

# Filahati



Deployment of a secure client server mobile and web application as an  
ordering and delivery system for agricultural supplies  
A project to obtain a certificate for a start-up enterprise according the  
ministerial decree 1275

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# Chapter One: Project Overview

## Chapter One: Project Overview

### 1. Project Idea:

Our project aims to develop an innovative agricultural supply delivery system that will simplify the delivery of essential agricultural supplies to points of sale and agricultural businesses. By taking advantage of technology and effective logistics, we seek to meet the challenges faced by companies in displaying their goods quickly, including point of sale, in accessing supplies of high quality in a timely manner, which supports their productivity and ultimately success.

### 2. Value Proposition:

Our delivery system provides agricultural companies and points of sale, a convenient and reliable solution for buying and selling agricultural supplies. Through our system, companies can sell their products through the system's website, and points of sale can easily request from the application a wide range of products, from seeds, fertilizers, and tools. Our streamlined delivery process ensures quick and accurate deliveries, eliminating the need for points of sale to spend time and effort searching for other suppliers or coordinating transportation logistics. We partner with trusted suppliers to ensure good sales and growers get the best produce.

### 3. Working Team:

Our team comprises a diverse group of professionals with extensive experience in agriculture, logistics, and technology. Our core team includes agricultural experts who understand the unique needs and challenges faced by farmers. We also have skilled software developers, logistics specialists, and business strategists who are passionate about revolutionizing the agricultural supply chain.

This team consist of:

- First student: DARBEIDA Abdelhak, speciality software engineering, whom he has the following expertise:
  - internship in Algerian Telecommunication Company for 12 days and Djezzy telecommunication company for 5 days in 2019 where he learned about the workflow of companies in general
  - internship in University Zian Achour of Djelfa for one month in 2020 where he learned how to build dynamic websites using the PHP programming language and he built a management website for graduation thesis.
  - internship in EURL the team start-up for three months where he built a micro blog website and learned about how to design information systems and manage team members of development projects.
  - One year of work experience in building web applications using JavaScript and several of its frameworks (Express JS, React JS).

- Second student: ARIBI Haythem, speciality software engineering, whom he has the following expertise:
  - He has a certificate providing courses in language java and C programming at the university El Oued in 2019 and 2020.
  - A training period in Startup UbexPay Mostaganem, the team started for four months, where we developed an application for electronic payment, and learned how to design information systems, manage team members in development projects, and get acquainted with emerging institutions in terms of management and development experience.
  - Six months of work experience in building web applications using JavaScript and several of its frameworks (Laravel PHP, Vue JS, Java).

The first student role consists of building the functionalities of the system, and the admin dashboard web app of the companies in order for them to manage their products. On the other hand, the second student takes care of the mobile application of the small shops to browse and order products from the companies, and he also takes care of the management and marketing of our company products.

#### **4. Project Goals:**

Our short term goals are to create a strong customer base within our target area, through which companies producing and importing agricultural commodities can display their products to the largest possible group of customers through the system's website, and request agricultural materials from the application for the benefit of points of sale with ease, as we aspire to reach To a fast and reliable system of goods from companies to points of sale. We also aim to expand our operations into new geographies, establish strategic partnerships with key stakeholders in the agricultural industry, and become a leading player in the agricultural supply delivery market.

#### **5. Timeline:**

We have outlined a comprehensive timeline for the project, starting with six months of intensive research and development, followed by three months of pilot testing and refinement. After successful completion of the pilot phase, we anticipate a full launch of our delivery system within one year. Subsequent phases will focus on scaling operations, expanding our product offerings, and exploring opportunities for regional and national growth.



## **Chapter Two: Innovative Aspects**

## **Chapter Two: Innovative Aspects**

### **1. Nature of Innovations:**

Our agricultural supplies delivery system includes many innovative features that revolutionize the way farmers and points of sale access agricultural supplies quickly. Simplifies the buying and selling process. In addition, we have implemented intelligent inventory management systems that ensure real-time product availability and efficient order execution. Moreover, reducing losses caused by the late arrival of goods.

### **2. Fields of Innovation:**

The innovative aspects of our project are:

- The first project in Algeria for selling agricultural supplies and transporting them across all regions of the state, and the country in the future.
- Our system relies on functions that facilitate the management and product tracking, which greatly helps to increase sales and stimulate transportation.
- Use new features in the process of requesting materials and transportation through the application and stop using traditional methods.

## **Chapter Three: Market Analysis**

## Chapter Three: Market Analysis

### 1. Market Segment View:

#### 1.1. Potential Market:

Our system is directed to every farmer, company, or trader of agricultural supplies, because of its advantages in terms of speed in requesting and transporting goods. They are present on farms and points of sale of agricultural supplies, and they are present in very large numbers within the country.

#### 1.2. Target market:

- Companies producing and Importing agricultural Goods in Algeria, are found in many states throughout the country. We target these companies to use the Web Application for these reasons :
  - contains a lot of goods, which produces big money.
  - The companies have a wide trade movement across the country, which earned a lot of money.
  - Companies are the first solution to activate the agricultural movement in the country.

- Point Of Sale:

Point of sale are small and large shops that sell agricultural goods, they are located throughout the country, from the state to the villages. The owner of the shop uses the application to order goods from companies with the possibility of ordering a means of transportation and tracking the location of the commodity in the stage of transportation.

The majority of shop owners buy traditionally in the form of a phone call or text message through social networking sites or waiting for the company's engineer to come with the goods. These problems cost a lot of money and put you in a loss as it takes you a lot of time. So we we targeted these point of sales to use our mobile application for the following reasons:

- The presence of agricultural shops in the whole country, which achieves great fame for the application and consequently achieving great profits.
- Too much demand for agricultural goods.

- Companies transporting Goods:

Private companies transporting goods through the Algerian states and they are supporting our system with transportation service, where the owner of the company uses the site and controls customer requests for acceptance or postponement, depending on the company's ability to provide transportation. We chose and targeted these transportation companies, because:

- Transportation companies provide all kinds of trucks in different weights, which assures a high quality service and thus highly requested service.

- Their good knowledge of the good and bad ways in most parts of the country, which saves time and great money.

## 2. Assessing Competitive Intensity:

### 2.1. Direct Competitors:

Based on our research findings, we have not identified any direct competitors in Algeria utilizing the same system as ours.

