



Mario and Luigi's Pizzas

Project Plan

INTRODUCTION - CLIENT

- The clients are Mario and Luigi, two brothers who own their own pizzeria and they are facing an increased flow of clientele. Mr. Panucci wants to invest in their business, but he wants the brothers to upgrade their order process in order to handle the increased workload. They employed an IT Team to help with this task.
- They can be contacted through both the telephone and email, but also at the restaurant during the working hours.
- They are the owners of the pizzeria called Mario and Luigi's Pizzas, a family business, with only the two as the only employees.

TEAM

- Ciupercă Diana – Team leader
- Demirci Alpay – Lead developer
- Dulgerov Stefan – Developer
- Zwartenkot Pjotr – Developer

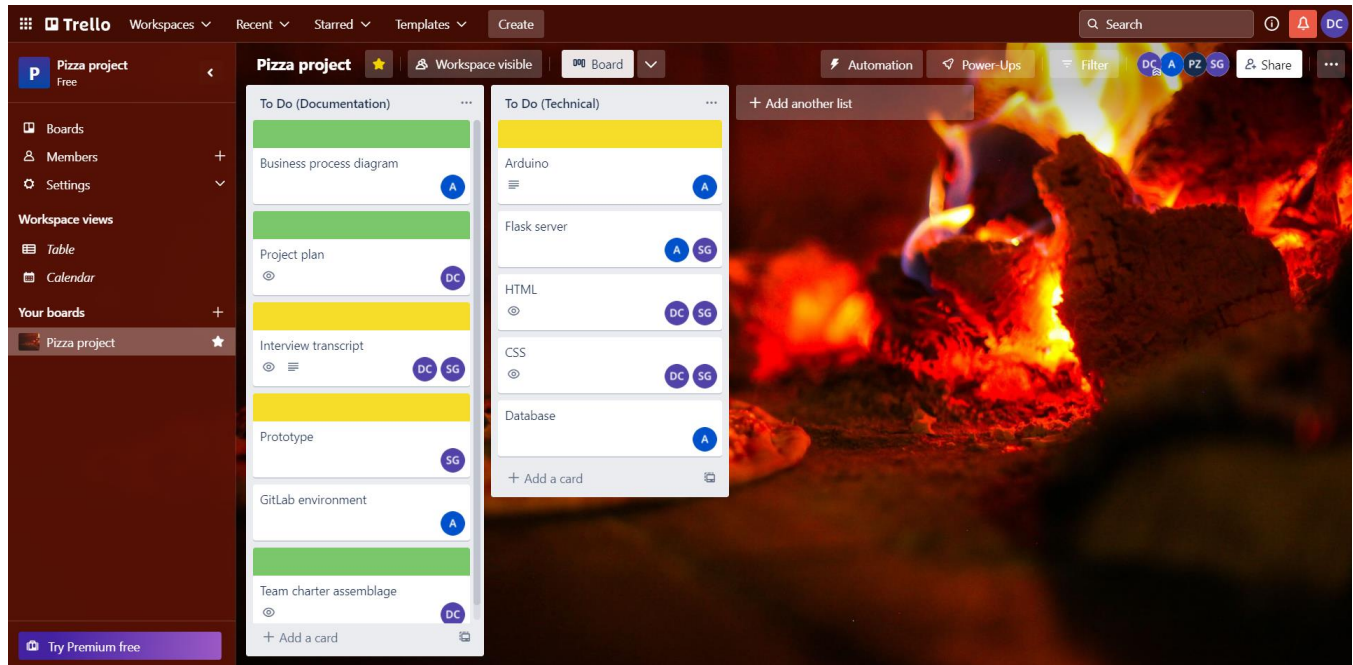
COMMUNICATION METHODS

- **Trello** - We assign tasks for each member in Trello and we decide how long it takes to complete said tasks. We expect that each member will do their work in the designated timeframe and we expect professionalism and hard-work in order to efficiently finish
- **What's app** – We send here our work and we ask for feedback. We send any answers and ideas we have. We announce when we are late or if anything unplanned happens so that we know how to adapt to each situation.

