QA Technical Test

The exam is written in English, but feel free to respond in Spanish if you prefer. Part 1.

Please evaluate the provided test electronic website as if you were testing it upon a developer's

request. Spend a few minutes navigating through the site and complete an electronic purchase to familiarize yourself with its functionality. (Please use test data: card 4111-1111-1111-1111 - 12/26 - 123)

<https://www.demoblaze.com/>

Once you understand how the website works, please make a plan to test the part where people perform a purchase of any product. We are just looking for use cases so we don’t need to add step by step instructions on how to execute use cases.

Additionally We would like you to report at least 5 bugs you find during your testing session. Keep in mind the end goal is a fully functional electronic website store. Please include all appropriate info when creating these bug reports, we are mimicking a live testing environment.

Part 2. (Optional) - Completing or not completing this section (Part 2) will not affect your overall evaluation. Your decision to participate in this part is optional and is only intended to provide us with additional insight into your automation skills, if applicable..

Please use the same electronic website store to create two automated scenarios using Selenium (or any other framework) and a language of your choice. We should be able to run this test from within the directory you provide. Please have this assessment turned in the following 5 days.

Using the test electronic website please automate the following: <https://www.demoblaze.com/>

Scenarios: Please make these separate transactions that can run independently of each other.

Select Samsung galaxy s6, add a Add to cart and Confirm product added, pay with Card 4111- 1111-1111-1111 - 12/26 - 123

Select Nokia lumia 1520, add a Add to cart, and Confirm product added, delete the product and confirm the product is deleted

Feel free to use any design pattern, methodology, or proposal you see fit. The evaluation will focus on the quality of the code and the proposed solution.

Part 3.- Open questions. Please answer the following open-ended questions without using the internet or external sources. At Aplazo, we greatly value honesty and integrity in our evaluations. These questions do not have right or wrong answers and will not directly impact your final evaluation. Their purpose is only to help us better understand your experience and approach in the area of software testing.

**Please make sure that your answers reflect your own reasoning and knowledge. We value an authentic answer, even if it is not perfect, more than one generated by AI. The authenticity and justification of your answers are key for us, and we can identify when AI is used.**

**1.- When a testing phase is completed and no defects are found, how would you ensure that the software is ready for release?**

Depending on what type of testing has been completed, that is, if the functional testing of a sprint has been completed, we continue with the integration testing for a second review already integrated, then one more phase that would be the UAT testing and finally be able to carry out the launch, I would not recommend doing automation between those stages since this would have to be done either in a QA environment or in a pre-production environment with something that has already been released to the market previously and is much more stable and managed, once all the previous processes have been done, then do them automatically.

**2.- If you have limited time and resources, how would you decide which parts of the software to test to ensure the best possible coverage?**

If I have limited time and resources, I would first execute the Happy Pads of the requirements or just ensure that the business rules are met, then in another sprint or another Development period I would introduce a second phase to give a more detailed review of that requirement, whether it be just services or layout.

**3.- When do you consider is the best time to start testing in a software project, and why?**

The best moment is when the back end and back end are already contemplated in the same Development, that is, the services are already coexisting with the design, this in an already integrated version and with a stable environment, which can be in QA.

**4.- You have identified that some modules of your application tend to have more defects than others. How would you use this information to plan your tests?**

Giving priority to just the most unstable modules and in each integration or in each test version that is deployed, giving a 360 to the modules, not a detailed execution being more of a smok test on these.

**5.- What would you do if your current tests stop finding new defects in the software after several development cycles?**

Implement some other types of tests such as backend tests, microservices, APIS, automated tests and performance tests.

Most of the time people get addicted to a flow, very commonly doing the Happy Pad, creating alternative scenarios that may not be taken into account in requirements that could be improvements, or they could do a more complete development and considering tools in the aforementioned tests that could be of great help for basic defects that are usually passed on to the user at the time of execution.

**6.- Describe how you would adapt your testing approach for a project that is very different from those you have worked on before, for example, a web application versus an embedded system.**

First, I would perform an analysis of the requirements/User Stories to understand the entire software part of the project. Later, I would do the same for the hardware part, looking at the business rules, main flows, limitations for both, and the technologies and tools used. Once that is done, I would familiarize myself with both and prioritize the integration tests, since they are the ones that most affect the software that is intended to be released to the market. Then, I would put in the performance tests that would already run on the hardware, thus prioritizing the two most important stages for each embedded system. Constant regression of the tests would be a plus to be evaluating both things in each production release.

**7.- How would you ensure that a software not only is free of defects but also meets the needs and expectations of the end use**

There is no product free of defects in its entirety, there are more unstable stages on Development environments, I would carry out the integration tests, creating more complete E2E flows where the front and back already coexist correctly, in a stable version and prioritizing the business rules and main flows detailed in the requirements.

**8.- How would you handle the situation where you have to choose between finding more defects or validating that the software meets the client’s requirements?**

If there is a situation like the one mentioned in the question, it would be to guarantee Quality, then I would prioritize the greatest detection of defects, but the idea is that both things have stability, that is, that the software works as the client asks and the more analysis is done by QA, the greater the increase in test cases and the more thorough it is, more defects can be found and subsequently, the more progress is made in the testing stages, the analysis will be more complete with fewer and fewer defects in it.

**9.- With limited time and resources for testing, what criteria would you use to prioritize which features or modules should be tested first?**

Since there is no specific software defined, according to other projects, these would be the modules:

Login, Administrator, Roles and permissions, Collaborators, Assignment segmentation, Check In/check out, My attendance, Tasks, Training, Communications, Accounts, Cards, Credits, Settlements, Sales, Cart, Warehouse, etc.

**10.- How would you maintain the effectiveness of your test suite when a significant change is introduced in the software, without having to redo all tests from scratch?**

For a faster review, I will first perform a smok test, reviewing all the modules that could be affected, without the need to execute them as is in a matrix, then perform an integration execution and finally, if I already have some automated modules, execute the scripts.

**If you have any questions please reach out, good luck, We are looking forward to seeing your solution.**