### 2.2. Indirect competitors:

This category can be further divided into two sections:

- Online retailers (E-commerce websites), such as **Ouedkniss**:
  - a. Ouedkniss possesses strengths in terms of its long-established presence in the market and strong brand recognition.
  - b. However, it faces weaknesses in terms of its inability to provide product delivery services, which poses challenges for customers in receiving their purchases. Moreover, they lack specialization in selling agricultural products, limiting their ability to offer a comprehensive range of necessary agricultural items.
- Product delivery companies: **YALLIDINE** is a prominent player in this field in Algeria
  - a. YALLIDINE benefits from its extensive market experience and a strong brand reputation.
  - b. However, it lacks an integrated system compatible with e-commerce websites or mobile applications. Additionally, there is no platform available for submitting delivery requests, as all processes are carried out manually.

## 3. Marketing Strategies:

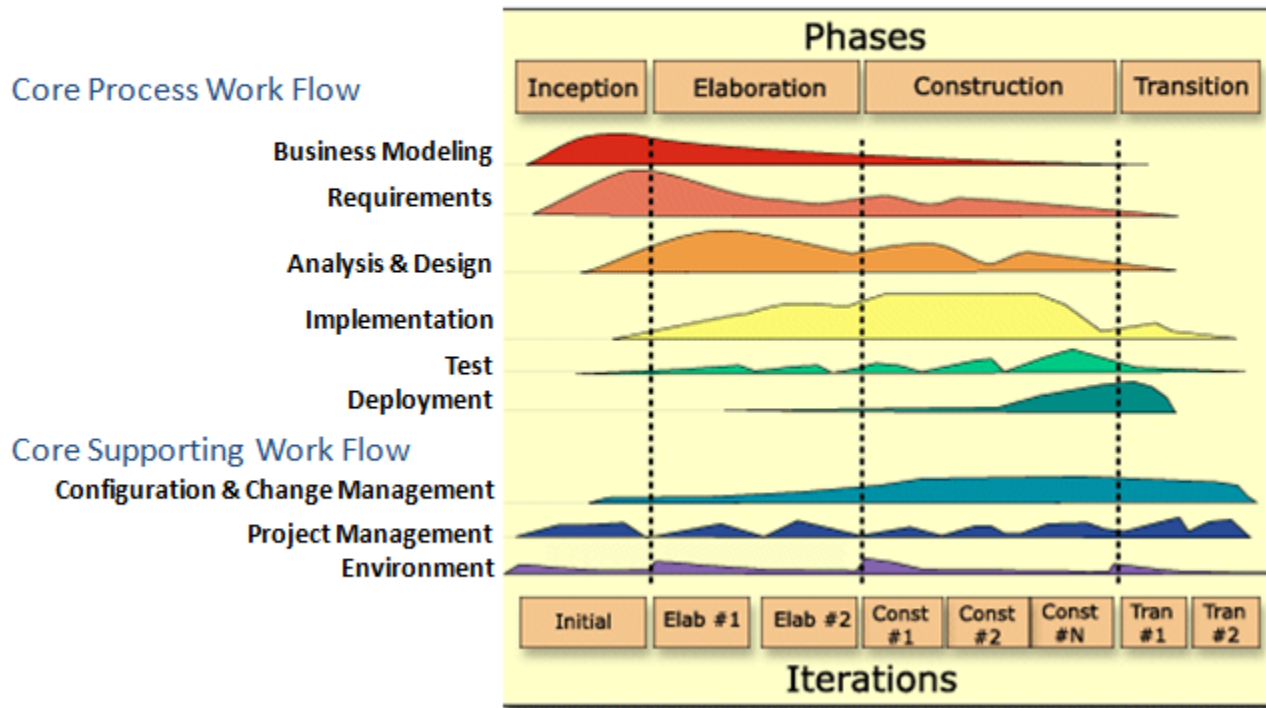
Our marketing strategy involves providing companies involved in agricultural production, importation, and transportation, as well as points of sale and farmers, with an enticing proposition: a 15-day free trial of our system. Alongside this offer, we request the submission of documents containing experimental results that demonstrate the system's effectiveness.

Prior to the trial phase, we allocate a 15-day period for comprehensive training sessions, ensuring that users are well-equipped to utilize the system effectively. This training phase is crucial in ensuring the successful implementation of the trial period. Once the configuration and trial phases are completed, our customers will have the option to subscribe to our system, with flexible payment plans available, either on a monthly or annual basis, in accordance with the diverse offers and features provided within our system.

# **Chapter Four: Production Plan and Organization**

## Chapter Four: Production Plan and Organization:

### RUP Phase Model



## 1. The production process:

### 1.1. System development:

Our agricultural supply delivery system will be developed as a mobile and web application to facilitate seamless ordering, tracking, and management of agricultural supplies. The system development process will involve the following steps:

#### 1.1.1. Inception Phase:

- **Requirements Gathering:** During this phase, the team will gather requirements from stakeholders, including shop owners, suppliers, and end-users, to define the scope and objectives of the agricultural supply delivery system.

#### 1.1.2. Elaboration Phase:

- **Design:** In this phase, the team will focus on creating detailed UI and UX designs for the mobile and web applications. The design will align with the gathered requirements and ensure an intuitive and visually appealing user experience.

### 1.1.3. Construction Phase:

- **Development:** The team will proceed with coding and programming to develop the mobile and web applications. This phase involves implementing the design, building the necessary functionalities, and integrating them into a functional system.
- **Testing:** Throughout the construction phase, rigorous testing procedures will be conducted, including unit testing, integration testing, and user acceptance testing. Any identified bugs or issues will be addressed promptly to ensure the system's functionality and reliability.

### 1.1.4. Transition Phase:

- **Deployment:** Once the system has successfully passed testing, it will be deployed to production servers and made accessible to shop owners, suppliers, and customers. This phase involves a seamless transition from the development environment to the live environment.
- **Maintenance and Upgrades:** After deployment, the team will continue to provide ongoing maintenance and support for the system. Regular monitoring, bug fixes, performance optimizations, and updates will be performed to ensure a smooth user experience and address evolving needs.

## 1.2. Supply:

The successful operation of our agricultural supply delivery system relies on the availability of necessary tools and equipment, as well as the means to pay for the required services. Here's how we plan to address these aspects:

### 1.2.1. Required Tools and Equipment:

To ensure the seamless operation of our system, we will conduct a comprehensive assessment to determine the specific tools and equipment required. The following equipment is vital for the success of our project:

- **Hosting Server:** We will acquire a reliable hosting server to handle the system's data and ensure smooth functioning.
- **API Payment Integration:** Implementing a robust API payment integration will enable seamless and secure transactions between our platform and users.
- **Certified SSL (HTTPS):** We prioritize the security of user information and transactions. Thus, we will obtain a certified SSL certificate, ensuring encrypted communication and protecting sensitive data.
- **Mobile Devices:** We recognize the significance of mobile accessibility. By equipping our team members with mobile devices, we can effectively manage and monitor the supply delivery process on the go.