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- **GitLab** – It's the workspace we'll use in order to send the work to different devices and work on the same code. This way, we can efficiently add new functions to the same program and see which part was done by which member. It will help us coordinate and figure out what parts are missing and improve the final product.



CURRENT SITUATION

Mario and Luigi are two brothers who conduct a family business named “Mario and Luigi’s pizzas”. They are the only workers at the pizzeria and need to manage every task all by themselves.

- Mario is the cashier. He works at the front desk and takes the orders from the customers. He shouts them to Luigi. After that, he needs to hear when the pizzas are ready and deliver them to the customers, leaving the new clients waiting
- Luigi is the chef. He works in the kitchen and writes down what he hears from the orders that Mario is shouting. He needs to make the pizza, put it in the oven, continuously checking the time while also paying attention if Mario says any more orders.

The process is ineffective as both Mario and Luigi need to manage more tasks at the same time. They get orders wrong, miss the cooking time and make the clients wait more than it would be admissible in a professional restaurant. They want to automate some processes in order to meet the customers’ demands and overall make the experience more pleasant.

PROBLEM DESCRIPTION

Mario and Luigi are facing an increased flow of clientele due to their business becoming more popular. They are two brothers who are working together and they don't have any automated process, meaning that the whole process is inefficient and problematic.

- Mario shouts the orders which creates discomfort in the restaurant and a risk of miscommunication between him and the kitchen
- Luigi needs to understand Mario's shouting, which can be misheard due to the noise from the clients
- Luigi needs to write down the orders and check the status of the pizzas, losing valuable time and making new clients wait longer for their orders
- Mario needs to pay attention to both the customers (to get their orders) and Luigi (to hear when the pizza is ready and deliver it to the assigned table), creating an irritable waiting time for the customers while other pizzas are delivered

PROJECT GOAL

The team will create an IT solution, which will solve the miscommunication between the brothers as well as decreasing the waiting time for the customers. It will make the restaurant suitable for the rising intake of customers.

- Decrease the loud and unwanted noise from the shouting, creating a more pleasant environment for the customers
- Decrease the long waiting time
- Decrease the possibility of getting the order wrong
- Create a friendly and intuitive application the customer can use in order to improve the process of ordering pizza
- Improve the quality of life inside the pizzeria

DELIVERABLES – MOSCOW PRIORITIZATION

- **Must have:**
 - Project Plan
 - Business process diagram
 - Interview transcript
 - Paper prototype
 - Web application (Main page, Menu page, Order page, Overview/Track order page)

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- Details about the products
- Smart oven (Arduino)
- **Should have:**
 - Database
 - Account creation
 - Different security levels
 - Pickup page
- **Could have:**
 - Delivery option
 - Animations
- **Will not have:**
 - Password encryption
 - Bootstrap for styling

RISK ASSESSMENT

- **Executive support**

- What is it?

Executive management disregards project communications and meetings.

- Probability of happening?

The probability of that happening while not that high, exist because there might be outside circumstances that make the person become disengaged

- Impact on project?

Medium high, depending on the role the executive has. If it is a central part of the team, it might prove difficult to replace them or look for support from somebody else.

- How to prevent it?

Ensure nothing is distracting the executive and, if it is impossible for them to continue their work, it might be a good idea not to involve them in future plans for the group.

- What if it occurs? How to minimize effect?

If it does occur and there is nothing to do prevent it, the obvious solution is to keep going without that person in mind and not count on them.

- **Inaccurate estimates**

- What is it?

The team overestimates the time they have to deliver the project, the capabilities of each member, the complexity of the task, the investments needed etc. and they face difficulties in adapting to it.

- Probability of happening?

High possibility of it happening if a person overestimates themselves, the group or the task. There need to be realistic expectations that have been set from the start. If something is not certain to be achievable, the team can ask a supervisor for advice.

