format for API processing.

`Flutter` `Dart` `PostegreSQL` `Git` `JIRA` `Confluence` `VSCode` `API` `Scrum` `MVC` `getX` `FingerPrint Authentification` `Android Studio` `GoogleMaps API`

Context : | **Designing and building Company app with Flutter from scratch**
Tasks : |
- ❯ Analysis and specification of needs.
- ❯ Modeling the different requirements in UML .
- ❯ Contibute to project documentation and conception.
- ❯ Creating Components Animations.
- ❯ Testing And Publishing the application in the Google Play Store.

`Flutter` `Dart` `Git` `JIRA` `Confluence` `VSCode` `Android Studio` `GoogleMaps API`

Context : | **Designing and building a restaurant app with IOS from scratch**
Tasks : |
- ❯ Analysis and specification of needs.
- ❯ Modeling the different requirements in UML .
- ❯ Contibute to project documentation and conception.
- ❯ Consumption of REST web services in JSON format for API processing.

`iOS` `Xcode` `Git` `JIRA` `Confluence` `Github` `Swift`

Jan -Jun 2023	**End of Studies Internship : HLPro**
Context :	**End of year project : Implementation of an automatic system based on generative models for the optical fiber patchcord test phase.**
Tasks :	> Functional Needs Analysis and specification . > Building an intelligent system for predicting patchcord quality with deep learning model based on pretrained models (VGG16,VGG19,MobileNetV2) and train them on dataset generated with DCGAN Model and mobile application for presenting the results). > Modeling the different requirements in UML standards . > Preparing Dataset > Developping GAN Model and generating images from the initial dataset > Developping and trainning different model types with the generated dataset on Google Colab > Generating h5 and tflite models > Configuring raspberry pi and installing needed librairies (OpenCV,Keras,TensorFlow,Mosquitto ...) > Design and Development of a mobile application using Flutter to show prediction result > Building the webservice using Flask on Raspberry pi with differents needed apis .

`DCGAN` `Flutter(Dart)` `Flask(Python)` `CNN` `VGG16` `VGG19` `MobileNet V2` `MQTT(Mosquitto Paho)`
`Android Studio` `VSCode` `Colab` `OpenCV` `TensorFlow` `Keras` `TFlite` `GetX` `Raspberry Pi`

Jan -Jun 2017	**End of Studies Internship : Al Hekma Consulting**
Context :	**End of year project : Development of a suitcase tracker and a mobile application.**
Tasks :	> Functional Needs Analysis and specification . > Benchmarking of similar solutions, and different possible technologies that can be used. > Building a system for detecting the state of the suitcase and its position to protect it against theft using a system that supports several communication technologies (Wifi, Bluetooth and GPS). > Modeling the different requirements in UML standards . > Design and Development of a mobile application to show information about the state of the suitcase and its position in the map using google maps api > Building the webservices. > Hosting of a web server for the exchange of data

`Android(Java)` `PHP` `Arduino UNO` `Visual Paradigm` `Arduino IDE` `Arduino GPS Shield` `Arduino WIFI Shield`
`Ldr Sensor` `HC05` `GoogleMaps API` `SQLite` `Bluetooth` `Wifi` `GPS`

Jan -Feb 2016	**Technician internship : Institut des Régions arides**
Context :	**Building from scratch a material manager of the store.**
Tasks :	> Functional Needs Analysis and specification . > Benchmarking of similar solutions, and different possible technologies that can be used. > Building the architecture of the project and the Database using MySql. > Developing the UI of the application using HTML CSS > Modeling the different requirements in UML standards . > Optimisation of UX using JS > Building the Backend using PHP and Xampp.