- **High-Performance Computer:** We will invest in high-performance computers with specifications such as an Intel i7 HQ 10th Generation processor, 16GB RAM, 500GB SSD, and a dedicated graphics card like the GeForce RTX 3050. This will empower our team to handle complex tasks efficiently.
- **Supply and Marketing of Goods:** Alongside the technical aspects, we understand the importance of effective supply chain management and marketing. We will focus on optimizing the supply of goods and implementing strategic marketing techniques to maximize visibility and reach.

By addressing these equipment requirements, we aim to enhance the overall effectiveness and reliability of our agricultural supply delivery system.

- **Procurement Strategy:** To acquire the necessary tools and equipment, we will adopt a procurement strategy that balances quality, cost-effectiveness and timely availability. This may include the use of sources from trusted sellers. We will also focus on buying computers on used products because they are known for good and clean goods in this field, and for this we will save a lot of money instead of buying new and expensive products that carry the same features as used goods.
- **Payment policy and time of receipt:** When ordering goods and agreeing on the amount on the basis of installments, our next commodity is received from the store selling the goods, and the payment is in installments according to the money available to us, because in the case of paying all the fees at once, it is likely to fall into bankruptcy, and the payment is by installments in the year through a balanced chain And agreed upon, until the project starts working here, we will have profits, and thus we will obtain a financial balance within the company.

#### 1.2.2. Labor Force:

The agricultural supply delivery system will create a significant number of job opportunities, both directly and indirectly. The development team will consist of approximately 10 skilled software developers, system administrators, UI/UX designers, QA testers (quality assurance), and related workers who will design, develop, and maintain the mobile and web applications. These positions will contribute to the system's functionality, user experience, and technical support. Additionally, the system will provide employment for approximately 5 warehouse managers who will oversee inventory management, storage, and organization of agricultural supplies in our warehouses. Furthermore, we anticipate employing approximately 10 delivery drivers who will play a crucial role in transporting agricultural supplies from the warehouses to the point of sale locations, ensuring timely and accurate deliveries. With these direct and indirect job positions, the agricultural supply delivery system aims to provide employment opportunities for around 25 individuals and contribute to the growth and efficiency of the supply chain.

### **1.2.3. Key Partnerships:**

The most important partnerships in our project were with the providers of agricultural materials. One such significant partnership was with the Mallah Company, located in Mazagran, Mostaganem. They played a crucial role in the importation of agricultural materials, providing us with the necessary resources for our project.

Additionally, we formed partnerships with other key suppliers, such as the Agri Company situated in the Salam street of Mostaganem. Their contributions and provision of agricultural materials were instrumental in the success of our project. To ensure efficient transportation of goods, we relied on the services of the Chakour Company, located on the Oran Road in Mostaganem. Their expertise in commodity transport played a vital role in designing the delivery system for our project.

Furthermore, we must acknowledge the valuable support and contributions from the business incubator of the University of Mostaganem. Their training courses and commitment to the project's progress were instrumental in ensuring its success.

## **Chapter Five: Financial Plan**

## Chapter Five: Financial Plan

### 1. Costs and Charges:

#### 1.1. Capital Expenses:

- 1.1.1. We need at first two laptops with high performance for development that costs a total of 250,000.00 DZD approximately 83,000.00 DZD per year.
- 1.1.2. Because of the health problems that might occur because of the long sitting in front of the computer, it's a requirement to have comfortable ergonomic office chairs and tables that costs a total of 120,000.00 DZD, approximately 40,000.00 DZD.

#### 1.2. Operational Expenses:

- 1.2.1. In the future, we will need to hire employees who can manage marketing and programming tasks for the successful execution of the project. We will offer competitive salaries for these positions. We will offer from 30,000.00 DZD to 50,000.00 DZD per month.
- 1.2.2. We will allocate 100,000.00 DZD per year to ensure a reliable hosting server for our project.
- 1.2.3. Our annual budget of 120,000.00 DZD will be dedicated to effective advertising strategies to promote our project.
- 1.2.4. To maintain seamless connectivity, we have set aside 36,000.00 DZD per year for our internet bill.
- 1.2.5. We will invest 40,000.00 DZD annually to secure a memorable and professional domain name for our project.
- 1.2.6. Ensuring secure transactions and data protection is paramount, which is why we will allocate 10,000.00 DZD per year for an SSL certificate.

### 2. Share Capital:

#### 2.1. Point of Sale (small shops):

	Year 1	Year 2	Year 3
Mobile App Quantity	60	84	96
Price of Mobile App	32,000,00	36,000,00	40,000,00
Mobile App Share capital	1,920,000.00	3,024,000.00	3,840,000.00

- 2.2. Agri Companies: TOA = Total Amount of Order  
Plan 1: TAO  $\leq$  10,000.00 DZD / 3%.  
Plan 2: TAO  $\leq$  100,000.00 DZD / 2.5%.  
Plan 3: TAO  $\leq$  1,000,000.00 DZD / 0.5%.

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	Year 1	Year 2	Year 3
Plan 1 Orders	60	80	100
Price of plan 1	300,00	300.00	300.00
Plan 1 Share capital	18,000.00	24,000.00	30,000.00

	Year 1	Year 2	Year 3
Plan 2 Orders	60	80	100
Price of plan 2	2,500.00	2,500.00	2,500.00
Plan 2 Share capital	150,000.00	200,000.00	250,000.00

	Year 1	Year 2	Year 3
Plan 3 Orders	60	80	100
Price of plan 3	5,000.00	5,000.00	5,000.00
Plan 3 Share capital	300,000.00	400,000.00	500,000.00

### 3. Expected Revenue Table:

	Year 1	Year 2	Year 3
Mobile App Share capital	1,920,000.00	3,024,000.00	3,840,000.00
Plan 1 Share capital	18,000.00	24,000.00	30,000.00
Plan 2 Share capital	150,000.00	200,000.00	250,000.00
Plan 3 Share capital	300,000.00	400,000.00	500,000.00
Total Share Capital	2,388,000.00	3,648,000.00	4,620,000.00
Total Costs	2,309,000.00	2,789,000.00	3,269,000.00
Expected Revenue	79,000.00	859,000.00	1,351,000.00