- Impact on project?

Depends on how much of a difference there is between expectations and reality, because a small difference can be overlooked, but a huge miscalculation will definitely hinder the group and might even discourage them from continuing.

- How to prevent it?

Do a thoroughly research and get feedback from the people you work with. Another possibility is to ask somebody with previous experience for help analyse the situation.

- What if it occurs? How to minimize effect?

Check the actual situation, look where the problem is, ask for advice from trustworthy people that have previous experience in this field and make any changes if needed.

• Under-communication

- What is it?

It is one of the more common problems in a remote work environment and occurs when a manager is unable to clearly communicate what they need, want, or expect to their team, or between team members when they are not able to work together.

- Probability of happening?

Medium possibility of it happening since the manager often gives clear instruction to his employees and members have their own assigned tasks, but it's a serious matter if any miscommunication occurs, because it puts the whole project at risk.

- Impact on project?

It might have a high impact on the group, since they can lose valuable time, effort and money if they follow misleading demands.

- How to prevent it?

Create a safe environment in which you can communicate freely with the manager, but also between members. Every team member should put constant effort into good communication.

- What if it occurs? How to minimize effect?

People involved need to try their best to communicate with others and try to adapt to the new circumstances. Every member needs to reconfigure their work based on the new demands and communicate any problem they might encounter.

• High demands

- What is it?

Learning curves lead to delays and cost overrun.

- Probability of happening?

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Medium-low probability for it to happen since people often know their capabilities and they don't try learn something new during a project, because they don't want to risk failing to meet the demands.

- Impact on project?

When your team needs to acquire new skills for the project, there's a high risk that productivity will be low and the deadline will be exceeded.

- How to prevent it?

Don't try to learn something new while a project is ongoing. You may need to learn some new things, but don't learn something from scratch, because it will overcomplicate things and could make you miss the deadline. You should only take on tasks that you know you can manage.

- What if it occurs? How to minimize effect?

If it is necessary to learn something else, it is best to learn just what you need instead of analyzing it in depth. If you want to continue studying it, do it outside the project, for your own development.

- **Low team motivation**

- What is it?

People don't put enough effort into completing their tasks, leading to a low quality product.

- Probability of happening?

Medium possibility of it happening since are many variables that need to be taken into account like a person's personality or the kind of tasks they need to do.

- Impact on project?

It might have a high impact since it can lead to delays and even missing the deadline. It can also lead to a low-quality product if the work is procrastinated and it's done defectively in the last minute

- How to prevent it?

The best prevention might be to create a good work environment while making sure that the people working on the project are happy. Other people might benefit from other methods such as small rewards or written achievements.

- What if it occurs? How to minimize effect?

Try some team-building activity that would increase both the morale and the productivity of the team. Sometimes, after long working hours, some change of pace would certainly boost the team's motivation and quality of work.

PLANNING

- **First week:**

- Assign tasks and timeframes for each member (Trello) - Diana
- Create the workspaces where we can communicate and send our work
 - What's app group - Diana
 - GitLab - Alpay
- Finish and submit the documentation
 - Project plan - Diana
 - Business process diagram - Stefan
 - Interview transcript – ~~Pjotr~~ Stefan
 - Prototype – Alpay, Stefan
 - Document formatting - Diana
- Plan and start the implementation of the website - Alpay

- **Second week:**

- Study the methods we are going to use - Everyone
- Code the smart oven (Arduino) - Alpay
- Finish the back-end (Python, Flask) – Alpay, Stefan
- Finish the front-end (HTML, CSS) – Stefan, Diana
- Create a database – Alpay
- Keep track of the work and update the feedpulse - Diana
- Add new features - Everyone

- **Third week:**

Since half of the team will be away during the holiday (Diana 22oct – 2nov, Stefan 25oct – 2 nov) we will try to finish 80-90% of the project before the holiday, so we will only address really important matters during that period

- Add minor features
- Make front-end adjustments
- Make the presentation
- Submit the final project