**Manual QA Task#1**

**Functional testing** – by that type of testing, I will verify that the main functionality of the controller works as expected. Firstly, I will test sending a signal after pressing any button; after that, I will verify the main controls: power on/off, increase and decrease the volume, switch between channels by using the “P” button, and mute the volume. In the next stage, I will test the functionality of the rest of the controls.

**Performance testing** –I will put a load on a remote controller to see how well it works and how long it takes to respond.

**Load testing** – I will test the stability and response time by making the controller work with as many users as it was designed for (In our case – with one user).

**Stress testing** - I will test the stability and response time by making the controller work with more users as it was designed for (In our case – more than one user).

**Endurance testing** - I will test the stability and response time by making the controller work for a long time while using it with the load.

**Usability testing** – the controller will be tested from the user’s point of view to see how it looks and how easy it is to use. For example, it will be checked: how easy it is to use the controller with one hand, whether the buttons are consistently layout to the user experience, etc.

**UI testing** – the main reason for this testing is to ensure that the UI meets the requirements and mockup set up. UI testing looks at the size of the remote controller (width, length, thickness), the size of the buttons on the controller, the color of the controls, the text symbols printed on the buttons, and the arrangement of the buttons that is proportional and appropriate to each other.

**Localization testing –** the main idea of localization testing is to test the appropriate linguistic and cultural aspects of a particular locale. For example, it will be tested whether the text is in Latin, whether the digits are in Arabic, etc.

**Accessibility testing -** is set up to determine whether people with disabilities can use the remote controller. For example, I will test the availability of the Braille font for blind people; in another case, I will verify if the buttons which should be colored also have symbols on them for people who are colorblind.

**Monkey testing** – that type of testing aims to see if the controller crashes by clicking random buttons. Testing is done randomly, with no test cases, and it is not essential to know how it works. In our case, we can give the controller to the baby and see how it will react to that type of usage.

**Compatibility testing –** make sure that the remote controller works and behaves the same way with different TVs (the models of TVs with which the controller should work are indicated in the documentation)

**Positive testing –** involves entering and performing "valid" actions that the system should accept without errors. For example, I will test whether the volume will continuously decrease to 0 when pressing the “Volume -” button and holding it for more than 10-15 seconds.

**Negative testing -** involves entering and executing "invalid" actions, which the system should perceive as an error. For example, I will verify whether the remote is waterproof or not; I will test whether the remote works without batteries.

**Ad-hoc testing** –is intuitive, free, without preparation and expected test results. It does not require any documentation, planning, or processes.

**Recovery testing -** tests how well the remote works after it crashes or something bad happens. For example, I will test to remove the batteries from the remote while using it and then insert them back into the remote to see whether it will work correctly; or I will pour water on the remote controller to see whether it will recover.

**End-to-End testing –** involves testing the remote controller in a way similar to how it would be in real life. For example, I will test taking the controller in my hand, clicking the “Power” button, switching to my favourite channel, increasing the volume, clicking the “Mute” button, and clicking it again, decreasing the volume, and clicking the “power” button.

**Security/safety testing -** refers to protection against both intended and unintended threats like accidents, damages or events, etc.I will verify: from what materials the remote is made; whether those materials have any harmful chemicals; whether children can take the remote to their mouth; whether it can hurt anyone.

**Acceptance testing –** is a type of testing in which a client or a customer test the product using real business scenarios. To execute the acceptance testing, I will give the controller to the interviewer and ask him to test it by himself.