Desafio técnico Estágio QA Presencial na ZBRA.

Before you begin

All questions have possible answers. There are no trick questions.

All questions must be answered in English

1. Explain the importance of quality assurance in a project.

Quality assurance plays a key role in the pursuit of success for any venture and in satisfying all parties involved. Here are the main reasons why it is important and why it should be applied to company projects:

Customer Satisfaction: Quality assurance ensures that the project delivers the desired quality, which in turn leads to satisfied customers. Happy customers are more likely to provide positive feedback and return for future projects, and even recommend your services to others.

Cost Reduction: Quality assurance helps identify and correct problems early in the project lifecycle, reducing the likelihood of costly rework, delays, or legal issues.

Risk Management: By implementing quality assurance processes, project managers can identify, assess, and mitigate potential risks that could affect the project outcome.

Building a Reputation and Brand: Consistently delivering high-quality projects enhances an organization's reputation and brand. This can lead to more business opportunities and a strong position in the market.

Regulatory Compliance: It ensures that standards are met, reducing the risk of legal consequences or fines for non-compliance.

Continuous Improvement: By identifying areas for improvement and implementing corrective actions. This cycle of continuous improvement helps refine processes and improve efficiency.

Accountability: Accountability ensures that everyone involved in the project understands their role and takes ownership of quality-related issues.

Predictability: The implementation of quality assurance makes project outcomes more predictable. Stakeholders can have greater confidence that the project will meet its quality objectives, stick to the schedule, and stay within budget.

Long-Term Success: Ensuring quality is not just about successfully completing the current project, but also about building a foundation for long-term success. High-quality projects result in satisfied customers, repeat business, and sustainable growth.

2. In 8 hours, 20 trucks can unload 160 m3 of sand into a pit. In 5 hours, how many trucks are necessary to unload 125 m³ of sand?

In 8 hours, 20 trucks can unload 160 m3 of sand. So, in 1 hour, 20 trucks can unload 160 m3 / 8 = **20 m3** of sand. Therefore, in 1 hour, 1 truck can unload 20 m3 / 20 = **1 m3** of sand.

In 1 hour, we need to unload 125 m3 / 5 = **25 m3** of sand. So, we need 25 trucks (since one truck can unload 1 m3 of sand in one hour).

Using the compound rule of three, I conclude that **25 trucks are needed to unload 125 m^3 of sand**

3. Given the toy below, describe test scenarios that guarantee that its functionalities are properly implemented

Here are some test scenarios to ensure its functionalities are properly implemented:

Shape Fitting Test:

- Test Objective: Verify that each shape fits into its corresponding hole in the lid.
- Test Steps: Try to fit each shape into each hole in the lid.
- Expected Result: The shapes should only fit into their corresponding holes and not into holes of different shapes.

Handle Durability Test:

- Test Objective: Verify the durability of the handles.
- Test Steps: Apply force to the handles.
- Expected Result: The handles should not break or detach from the base under normal use.

Lid Attachment Test:

- Test Objective: Verify that the lid can be easily removed and reattached by a child.
- Test Steps: Try to remove and reattach the lid.
- Expected Result: The lid should securely attach to the base but also be easy enough for a child to remove.

Material Safety Test:

- Test Objective: Verify that the toy is safe for children to use.
- Test Steps: Test the toy for harmful substances, such as lead-based paint, or small parts that could pose a choking hazard.
- Expected Result: The toy should not contain harmful substances or small parts that could be swallowed.

Stability Test:

- Test Objective: Verify that the toy remains stable when shapes are inserted or when the lid is removed or attached.
- Test Steps: Insert shapes into the toy and remove and attach the lid.
- Expected Result: The toy should not tip over easily.

Color Fastness Test:

- Test Objective: Verify that the colors on the toy do not fade or transfer when rubbed or washed.
- Test Steps: Rub and wash the toy.
- Expected Result: The colors on the toy should not fade or transfer.

Shovel Functionality Test:

- Test Objective: Verify that the shovel can collect the blocks.
- Test Steps: Try to use the shovel to collect the blocks.
- Expected Result: The shovel should be able to collect the blocks.