`PHP` `HTML` `CSS` `JavaScript` `MySql` `Xampp`

🖥 Projets

2024	**FreeLance :**
Context :	**Design and Development of a Flutter Rent Car Application**
Tasks :	> Conducted needs analysis and specification gathering. > Modeled various requirements using UML diagrams. > Contributed to project documentation and conceptual design. > Consumed RESTful web services in JSON format using Dio for API processing. > Implemented Clean Architecture, structured the project, and set up app navigation and dependency injection. > Led the team, organized tasks, and provided assistance. > Implemented the application design based on provided templates.

`Flutter(Dart)` `Dio` `Getx` `Dependency Injection` `Clean Architecture`

2024 | **FreeLance :**

Context : Design and Development of a Flutter Water Pump Control Application

Tasks :
> Conducted needs analysis and gathered specifications.
> Modeled various requirements using UML diagrams.
> Contributed to project documentation and conceptual design.
> Consumed RESTful web services in JSON format using Dio for API processing.
> Implemented the MVC architectural pattern.
> Ensured data persistence using Firebase.
> Controlled relay in real-time using Firebase Realtime Database.
> Scheduled actions using Firebase Functions.
> Managed authentication using Firebase Authentication.
> Read values from temperature and current sensors and executed actions when maximum thresholds were reached.

`Flutter(Dart)` `Dio` `Getx` `MVC` `Firebase Realtime Database` `FireStore` `ESP32` `Arduino IDE` `VSCode` `Firebase Authentication` `Firebase Functions` `Temperature Sensor (DS18B20)` `Current Sensor(ACS712)`

2024 | **FreeLance :**

Context : Design and Development of a Flutter Robot Arm Control Application

Tasks :
> Conducted needs analysis and gathered specifications.
> Modeled various requirements using UML diagrams.
> Contributed to project documentation and conceptual design.
> Implemented the MVC architectural pattern using Getx.
> Developping Flutter Application to Control Robot Arm using Bluetooth technology.

`Flutter(Dart)` `Getx` `MVC` `ESP32` `Arduino IDE` `VSCode`

2023 | **FreeLance :**

Context : Designing and building an iOS Market app

Tasks :
> Analysis and specification of needs.
> Modeling the different requirements in UML .
> Contibute to project documentation and conception.
> Consumption of REST web services in JSON format for API processing using Moya.
> Linking existing UiKit Views in SwiftUI Views using Coordinator and UIView Representable.
> Contributing to the app store publishing process.

`iOS(Swift)` `SwiftUI` `UiKit` `Xcode` `Firebase SDK` `Crashlytics` `Analytics TestFlight` `Coordinator` `Git` `CoreData` `RxCocoa` `RxSwift` `Moya`

Oct2021 | **University project :**

Context : Development of a Facial Recognition Pointing System.

Tasks :
> github link : HTTPS://GITHUB.COM/MOHAMEDBNHMIDA/POINTAGE_RECONNAISSANCE_FACIALE .
> Building the UI and the logic of the app using Android (Java).
> Designing the architecture of the app.
> Writing project documentation and functional needs, analysis and specification.
> Configuring Raspbian OS and the needed packages and installing OpenCV .
> Developing Android application to communicate with the card and execute shell script to authenticate the employee .
> Developing two python script one for creating user face model and registring an account for employee and the other one for the face recognition and reading the voice message with gtts .

`Android(Java)` `MySql` `Xampp` `gTTS` `OpenCV` `Python` `Jsch(SSH)` `Raspberry Pi Camera`

Oct2021 | **University project :**

Context : Developement of a heartbeat and body temperature observation system .

Tasks :
> Building the UI and the logic of the app using Android (Java).
> Designing the architecture of the app.
> Writing project documentation and functional needs , analysis and specification.
> Realization of System with the ESP32 card, temperature sensor (DS18b20 waterproof temperature sensor)and the Heartbeat Sensor (AD8232 ECG HEART RATE Kit).
> Developing Android application called "Heartrate" connected to the system with Bluetooth to display sensor data in charts .

`Android(Java)` `ESP32` `DS18b20` `AD8232` `Arduino IDE` `C++`