

Software Developer (Internship)

EL MOUDEN Saïd

Domaines de compétences

1) Programming knowledge :

- Software, Web and mobile (Android) applications development (Front-end/Back-end)
- Use of diversives libraries and frameworks
- Api integration
- Multithreading programming
- Good knowledge of OOPs concepts
- Database Management System
- Unit Tests, Acceptance Tests, Security Tests

2) Operating Systems :

- Linux commands
- Process (fork, clone, zombie, ...)
- Memory
- File system architecture (NTFS, EXT)
- Inter-process communication (IPC, semaphores, pipes, synchronization)

3) Security :

- Web security (SQL Injections, CSFR and XSS attack)
- Brute force attack (Dictionary attack, Rainbow attack)

4) Project Management :

- Agile methodology (XP, SCRUM)
- Git & GitHub

Connaissances techniques

- **Analysis, conception, software architecture** : UML, design patterns (MVC, MVP, MVVM, Observer/Observable, Singleton, Composite, ...)
- **Application Software** : Java/JavaFX, C, C++/Qt
- **Database** : SQL, PL/SQL, MariaDB, PostgreSQL, Oracle DB, transactions, triggers, indexes, SQL scripts
- **ERP** : Odoo, Python, modules creation, tests, security
- **Mobile Application** : Kotlin, Android Studio
- **Operating System** : Linux commands, file systems, processes (fork, zombie, clone, ...), inter-process communication, memory
- **Project Management** : Agile methodology, XP/SCRUM, Git & Github
- **Testing** : Unit tests, acceptance testing, security testing
- **Web Application** : Front-end -> HTML, CSS, Bootstrap, JS, jQuery, Ajax, Vue.js. Back-end -> PHP/Laravel, Java Spring and Python/Django

Expériences professionnelles

HE2B-ESI**02/2020 - 04/2020 (3 mois)****Brussels (Belgium)**

Brick Breaker Game

Contexte et objectifs du projet:

In my first year of Bachelor, we had to implement the known game "Brick Breaker" in our Web development course.

Réalisations et activités:

OOP conception, MVC pattern, Unit tests on Model

Livrables/Résultats:

The result was good and met my teacher's expectations. I learned more about MVC pattern and unit tests.

Secteur:

ICT

Outils:

HTML, CSS, JavaScript, jQuery, Visual Studio Code

HE2B-ESI

02/2020 - 04/2020 (3 mois)

Brussels (Belgium)

Humbug Game

Contexte et objectifs du projet:

In my first year of Bachelor, we had to implement the Humbug Game for our software development course. It's a mobile game application that we can found on PlayStore. For this realisation we only had to make a simplified version of this game without graphical interfaces but only in terminal.

Réalisations et activités:

OOP conception, MVC pattern, Unit tests on Model

Livrables/Résultats:

As the final result I had a good fonctionnal game that met my teacher's expectations. I improved my knowledge about MVC pattern and Java.

Secteur:

ICT

Outils:

Java, Netbeans 8.2

HE2B-ESI

10/2020 - 11/2020 (2 mois)

Brussels (Belgium)

2048 Game

Contexte et objectifs du projet:

In my second year of Bachelor. We had to implement the game "2048" in my software development labs. This time we had to implement it with a graphical interface.

Réalisations et activités:

OOP conception, MVC and Observer/Observable pattern, Unit tests on Model

Livrables/Résultats:

Good result at the end. Validates by my teacher

Secteur:

ICT

Outils:

Java, JavaFX, FXML, CSS, SceneBuilder, Netbeans

HE2B-ESI

02/2021 - 05/2021 (4 mois)

Brussels (Belgium)

Abalone Game

Contexte et objectifs du projet:

In my second year of Bachelor, we had to implement a platform game named "Abalone" in my C-C++ development course. This project had to be done by two. So we worked about it by pair programming.

Réalisations et activités:

OOP, MVC, Observer/Observable, GUI, Unit tests on Model

Livrables/Résultats:

Project achieved successfully. Validated by my teacher. I improved my knowledge about memory management, custom compilation because we had to work with C++. I also learn more about project management and pair programming technique.

Outils:

C++/Qt, Qt Creator

HE2B-ESI

04/2021 - 04/2021 (1 mois)

Brussels (Belgium)

Rainbow Attack

Contexte et objectifs du projet:

In my second year of Bachelor, we had to implement in groups of four completely a Rainbow Attack from scratch in my security course. This project consisted of launching a brute force attack on SHA-256 hashes and try to crack them. This project was divided by two realisations. First we had to implement the Rainbow Table Generator and then we had to implement the Rainbow Attack using the Rainbow Table previously generated.

Réalisations et activités:

C++, Multithreading, Custom Compilation

Livrables/Résultats:

The attack was running correctly and the project was successfully achieved. I improved my knowledge about the importance of making an efficient program in some cases and I learned a lot in this project about how to manage the time-memory trade-off. I also improved my knowledge about multithreading programming.

Outils:

C++, Qt Creator

HE2B-ESI

05/2021 - 05/2021 (1 mois)

Brussels (Belgium)

Secure Instant Messaging

Contexte et objectifs du projet:

In my second year of Bachelor, we had to implement by two a secure instant messaging application in my security course. Our application at the end had to be secure against many attack like SQL injections, XSS/CSRF attack, data remanence attack, dictionary attack, brute force attack.

Réalisations et activités:

Use of frameworks, libraries and authentication and security packages

Livrables/Résultats:

Project achieved successfully. Validated by my teacher. I improve my knowledge about cyber-security and especially about web security and about the importance to implement a secure solution to counter the treats and the differents types of attacks.

Secteur:

ICT

Outils:

HTML, CSS, Bootstrap, PHP/Laravel

Formations / Diplômes

2022	Bachelier en Informatique de gestion - <i>Actuellement en dernière année</i> - HE2B-ESI
2018	Enseignement secondaire supérieur - <i>En option informatique 8h/semaine</i> - Institut Saint Joseph d'Etterbeek

Langues

Français	Mother Tongue
Anglais	Courant
Néerlandais	Niveau scolaire

Informations complémentaires

Permis : B
Nationality : Belgian

Driving license : Category B