## **Chapter Six: Prototype**

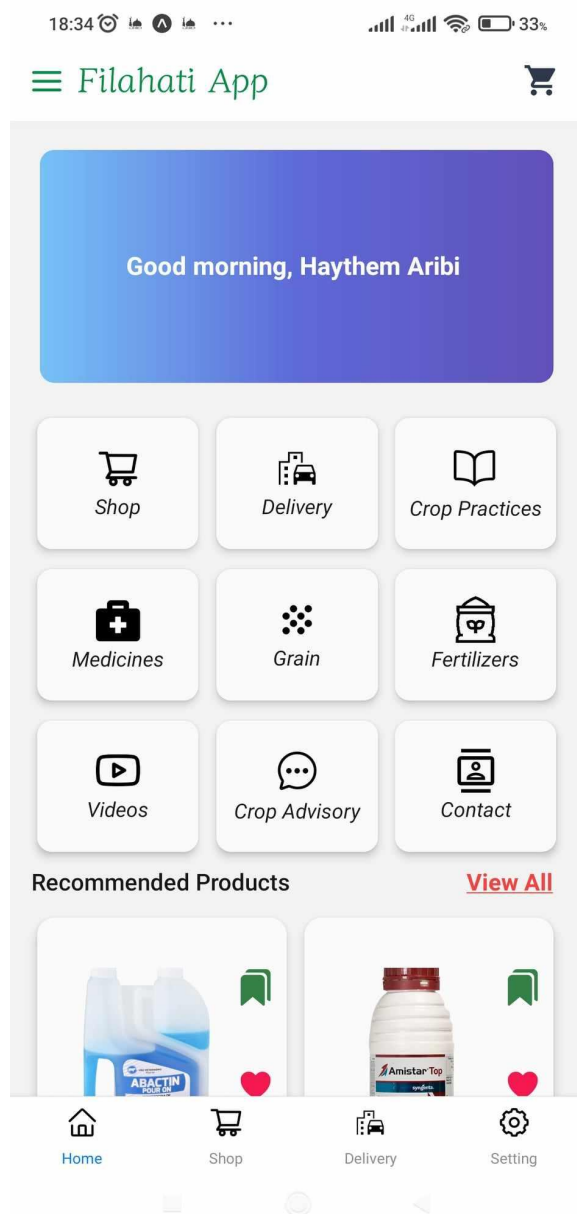
## Chapter Six: Prototype

In this chapter, we present an overview of the mobile and web application developed. The application aims to streamline the process of ordering products from a point of sale (POS) using a mobile app, which is then received and processed by Agri companies through a web application.

### 1. Mobile Application:

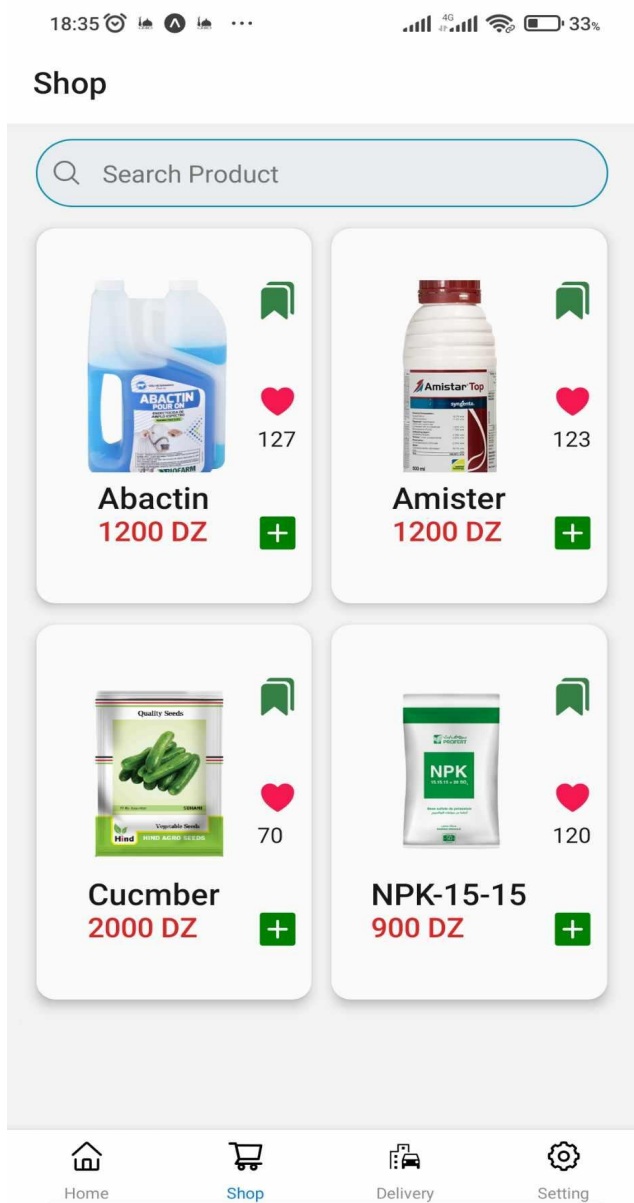
#### 1.1. Home Page:

The Home Page serves as the landing page of the mobile app after the user login. It provides a welcoming interface to users and offers an overview of the app's features



## 1.2. Products

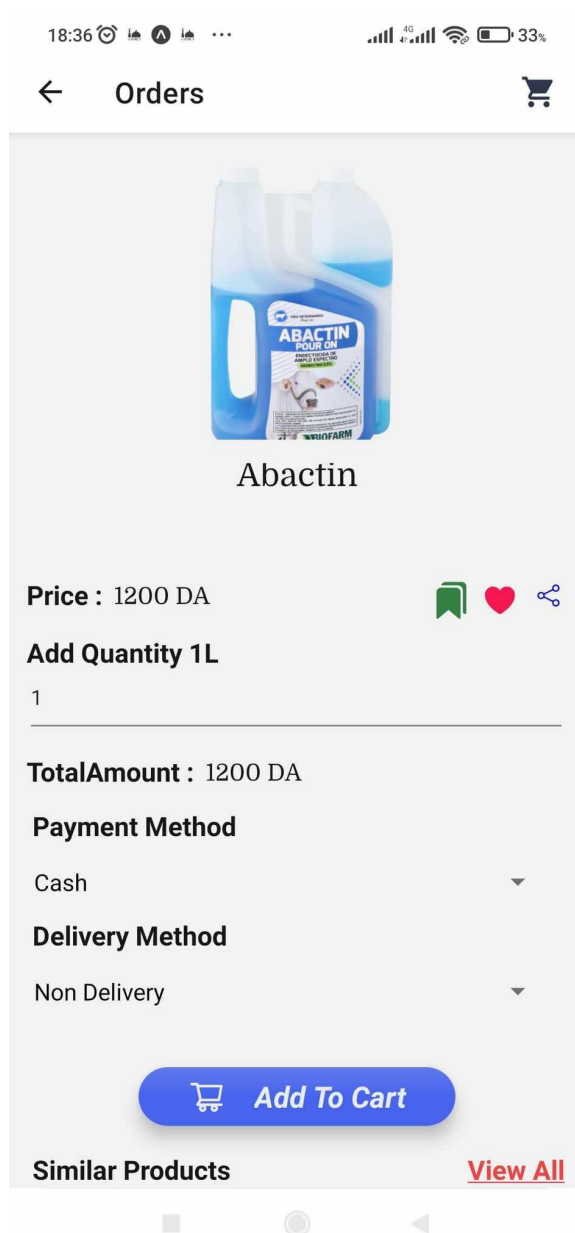
The Products Page is a crucial section of the mobile app where users can browse and explore the available products. This page displays a catalog or list of products with relevant details such as images, names, descriptions, prices, and possibly other attributes. Users can scroll through the product listings, search for specific items, and filter or sort the products based on their preferences. Tapping on a product usually leads to a detailed product view.





