**Milestone 2**

**BizHub**

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| Name | ID |
| رنا محمد على عطية | 21010528 |
| أمنية طارق إبراهيم السيد | 21010298 |
| روان محمد سعيد عبد الفتاح | 21010547 |
| هاجر اشرف محمد حسن ملوك | 21011505 |
| نوران اشرف يوسف | 21011492 |

We delivered a report containing the first four steps in Milestone 1:

1. The requirements.
2. Data gathering.
3. Data analysis.
4. Wireframes of the application.

We will deliver a report containing :

1. Feedback.
2. UI/UX .
3. Source code of the implemented features of the application.
4. Task description of implemented features.

**Requirements:**

* **Functional requirements:**

1. **User registration:** the application should allow the users to register as one of two types: raw material supplier, business owner(importer).
2. **User profile management:** each user should be able to manage their profile information, including their interests, work, and location.
3. **User evaluation system:** importers can evaluate the suppliers they interact with. The evaluation feature should be accessible only if a prior transaction with the other users exists.
4. **Placing Orders:** Importers should have the ability to make orders that include materials from multiple suppliers. The application should facilitate the coordination and delivery process of these materials simultaneously.
5. **Communication channels:** importers and suppliers should be able to communicate with each other either through a chatbot or messaging feature within the application.
6. **Material Management:** business owners should be able to Identify and manage the materials they use in their work. This includes specifying quantities, adding notes (including expiration dates), and organizing the materials in a simple manner.
7. **Importer-product inventory:** importers (business owners) should be able to associate each product they offer with the raw materials needed, so they can define the required quantity of each material for a product and check the availability of components in the inventory.
8. **Supplier Management:** Suppliers should have a list of available raw materials and should also be able to track the supplies required from them, including cost and availability in the warehouse. The application should provide alerts for low stock items.
9. **Shipping Company Integration:** The application should integrate with the designated shipping company to facilitate the delivery process. It is an optional feature for small business owners who do not have a shipping system.
10. **Feedback and reviews:** this feature allows importers to provide feedback and reviews for suppliers and it will be available if there exists a past transaction between both parties. These reviews and feedback are visible to other users to help them make informed decisions when interacting with other users. This feedback system evaluates factors such as reliability, trustworthiness, product quality and overall satisfaction.

* **Non-functional requirements:**

1. **Usability:** The application should have an Intuitive and user-friendly interface to ensure ease of use for all types of users.
2. **Performance**: The application should be responsive and provide quick search results, suggestions, and order processing to ensure a smooth user experience. (less than 30 sec for each response).
3. **Reliability:** The application should be reliable, ensuring that orders are processed accurately, and all user interactions are recorded and saved securely.
4. **Delivery Reliability:** The application should ensure reliable and on-time delivery of orders through effective coordination with the shipping company. This includes accurate order information sharing, timely updates, and efficient problem resolution in case of delivery issues.
5. **Data Security:** The application should ensure the security and privacy of all shared data, including customer information, order details, and communication exchanges between users.
6. **System Maintenance and Updates:** The application should have a well-defined maintenance and update process to ensure continuous improvement, bug fixes, and feature enhancements.

**Data gathering:**

**Okay!! After we reviewed the requirements of our application, let’s discuss about our trip with collecting data….**

1. **First topic we have here is interview with company in importing and supporting field, it was an amazing event so I will show the questions and the company’s owner responses…**

* As supporter, what is the most important thing you aim to?
* I need to be famous for importers and to show my products in good way with long and small description for it and get continuous feedback with rating.
* And as importer?
* I need many options of supporters to choose from and their rating must be correct.
* Suppose you have the chance to have application helping you in your work, what is the most important feature you need in it?
* Payment guarantee, it represents large problem in our work.

and from my view, I see you can handle it by let the importer pay on your application and you don’t send it to the supporter until the importer confirm receiving the product. Also you must make sure that many payment methods are available.

* Have you encountered problems dealing with the other supporters/importers?
* Actually, I was scammed by an importer, the problem was due to no payment guarantee.
* Which websites/applications you use to help you in your work?
* Here are some examples: - Cartona.com, buymassry.com, Maxab.io.

**Unfortunately!! Our meeting ended at this point…**

1. **Let’s start with the second amazing stage in our trip, it is the questionnaires!!**

**Our questionnaire asks people about their work and problems they face in it, so here are the questions we put in it: -**

* **Talk about your work.**
* **What are the problems you face in your work in general and access to your raw materials in particular?**
* **What are the tasks take large effort from you?**
* **How to find your supporter and problems facing you dealing with him?**
* **How you manage your raw materials in compressed workdays?**
* **Do you use any application or tool helping you in your work?**
* **Suppose you have application to help you, what do you need to be in it?**

**Let’s show the different responses we get: -**

**First response:** it is from Menna, I work with raw materials and products related to scented candles. I face problems dealing with shipping companies and the continuous price rising and sometimes I ship the product to the customer, but he cancels it. the task takes most effort is selling the products. To avoid any problems in the compressed workdays, I store large number of raw materials. I hope I have application that make me famous and provide free advertisements and update the data and orders continuously.

