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## Skills management plan

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Version 1.1  
23/06/2024



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## VERSION HISTORY

Version #	Implemented By	Revision Date	Approved By	Reason
1.0	Hugo Marques	12/06/24	Quentin T	Review with the projects manager
1.1	Hugo Marques	22/06/24	Smart Tracability	Review with the full team

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## **INTRODUCTION**

### **OBJECTIVES OF THE SKILLS MANAGEMENT PLAN**

The skills management plan presents an analysis of the general and specific skills required for the execution of all tasks of the BC24 project, an initial audit of the team's acquired skills, an action plan aimed at reducing the gap between required skills and acquired skills, and a retrospective review at the end of the project on the progress made by the team.

The target audience for the BC24 skills management plan is the project sponsor and the referring teacher.

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## REQUIRED SKILLS

After analysis of the chart of the project, the required skills to make it happen are :

**DEVELOPER :**  Developpeur

**PROJECT MANAGER :**  project manager.pdf

**ENTREPRISE ARCHITECT :**  Architect entreprise

- **A1 IS and Business Strategy Alignment**

- **Expected Level :**  
Level 4
- **Description of the Skill Level:**  
Provides leadership for the construction and implementation of long term innovative IS solutions.
- **Justification in the Context of the Project:**  
In order to carry out this project, it was necessary to understand the strategic stakes of the project well in order to accomplish it.

- **A3 Business Plan Development**

- **Expected Level :**  
Level 4
- **Description of the Skill Level:**  
Provides leadership for the creation of an information system strategy that meets the requirements of the business (e.g. distributed, mobility-based) and includes risks and opportunities.
- **Justification in the Context of the Project**  
In order to complete this project, it was necessary to organize the documentation of what was being done and to do it as the project progressed.

- **A4 Product / Service Planning**

- **Expected Level :**  
Level 4
- **Description of the Skill Level:**  
Provides leadership for the construction and implementation of long term innovative IS solutions.
- **Justification in the Context of the Project:**

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In order to complete this project, it was necessary to effectively manage the entirety of the project and its schedule.

- **A.5. Architecture Design**

- **Expected Level :**

- Level 4

- **Description of the Skill Level:**

- Acts with wide ranging accountability to define the strategy to implement ICT technology compliant with business need. Takes account of the current technology platform, obsolescent equipment and latest technological innovations.

- **Justification in the Context of the Project:** The project aims to demonstrate the feasibility and interoperability between a blockchain and sensors (IoT). The goal is to ensure compliance with meat processing conditions in a web application designed for professionals and consumers.

- **A.7. Technology trend monitoring**

- **Expected Level :**

- Level 4

- **Description of the Skill Level:**

- Validates new and emerging technologies, coupled with expert understanding of the business, to envision and articulate solutions for the future. Creates the organization wide trend monitoring processes.

- **Justification in the Context of the Project:**

- The project aims to demonstrate that blockchain is a tool that can be used in various contexts and at different scales.

- **B.1. Application development**

- **Expected Level :**

- Level 3

- **Description of the Skill Level:**

- Acts creatively to develop applications and to select appropriate technical options. Accounts for others development activities. Optimizes application development, maintenance and performance by employing design patterns and by reusing proved solutions.

- **Justification in the Context of the Project:**

- The project aims to develop smart contracts (solidity), APIs (python) and a web application (symfony) to communicate with users.

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- **B.2. Component Integration**

- **Expected Level :**

- Level 3

- **Description of the Skill Level:**

- Accounts for own and others actions in the integration process. Complies with appropriate standards and change control procedures to maintain integrity of the overall system functionality and reliability.

- **Justification in the Context of the Project:**

- The project will consist of several complementary components. Integrating these components is one of the key pillars, ensuring the integrity of the data used.

- B.3. Testing**

- **Expected Level**

- Level 3

- **Description of the Skill Level:**

- Exploits specialist knowledge to supervise complex testing programmes. Ensures tests and results are documented to provide input to subsequent process owners such as designers, users or maintainers. Accountable for compliance with testing procedures including a documented audit trail.

- **Justification in the Context of the Project:**

- The project was carried out by 4 different teams with varying project visions and requirements. It is necessary to conduct tests to ensure user experience and data integrity management.

- B.5. Documentation production**

- **Expected Level :**

- Level 3

- **Description of the Skill Level:**

- Adapts the level of detail to meet the needs of the targeted population.

- **Justification in the Context of the Project:**

- This project has experienced significant turnover and addresses complex concepts that are not easily approachable. It is necessary to have clear and accessible documentation at all levels to facilitate the integration of new stakeholders and external users.

- C.4. Problem management**

- **Expected Level :**

- Level 4

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- **Description of the Skill Level:**  
Exploits specialist knowledge and in-depth understanding of the ICT infrastructure and problem management process to identify failures and resolve with minimum outage. Makes sound decisions in emotionally charged environments on appropriate action required to minimise business impact. Rapidly identifies failing component, selects alternatives such as repair, replace or reconfigure.
  - **Justification in the Context of the Project:**  
This project is an Agile-evolving Proof of Concept (POC) where requirements and definitions constantly evolve alongside development. Additionally, the skill levels across teams may not necessarily be balanced.
  - **E.3. Risk management**
    - **Expected Level :**  
Level 2
    - **Description of the Skill Level:**  
Understands and applies the principles of risk management and investigates ICT solutions to mitigate identified risks.
    - **Justification in the Context of the Project:**  
The risks associated with this project are diverse and cross-cutting. They impact budget management, time constraints, and the potential for team delivery delays.
  - **E.8. Information Security Management**
    - **Expected Level :**  
Level 3
    - **Description of the Skill Level:**  
Provides leadership for the integrity, confidentiality and availability of data stored on information systems and complies with all legal requirements.
    - **Justification in the Context of the Project:**  
For this project, it was essential to emphasize a significant aspect of security, as a substantial part of the project deals with ensuring reliable security measures.