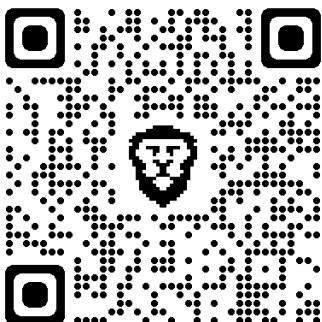
### 1.3. Orders:

The Order Page allows users to create and manage their orders within the mobile app. It provides a seamless and intuitive interface for users to select products, specify quantities, and add items to their shopping cart. Users can review their cart, modify quantities or remove items if needed, and proceed to the checkout process. The Order Page may also display the total order amount, and any additional information required for successful order placement.



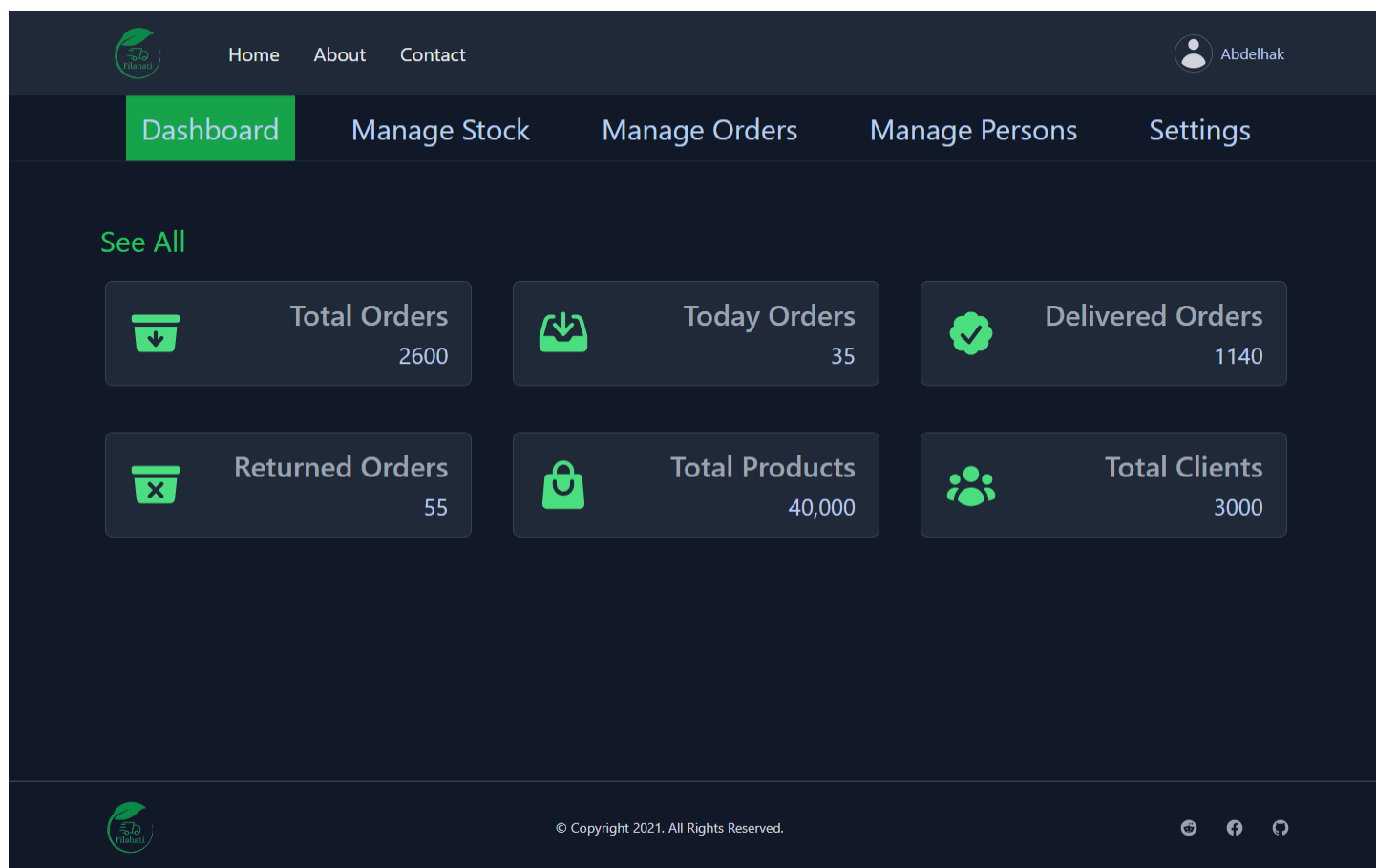
## 2. Web Application:

### 2.1. Live Test:



### 2.2. Dashboard:

The Dashboard is the central hub of the web application, providing an overview and summary of the Agri company's operations and order management. It typically includes key metrics, graphs, and charts that offer insights into sales performance, order status, and other relevant data. The Dashboard serves as a high-level view to help Agri companies track and analyze their business activities. It may also provide quick access to important features and navigation links to other sections of the web app.



The screenshot shows a dark-themed dashboard for the Agri company. At the top, there is a navigation bar with a logo on the left, links for 'Home', 'About', and 'Contact', and a user profile icon labeled 'Abdelhak' on the right. Below the navigation bar is a horizontal menu with five items: 'Dashboard' (highlighted in green), 'Manage Stock', 'Manage Orders', 'Manage Persons', and 'Settings'. The main content area features a 'See All' link in green. Below this are six data cards arranged in a 2x3 grid, each with a green icon, a title, and a numerical value:

Metric	Value
Total Orders	2600
Today Orders	35
Delivered Orders	1140
Returned Orders	55
Total Products	40,000
Total Clients	3000

At the bottom of the dashboard, there is a footer with the company logo on the left, the copyright notice '© Copyright 2021. All Rights Reserved.' in the center, and social media icons for WhatsApp, Facebook, and Telegram on the right.