4. Describe, in your own words, all steps to cook spaghetti bolognese. Make sure that you are providing all relevant information to reproduce your recipe.

1. **First, check in your kitchen and refrigerator if you have all the necessary utensils and ingredients for preparing the spaghetti, which are:**

Ingredients:

400g of spaghetti ,2 tablespoons of olive oil 1 onion, finely chopped 2 cloves of garlic, crushed 500g of ground meat 1 can of chopped tomatoes (400g) 2 tablespoons of tomato extract Salt and pepper to taste Grated Parmesan cheese Fresh basil leaves

Instructions:

To prepare Spaghetti Bolognese, you will need the following kitchen utensils:

Large pot: To cook the spaghetti and make the Bolognese sauce. Sharp knife: To chop the onion and crush the garlic cloves. Cutting board: To chop the onion and garlic. Skimmer or pasta tongs: To remove the spaghetti from the water after it is cooked. Grater: To grate the Parmesan cheese. Wooden spoon: To stir the ingredients while cooking. Plates and cutlery: to add the spaghetti and serve

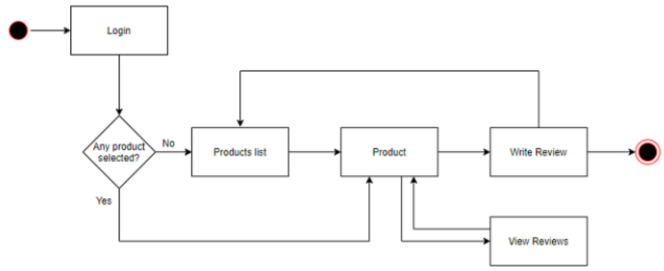
- Organize all ingredients and materials on a table
- Prepare the ingredients: Finely chop the onion and crush the garlic cloves. Grate some Parmesan cheese and set aside.
- Cook the spaghetti: Bring a large pot of salted water to a boil. Add the spaghetti and cook according to package instructions until al dente. Drain and set aside.
- Make the Bolognese sauce: Heat the olive oil in a large pot over medium heat. Add the chopped onion and crushed garlic, sauté until translucent.
- Cook the ground meat: Add the ground meat to the pot with the onions and garlic. Cook until it is browned and no longer pink.
- Add tomatoes and seasonings: Add the chopped tomatoes, tomato extract, salt, and pepper to the pot. Stir well to combine all ingredients.

- Let it simmer: Reduce heat to low, cover pot, and let simmer for about 15-20 minutes to allow flavors to blend.
- Combine spaghetti and sauce: Add cooked spaghetti to pot with Bolognese sauce. Stir well to ensure each strand of spaghetti is coated with sauce.
- Serve: Serve your Spaghetti Bolognese hot, topped with a generous portion of grated Parmesan cheese and some fresh basil leaves.

5. What information is important when creating a bug report?

1. **Bug Title or ID:** Should provide a quick description of the bug.
2. **Environment:** Where the bug appears, such as the device, operating system, browser, or application version.
3. **Steps to reproduce the bug:** Clear and simple instructions.
4. **Expected result:** What should normally happen.
5. **Actual result:** What happens when the bug occurs.
6. **Visual proof of the bug:** Such as a screenshot, video, or error message.
7. **Bug severity:** How much the bug affects the functionality or usability of the product.

6. Given the flowchart below, describe at least four possible flows to review a product



- **Login -> Products list -> Product -> Write Review:** This flow represents a user logging in, navigating to the list of products, selecting a specific product, and then writing a review for that product.

- **Login -> Products list -> Product -> View Reviews:** In this flow, a user logs in, goes to the list of products, selects a product, and then views the reviews for that product.

- **Login -> Any product selected? -> Yes -> Product -> Write Review:** This flow starts with a user logging in. If they have already selected a product (perhaps from a previous

session or from their wishlist), they can directly navigate to that product and write a review.

- **Login -> Any product selected? -> Yes -> Product -> View Reviews:** Similar to the previous flow, if a user has already selected a product, they can directly navigate to that product after logging in and view its reviews.