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## ROLES REQUIRED FOR THE TEAM COMPOSITION

<b>TEAM = 2 DEVELOPERS + 2 PROJECT MANAGER + ENTREPRISE ARCHITECT</b>
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## SKILL COVERAGE

	PROJECT	TEAM		ENTREPRISE ARCHITECT
		DEVELOPER	PROJECT MANAGER	
A.1. IS and Business Strategy Alignment	3	3	3	4
A.3. Business Plan Development	3	3	3	4
A.4. Product / Service Planning	3	3	3	3
A.5. Architecture Design	3	3	3	4
A.7. Technology trend monitoring	3	2	2	3
B.1. Application development	3	3	2	3
B.2. Component intégration	2	2	2	3
B.3. Testing	2	2	2	3
B.5. Documentation production	2	2	2	2
C.4. Problem management	2	2	2	2
E.3. Risk management	2	2	2	2
E.8. Information Security Management	3	3	3	3

## TEAM MEMBER ROLES

- **QUENTIN TAMBONE: PROJECTS MANAGER**

- **CHADI GROLLEAU-RAOUX** : DEVELOPER
- **ETIENNE BAUMGARTNER**: LEAD DEVELOPER + ENTREPRISE ARCHITECT
- **PAUL-CESAR TOUX** : DEVELOPER
- **HUGO MARQUES** : PROJECT MANAGER

## TEAM SKILLS

	QUENTIN T	CHADI G-R	PAUL-CESAR T	ETIENNE B	HUGO M	PROJET
A.1. IS and Business Strategy Alignment	3	2	3	3	3	2.8
A.3. Business Plan Development	3	2	3	3	3	2.8
A.4. Product / Service Planning	3	2	3	3	3	2.8
A.5. Architecture Design	3	2	3	3	3	2.8
A.7. Technology trend monitoring	3	1	1	3	1	1.8
B.1. Application development	2	2	3	3	2	2.4
B.2. Component intégration	2	2	2	3	2	2.2
B.3. Testing	3	2	1	3	3	2.4
B.5. Documentation production	2	2	2	2	2	2
C.4. Problem management	3	2	3	2	2	2.4
E.3. Risk management	2	2	1	2	2	1.8
E.4. Gestion de relation	3	2	2	2	3	2.4
E.8. Information Security Management	3	2	3	3	3	2.8

*Table 1: compétences de l'équipe*

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## SKILLS DEVELOPMENT PLAN

In order to acquire the skills we lacked, we were able to educate ourselves, communicate, learn from each other, and work on these shortcomings. This is how we were able to compensate for each other's deficiencies, or even completely fill the gaps.

WHAT	WHO	WHEN
Understanding the development of a web3 app.	QUENTIN T / CHADI G-R	When it was necessary to understand how another team's web app works in order to integrate this part into the project
Understanding the interoperability of components between hardware/blockchain in the cloud and the web app	QUENTIN T / CHADI G-R / ETIENNE B / PAUL-CESAR T	When it was necessary to assemble each part of the project to create the final product.
Recruitment and management Communication	QUENTIN T / HUGO M	When it was necessary to recruit and manage other teams to perform tasks that were not to be done by our team
Understanding the technologies associated with new concepts (blockchain) and Solidity	ETIENNE B / PAUL-CESAR T / HUGO M	When it was necessary to gather information to understand the topic in order to better comprehend the precise goal of the project.
Deployment of the application on different operating systems and platforms (Docker).	ETIENNE B / CHADI G-R	When it was necessary to connect the parts of the project so they could function on the required platforms (Raspberry Pi, cloud).
Project management and information continuity between multiple teams and the sponsor.	QUENTIN T / HUGO M	When it was necessary to manage our team as well as the other project teams to facilitate communication and information exchange between us.

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## FINAL SKILLS AFTER PROJECT COMPLETION

	QUENTIN T	CHADI G-R	PAUL-CESAR T	ETIENNE B	HUGO M	PROJET
A.1. IS and Business Strategy Alignment	4	2	3	3	3	2.8
A.3. Business Plan Development	3	2	3	3	3	2.8
A.4. Product / Service Planning	4	2	3	3	3	3
A.5. Architecture Design	2	2	4	3	1	2.4
A.7. Technology trend monitoring	3	2	4	4	2	3
B.1. Application development	3	2	3	3	3	2.8
B.2. Component intégration	4	2	2	4	2	2.8
B.3. Testing	4	3	4	5	3	3.8
B.5. Documentation production	3	2	3	3	4	3
C.4. Problem management	4	2	4	4	3	3.4
E.3. Risk management	4	2	4	4	3	3.4
E.4. Gestion de relation	4	3	3	3	4	3.4
E.8. Information Security Management	3	2	3	3	3	2.8