### 2.3. Create Product:

The Create Product Page is where Agri companies can add new products to their inventory through the web application. This page allows users to enter detailed information about the product, such as name, description, price, stock quantity, images, and any additional attributes relevant to the product. It provides a form or input fields for easy data entry and may include options for categorizing the product or assigning it to specific departments or sections. Upon submission, the newly created product becomes available for ordering in the mobile app.

The screenshot shows a web application interface for adding a new product. The top navigation bar includes 'Home', 'About', and 'Contact' links, and a user profile icon labeled 'Abdelhak'. Below this is a dashboard menu with 'Dashboard', 'Manage Stock' (highlighted in green), 'Manage Orders', 'Manage Persons', and 'Settings'. The main content area is titled 'Add a new product' and contains the following form fields:

- Product Name:** A text input field with the placeholder 'Type product name'.
- Brand:** A text input field with the placeholder 'Product brand'.
- Price:** A text input field with the value '\$2999'.
- Category:** A dropdown menu with the placeholder 'Select category'.
- Item Weight (kg):** A text input field with the value '12'.
- Description:** A large text area with the placeholder 'Your description here'.

At the bottom of the form is a green 'Add product' button. The footer of the page contains the application logo, the copyright notice '© Copyright 2021. All Rights Reserved.', and social media icons for WhatsApp, Facebook, and Telegram.

## 2.4. Manage Orders

The Manage Orders Page is a crucial section of the web application where Agri companies can efficiently handle and process incoming orders from the mobile app. This page provides a comprehensive view of all the orders received, including details such as order number, customer information, product details, quantities, and order status. Agri companies can review the orders, make decisions to approve or reject them, update the order status, and communicate with customers if necessary. The Manage Orders Page typically offers sorting, filtering, and search functionalities to streamline the order management process.

CUSTOMER NAME	ITEMS	DELIVERY	DELIVERY METHOD	PAYMENT STATUS	PAYMENT METHOD	STATUS	ACTION
John Doe	2	Yes	YALLIDINE	Paid	Cash	Processing	<a href="#">Approve</a> <a href="#">Reject</a>
Jane Smith	2	Yes	YALLIDINE	Paid	CASH	Pending	<a href="#">Approve</a> <a href="#">Reject</a>
Emily Johnson	2	Yes	FedEx	Paid	VISA	Shipped	<a href="#">Approve</a> <a href="#">Reject</a>
Michael Brown	2	No	N/A	Paid	EDAHABIA	Cancelled	<a href="#">Approve</a> <a href="#">Reject</a>
Olivia Davis	2	Yes	YALLIDINE	Paid	CIB	Completed	<a href="#">Approve</a> <a href="#">Reject</a>
William Wilson	2	Yes	FedEx	Paid	VISA	In Transit	<a href="#">Approve</a> <a href="#">Reject</a>
Sophia Moore	2	No	N/A	Paid	EDAHABIA	Processing	<a href="#">Approve</a> <a href="#">Reject</a>
Alexander Johnson	2	Yes	YALLIDINE	Paid	CASH	Pending	<a href="#">Approve</a> <a href="#">Reject</a>
Ava Taylor	2	Yes	FedEx	Paid	VISA	Shipped	<a href="#">Approve</a> <a href="#">Reject</a>
Mia Martinez	2	No	N/A	Paid	EDAHABIA	Cancelled	<a href="#">Approve</a> <a href="#">Reject</a>
James Wilson	2	No	YALLIDINE	Paid	CIB	Completed	<a href="#">Approve</a> <a href="#">Reject</a>

## 2.5. Supplier Delivery Requests Page:

The Supplier Delivery Requests Page serves as a dedicated section within the web application where suppliers can log in to their accounts and manage delivery requests received from Agri companies. This page provides suppliers with a clear and organized view of the pending delivery requests, allowing them to take appropriate actions in response.

Upon logging in, suppliers are presented with a list of delivery requests containing essential details such as order number, importing company information, requested delivery date, and any

specific instructions or notes provided by the Agri company. The page may display the delivery requests in a table or list format, allowing suppliers to easily scan and evaluate the pending requests.

For each delivery request, suppliers are provided with options to either accept or reject the request. By accepting a delivery request, the supplier confirms their availability and commitment to fulfill the requested delivery. This action indicates to the Agri company that the supplier is ready to proceed with the delivery.

On the other hand, if the supplier needs to decline or reject a delivery request, they can select the corresponding option. This action notifies the Agri company that the delivery request cannot be accommodated, possibly due to logistical constraints or other factors.

The Supplier Delivery Requests Page may also offer additional features and functionalities, such as the ability to view past delivery requests, communicate with Agri companies, and update the status of accepted delivery requests (e.g., mark them as in progress, completed, or canceled).

By utilizing this page, suppliers can efficiently manage and respond to delivery requests, ensuring a smooth coordination and fulfillment process with the Agri companies.

