

Mario and Luigi's Pizza Restaurant

Project Plan

Date :2nd of April 2024

Version: 1.0

1. Clients:

The client is Pizzeria "Mario and Luigi's Pizzas," represented by Mario, Luigi and Mr. Panucci.

Contact persons: Mr. Panucci.

Phone number: +31 61 23 456 78.

Email: fake1@gmail.com

2. Team:

- Back-end: Nikita

Phone number: +31 6 27120766

Email: fake2@email.com

- Front-end: Taha

Phone number: +31 6 22302394

Email: fake3@gmail.com

- Designer/Media: Khaaled

Phone number: +31 6 48642899

Email: fake4@email.com

- Project manager: Moumen

Phone number: +31 6 16094970

Email: fake@email.com

3. The current situation:

Currently, the process from ordering to eating a pizza is handled by the two brothers themselves. Mario is in the front of the store taking orders from the cash register and serving the pizzas. Luigi is the chef, preparing and baking the pizzas. The current workflow looks something like this:

- Mario takes an order from the customer.
- Mario shouts the order to the kitchen.
- Luigi attempts to comprehend the shouting and writes it down on a notepad.
- Luigi prepares the pizza and bakes it in the oven.

- Luigi periodically looks at the end of the production line and shouts to Mario if a pizza is ready.
- Mario picks up the pizza, if he hears Luigi, and brings it to the customer.

4. Problem description:

Their workflow is an utter mess, (Mario takes the orders and yells them to Luigi in the kitchen. Luigi prepares the order and yells back when it is ready.)

Very much prone for mistakes (it often happens that Luigi mishears Mario and makes the wrong pizza or forgets to write the order down because he is preparing a pizza).

The Pizzeria is not up to date. Only recently they acquired a pin-machine.

The stakeholder goals to increase the capacity of selling in the restaurant, and increasing number of clients is expected. However, we see it is not possible with the current situation of the restaurant.

5. The project contents:

We will build IT system for the client contents three parts:

- Webpage: to help customers place orders remotely. That will help to decrease the pressure work on the cashier and increase the number of the customer.
- Self-check-out: for customer who want choose and place their orders in the store. That, will help to decrease the pressure on the cashier, too.
- In-store system: the aims of this system are automating ordering, cooking and packing up processes; organizing the orders from the customers in a raw, and printed stickers; making the cooking process more organized. This system will help so much for three aspects:
 - ✓ Increasing the sell capacity.
 - ✓ Decreasing the mistakes from the employees.
 - ✓ Making the store environment quite quieter.

6. Deliverables:

❖ DOCUMENTATION:

- Business process diagram
- Paper prototype
- Interview transcript
- Project plan
- Data from the restaurant of the sales over the recent years.

❖ SYSTEM:

- A web application according to the client's requirements
- An abstract representation of a smart oven (with the Arduino) according to the client's requirements.

7. Non-deliverables:

- Maintenance plan.
- Dealing with the third-party delivery company.

8. Constraints:

- Budget constraints:
Limited financial resources may limit the investment in IT infrastructure and software development.
- Time constraints:
Limited time to implement IT solutions while minimizing disturbance to everyday operations.
- Limitations on Resources:
There aren't enough qualified IT specialists to build and maintain the systems.
Restricted hardware resources to use Arduino for the communication and display systems in the kitchen.
- Limitations on Compatibility:
incompatibilities between the suggested IT solutions and the current hardware and software systems.
- Regulation Restrictions:
adherence to industry standards and data protection laws when managing client information and financial transactions.
- Strategies for Mitigation:
Prior to deployment, thoroughly test and ensure quality in order to detect and reduce technical hazards.
Make sure staff workers receive thorough training so they can operate the new systems efficiently.
To safeguard sensitive data, put strong security measures in place including encryption and access limits.
- Assign enough funds and resources to the project and organize your work so that it is completed by the deadline.
- Work together with knowledgeable IT specialists and suppliers to resolve incompatibilities and guarantee the seamless deployment of IT solutions.

9. Risk Analysis:

- Technical risks:
 - ❖ Compatibility difficulties: The integration of various technologies such as Python, Flask, and Arduino may cause compatibility issues.
 - ❖ System failures: Any technological issues with the ordering system, kitchen display system, or communication system could disrupt operations.

- Operational Risks:
 - ❖ Resistance to change: Mario and Luigi may be averse to implementing new technologies or altering their workflow.
 - ❖ User error: Staff members may make mistakes when using the new systems, resulting in incorrect orders or inefficient processes.
 - ❖ Dependence on technology: Overreliance on technology can lead to problems in the event of system failures or technical concerns.
- Security Risks:
 - ❖ Data breaches: Because the ordering system and inventory management system may store sensitive customer information, suitable security measures must be installed to prevent data breaches.
 - ❖ Unauthorized access: A lack of effective access restrictions may result in unauthorized access to the systems, thereby exposing security vulnerabilities.

10. Phasing:

Three main phases, will start on 2nd of April.

1. Planning phase:
 - 2nd and 3rd of April: Business diagram and Project plan.
 - 4th of April: Interview with the stakeholder.
 - 5th of April: Drawing prototype on papers, and taking approve from the stakeholder.
2. Implementing phase:
 - 8th of April: Figma prototype and feedback from the client.
 - 9th to 12th of April: Implementing the webpage, self-check-out, and in-store system.
3. Testing and lunching phase:
 - 15th and 16th of April: testing the whole parts of the project and taking feedback, then improving the system.
 - 18th of April: presenting the project to the stakeholder and lunching it in the store.