**Second response:** it is from Israa; I work with cakes and cupcakes. I face problems dealing with people and responding to their questions. It takes me a lot of time to reach to supporter and may be not good in quality or the price. To avoid any problems in the compressed workdays, I store large number of raw materials or make the client choose from the available options. I hope I have application that has bot responds to customers’ questions, provide rating, delivery the orders and I hope that I can upload my works on it.

**Third response:** it is from sara, I work with clothes for veiled women. The price rising of raw materials and advertisements are the large problems we face now. We also face problem when dealing with supporters, it is due to high cost of shipping especially if it is from outside Egypt. we have many challenges in selling products, after sales service, find customers and raw materials with high quality and the need for continuous updating our designs. To avoid any problems in the compressed workdays, I always take inventory of products. I’m using business suite application, which organize the orders and messages. I need to evaluate performance of my workers and team members, so I hope that the application has these feature.

**Fourth response:** it is the final response, it is from Sahar, I work at scented candles and diffusers. I face problems in marketing and advertisements. Photographing products takes a long time. we face challenges to selling our products due to the price. I hope I have application that provide free advertisements.

1. **The last stage in our trip, it is the focus group, are you ready? ... let’s go.**

**The members of focus group are the team members themselves, so let’s see what decisions we have made: -**

* We will make it available for the importer to be a supplier by making a new account of type supplier.
* We need to provide a list of orders that took place and information about who order it and the importer deliver it in his own way and if anyone cancel the order, he must mention the reason.
* We decided to offer a trusted shipping company for those who don’t have one.
* To make the dealing between the importers and suppliers easier, we decided to make a bot to answer repeated questions if we have time.

**So, we reach to the end of our trip with collecting the necessary data about our application, but still have many things to show, so let’s go to the next section.**

**Data analysis:**

After collecting data from the questionnaire, focus group, and interviews, we started analyzing the data using qualitative analysis methods (QDA).

After performing content analysis, we noticed that there were a lot of frequently mentioned problems concerning the process of finding raw materials with a suitable price and quality, especially in fields that require business owners to concentrate on quality. Israa, the owner of a cake shop, said, "It takes me a lot of time to find a supplier, and sometimes the quality or price is not satisfactory." Sara, the owner of a clothing brand, added, "We also face problems when dealing with suppliers, especially when it comes to high shipping costs, especially for international orders."

Another common problem mentioned by almost all business owners was the difficulty in finding a reliable shipping company and affordable advertising options. Sahar expressed her frustration, saying, "I face problems in marketing and advertising. I wish there was an application that provides free advertisements." Sara also highlighted the issue of rising prices for raw materials and advertisements.

Menna shared her concerns about dealing with shipping companies and expressed her desire for an application that could make her business more visible and provide free advertisements. Israa added, "I hope there is an application with a bot that can respond to customer inquiries, provide ratings, and handle orders. It would also be great if I could showcase my work on the platform."

After identifying these problems, the stakeholders gathered and formed a focus group. They were aware of the issues and actively sought solutions to satisfy their customers. The most common problem related to shipping companies caught their attention, and they brainstormed potential solutions. One member suggested exploring new shipping partnerships. They also discussed the importance of adding a rating system for customers, suppliers, and importers to ensure transparency and avoid scams.

The data analysis stage provided valuable insights that were previously overlooked. It highlighted the need for an application that addresses these challenges and meets the requirements of the business owners.

**Task description:**

*The application*:

A diagram of a diagram

Description automatically generated

The home:

A diagram of a person with text

Description automatically generated

The chat:

A diagram of a chat

Description automatically generated

The Rating System:

A diagram of a person's diagram

Description automatically generated

The Search:

A diagram of a computer system

Description automatically generated

The Registration:

A diagram of a person with text

Description automatically generated

The Orders:

A diagram of a person

Description automatically generatedA diagram of a person with text

Description automatically generated

The Warehouse:

A diagram of a person with text

Description automatically generated

**Prototype:**

**Registration:**

<https://marvelapp.com/prototype/1a6eb93j/screen/93321921>

**Rest of the application:**

The first page does not exist in the application, it just helps to display the two users.

[**https://marvelapp.com/**prototype**/8d5g6fa**](https://marvelapp.com/prototype/8d5g6fa)

**Evaluation:**

We made a formative evaluation about the prototype design and the application usability.

After analyzing the data, here is the results of the evaluation:

* The evaluation of application logo is of mean 4.583/5
* The users filled in the form are 50% suppliers and 50% importers.
* The easiness of transporting between pages got evaluation of mean 4.35/5
* The evaluation of overall app design is of mean 4.4/5
* The content is 100% clear (not ambiguous)
* The order’s page had some lacking information from the users point of view which are (the product’s id, the response of the supplier to the order, the customer service number, and the contacting information of the shipping company)
* The warehouse management is 80% clear

**Next milestone requirements:**

* Milestone 3:

-A fully developed mobile application will be delivered containing all the features tested and working probably.

-Iterative development: iterating over the development and testing process to refine and improve the system. Collecting feedback from the stakeholders, address any issues or bugs identified during testing, and make necessary adjustments to enhance the systems’ functionality and usability.  
-A final evaluation will be made to identify issues and detect user satisfaction before delivering the application.

-A report containing the whole process of making the application.