# Annex

# Deployment of a secure client server and web application as an ordering and delivery system for agricultural supplies

<b>Business Model Canvas</b>		<i>Designed for:</i> Filahati	<i>Designed by:</i> DARBEIDA & ARIBI	<i>Date:</i> June 20 2023	<i>Version:</i> 1.2
<b>Key Partners</b>	<b>Key Activities</b>	<b>Value Propositions</b>	<b>Customer Relationships</b>	<b>Customer Segments</b>	
<ul style="list-style-type: none"> <li>• Companies producing and Importing agricultural Goods</li> <li>• Point of sale</li> <li>• Companies transporting goods</li> <li>• National Agency for Support and Development of Entrepreneurship</li> <li>• Incubator FILAHA INNOV</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Requirements</b> <ul style="list-style-type: none"> <li>○ Gathering</li> <li>○ Design</li> <li>○ Development</li> <li>○ Testing</li> <li>○ Deployment</li> <li>○ Maintenance and Upgrades</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Incrementing sales.</li> <li>• Providing new jobs in the transportation field.</li> <li>• Facilitating the work for the customers.</li> <li>• saving the traceability of the operations</li> <li>• Farmers receive their product on time.</li> </ul>	<ul style="list-style-type: none"> <li>• User-friendly mobile app for placing orders and managing accounts.</li> <li>• Online platform for managing stock and handling orders status.</li> <li>• Customer support through various channels (phone, email, integrated chat in the mobile and web app)</li> </ul>	<ul style="list-style-type: none"> <li>• Companies producing and Importing agricultural Goods</li> <li>• Point of sale</li> <li>• Companies transporting Goods</li> </ul>	
<b>Key Resources</b>		<b>Channels</b>			
<ul style="list-style-type: none"> <li>• Material resources                             <ul style="list-style-type: none"> <li>○ Laptop with high performance for developing</li> <li>○ Server</li> <li>○ Networking equipments</li> </ul> </li> <li>• Human resources                             <ul style="list-style-type: none"> <li>○ Software developers</li> <li>○ Management</li> <li>○ Marketing</li> <li>○ Lawyer</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Advertisement through social media</li> <li>• Offer the service directly to the companies.</li> <li>• Distribution of leaflets to small shops.</li> <li>• Promote our services throughout agricultural institutions, ex: Agricultural room of Mostaganem , BADR Bank, Directorate of Agricultural Services of Mostaganem</li> </ul>			
<b>Cost Structure</b>			<b>Revenue Streams</b>		
<ul style="list-style-type: none"> <li>• Capital Expenses:                             <ul style="list-style-type: none"> <li>○ Laptop for development x 2: 250,000.00 DZD.</li> <li>○ Ergonomic Office chairs and tables: 120,000.00 DZD.</li> </ul> </li> <li>• Operational Expenses:                             <ul style="list-style-type: none"> <li>○ Employers salaries: 30,000.00 DZD - 50,000.00 DZD / month.</li> <li>○ Hosting Server + Domain Name + SSL Certificate: 150,000.00 / year</li> <li>○ Advertisement: 120,000.00 DZD / year</li> <li>○ Internet bill: 36,000.00 DZD / year</li> </ul> </li> </ul>			<ul style="list-style-type: none"> <li>• Point of Sale (small shops): fixed price after six months of free trial.                             <ul style="list-style-type: none"> <li>○ 40,000.00 DZD per app: estimation of selling 5 apps per month. Total of: 2,400,000.00 DZD / year</li> </ul> </li> <li>• Agricultural Companies &amp; Suppliers: commission for the total amount of order (TAO) per order after 100 free first orders. Estimating total of 400,000.00 DZD - 700,000.00 DZD / year.                             <ul style="list-style-type: none"> <li>○ Plan 1: TAO &lt;= 10,000.00 DZD / 3%.</li> <li>○ Plan 2: TAO &lt;= 100,000.00 DZD / 2.5%.</li> <li>○ Plan 3: TAO &lt;= 1,000,000.00 DZD / 0.5%.</li> </ul> </li> </ul>		



# Business Model Canvas



**Project technical card:**

<b>First and last Name</b>	ARIBI Haythem DARBEIDA Abdelhak
<b>Title of Project</b>	Deployment of a secure client server and web application as an ordering and delivery system for agricultural supplies
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<b>City or municipality of activity</b>	

**The nature of the project:**

The project that we are offering is of a services nature.

### **The problem to be solved :**

We presented a solution, which is an application and a site for selling agricultural materials to the problem of reality in companies that sell these materials, most of which use traditional methods to publish goods and present them to shop owners, we mention some of them :

**Method 1 :**

Send the company its engineers to the points of sale that they deal with.the engineer display the available goods, In the event that the shop owner selects a group of goods, the engineer prepares the bill, a copy is given to the shop owner and a copy goes to the company,

The company then takes care of preparing orders and transferring them to their owners.

**Method 2 :**

The company sends the engineers and goods available through trucks, the engineer displays the goods to the shops and the sale and purchase process is done in a traditional way, then the engineer with the money to the company.

There is also another problem in the process of purchasing materials by shop owners, which are traditionally purchased through a phone call or text message via social networking sites, or waiting for the company's engineer to come with the goods. This method costs you a lot of money and takes a lot of time.

## 1. Value propositions :



- Buying and selling in an easy way through the system that we are putting forward, where companies specializing in agricultural materials display the materials on the site, then the shop owner uses the application and requests the purchase of these materials and delivers them to him.

### 1.1. The value we provide to the customer:

- **The value by design**

The application and the website are designed in a beautiful and easy way, which attracts the customer to use it.

- **The cap is easily to use**

Understanding how the application and the site work does not take you long because of the ease of the content of the interfaces.

- **The value of personalization and excellence**

It is the first system in the country specialized in buying, selling and transporting agricultural materials.

- **Comprehensive service value**

Our system contains three services integrated into one system.

### 1.2. Our projects targeting the same problem that have been implemented:

So far, there is no prominent competitor working on the same system that we have introduced.

## 2. Customer segments:



**a) Companies producing and Importing agricultural Goods:**

Companies producing and importing agricultural materials in Algeria, it's found in many states of the country. You support our system with agricultural goods. By providing the company with information on the Goods you sell, the prices and available quantities, We include information in the system's database. and the site is ready for the company.

**b) Point of sale:**

Point of sale are small and large shops that sell agricultural goods, they are located throughout the country, from the state to the villages, the owner of the shop uses the application to order goods from companies with the possibility of ordering a means of transportation and tracking the location of the commodity in the stage of transporting.

**c) Companies transporting Goods:**

Private companies transporting goods through the Algerian states and they are supporting our system with transportation service, where the owner of the company uses the site and controls customer requests for acceptance or postponement, depending on the company's ability to provide transportation.

**3. Customer Relationships:**



**a) How do we attract customer attention to our services?**

Through the modern design with which the system was completed, which makes the customer understand how it works easily, and the fact that the system is a new thing in the Algerian market makes the customer think a lot about trying it.

**b) How do we encourage the customer to buy our service?**

Our marketing strategy involves providing companies involved in agricultural production, importation, and transportation, as well as points of sale and farmers, with an enticing proposition: a 15-day free trial of our

system. Alongside this offer, we request the submission of documents containing experimental results that demonstrate the system's effectiveness.

Prior to the trial phase, we allocate a 15-day period for comprehensive training sessions, ensuring that users are well-equipped to utilize the system effectively. This training phase is crucial in ensuring the successful implementation of the trial period. Once the configuration and trial phases are completed, our customers will have the option to subscribe to our system, with flexible payment plans available, either on a monthly or annual basis, in accordance with the diverse offers and features provided within our system.

### c) How does the customer benefit from our service?

#### ➤ Company producing and importing goods:

- Expanding points of sale across the country.
- Significantly increase company profits.

#### ➤ Point of sale:

- Quick access to the finest agricultural goods without getting tired.
- Increasing profits through the availability of all the necessary goods for the farmer, which leads to a large influx of goods.

#### ➤ Companies transporting Goods:

- Request a transfer service to farther places, which will bring good profits.
- Achieving great fame within the country.



## 4. Channels:

#### 4.1. Mechanisms and methods for informing our service:

- Target the most active Facebook pages.
- Targeting associations and trying to integrate a presentation program for the project with one of their meetings with the people.
- Providing introductory clips of the project and distributing them to the companies and well-known stores in the country.
- Targeting a group of companies and major stores and trying to create a presentation for the project.

#### 4.2. Distribution channels preferred by customers:

- Facebook pages.
- Presentations in the country.

### 5. Key partners:



#### 5.1. Key partners who can help us:

##### 1)- Companies producing and Importing agricultural Goods:

Company Name	Address	Phone	Email
Agro mosta	27256 mesra Mostaganem, Algérie	+21345482940	contact@agromosta.com
AGRO SENOUCI,SARL	Lotissement n°4/72 Hai Terfes 27245 Bouguirat	+213 45 224027	

**2)- Point of sale:**

Shop Name	Shop Owner	Address	Phone
AGRIYAD	المهندس أحمد مسعودي	حي الصحن الوادي	0656141275
عتاد فلاحي		Q23W+48 El Hassaine,mostaganem	0799 37 70 59

**3)- Companies transporting goods:**

Company Name	Address	Phone	Email	site
transports chakour	3 Route des Sablettes, Mostaganem 27120	+21345420026	info@groupe-chakour.com	www.groupe-chakour.com
Yalidine Expre	W3CF+H98, Mostaganem	0560583160	contact@yalidine.com	yalidine.com

**5.2. Main suppliers:**

● **Companies producing and Importing agricultural Goods:**

Companies producing and importing agricultural materials in algeria, it's found in many states of the country. You support our system with agricultural goods By providing the company with information on the Goods you sell, the prices and available quantities, We include information in the system's database. and the site is ready for the company.



## 6. Key Activities:

### 6.1. Main stages:

Our agricultural supply delivery system will be developed as a mobile and web application to facilitate seamless ordering, tracking, and management of agricultural supplies. The system development process will involve the following steps:

#### 6.1.1. Inception Phase:

- **Requirements Gathering:** During this phase, the team will gather requirements from stakeholders, including shop owners, suppliers, and end-users, to define the scope and objectives of the agricultural supply delivery system.

#### 6.1.2. Elaboration Phase:

- **Design:** In this phase, the team will focus on creating detailed UI and UX designs for the mobile and web applications. The design will align with the gathered requirements and ensure an intuitive and visually appealing user experience.

#### 6.1.3. Construction Phase:

- **Development:** The team will proceed with coding and programming to develop the mobile and web applications. This phase involves implementing the design, building the necessary functionalities, and integrating them into a functional system.
- **Testing:** Throughout the construction phase, rigorous testing procedures will be conducted, including unit testing, integration testing, and user acceptance testing. Any identified bugs or issues will be addressed promptly to ensure the system's functionality and reliability.

#### 6.1.4. Transition Phase:

- **Deployment:** Once the system has successfully passed testing, it will be deployed to production servers and made accessible to shop owners, suppliers, and customers. This phase involves a seamless transition from the development environment to the live environment.



- **Maintenance and Upgrades:** After deployment, the team will continue to provide ongoing maintenance and support for the system. Regular monitoring, bug fixes, performance optimizations, and updates will be performed to ensure a smooth user experience and address evolving needs.

## 7. Key Resources:



### 7.1. Material resources:

<b>Ressources</b>	<b>Local or foreign source</b>	<b>Supplier</b>
Apple Laptop Mac Book Pro 13	Foreign	Apple
DELL Laptop Latitude 3540	Foreign	DELL Technologies

### 7.2. Human resources:

<b>Human resource class</b>	<b>Number</b>
Software developers	2
Management	1
marketing	1

## 8. Cost structure:



### 8.1. Structure costs:

	Quantity	Year 1	Year 2	Year 3
Laptops	2	83,000.00	83,000.00	83,000.00
Ergonomic Office	4	40,000.00	40,000.00	40,000.00
Software developer	2	50,000.00	60,000.00	70,000.00
Marketing	2	30,000.00	40,000.00	50,000.00
Hosting Server	1	100,000.00	100,000.00	100,000.00
Advertisements		120,000.00	120,000.00	120,000.00
internet bill		36,000.00	36,000.00	36,000.00
Domain Name		40,000.00	40,000.00	40,000.00
SSL Certificate		10,000.00	10,000.00	10,000.00

### 8.2. Salaries of employees and company officials:

Staff salaries	6840,000,00 (Month 30,000,00)
Net wages of officials	1200,000,00 (Month 50,000,00)

## 9. Revenue streams:



### 9.1. Point of Sale (small shops):

	Year 1	Year 2	Year 3
Mobile App Quantity	60	84	96
Price of Mobile App	32,000,00	36,000,00	40,000,00
Mobile App Share capital	1,920,000.00	3,024,000.00	3,840,000.00

### 9.2. Agri Companies:

TAO = Total Amount of Order

Plan 1: TAO <= 10,000.00 DZD / 3%.

Plan 2: TAO <= 100,000.00 DZD / 2.5%.

Plan 3: TAO <= 1,000,000.00 DZD / 0.5%.

	Year 1	Year 2	Year 3
Plan 1 Orders	60	80	100
Price of plan 1	300,00	300.00	300.00
Plan 1 Share capital	18,000.00	24,000.00	30,000.00

	Year 1	Year 2	Year 3
Plan 2 Orders	60	80	100
Price of plan 2	2,500.00	2,500.00	2,500.00
Plan 2 Share capital	150,000.00	200,000.00	250,000.00

	Year 1	Year 2	Year 3
Plan 3 Orders	60	80	100
Price of plan 3	5,000.00	5,000.00	5,000.00
Plan 3 Share capital	300,000.00	400,000.00	500,000.00

**9.3. Expected Revenue Table:**

	Year 1	Year 2	Year 3
Mobile App Share capital	1,920,000.00	3,024,000.00	3,840,000.00
Plan 1 Share capital	18,000.00	24,000.00	30,000.00
Plan 2 Share capital	150,000.00	200,000.00	250,000.00
Plan 3 Share capital	300,000.00	400,000.00	500,000.00
Total Share Capital	2,388,000.00	3,648,000.00	4,620,000.00
Total Costs	2,309,000.00	2,789,000.00	3,269,000.00
Expected Revenue	79,000.00	859,000.00	1,351,000.00

## Class Diagram :

