"Parker" Ballpoint pen testing

Test levels

Unit testing

-Check the push mechanism of the handle
-Check the thread quality of the handle when disassembling
-Check how the ball rotates in the tip of the ampule

Integration testing

-Make sure that the ampule properly interacts with the button, and appears after pressing the button
-Check for backlash in the handle after joining the upper and lower parts

System testing

-Checking the main functionality of the pen, whether it writes.
-Find out how many hours of writing the ink in the ampule will last

Acceptance testing

-The pen writes
-Push mechanism works properly
-No pronounced defects on the case

Alpha testing

-Within one day, the development team tests the pen. Writes and presses the button hundreds of times.

Beta testing

-Invite a group of volunteers and have them write something and test the action of the push mechanism of the pen.

Types of testing

Functional

Security

-Check how the pen behaves in a vertical position, if the ink is not flowing

Functional

-Check if pen writes at temperatures below 20 degrees Celsius

Interoperability

-Measure the maximum angle at which the pen can write

No-functional

Performance

-Check how fast the push mechanism works

Load

-Check the quality of the written text, provided that it is written as quickly as possible.

Stress

-Check how long you can write without changing the ampule
-Strongly press the handle on the table, while pressing the button
-Check the handle for burning
-Check the handle for drowning

Volume

-Add ink to the ampule above the established norm, and check how it will affect the writing.

Usability

-Is it comfortable to write with this pen
-Is it easy to change the ampule

Configuration

-What types of paper does the pen write on

UI/GUI

-What the pen looks like, color, design
-Are there any external defects on the handle
-How the "Parker" branding is applied

Localization \ Internationalization

-Are there any spelling errors in the words, on the body of the pen and on the ampule
-Text is printed from right to left
-The text is written in Latin

Changes related

Regression

-Rerun all priority tests

Re-testing

-During the localization test, a bug was found in the engraving on the body of the pen. After fixing the bug, you need to rerun this test.

Smoke

-Test the main functionality of the pen, whether it writes and how the pressure mechanism works.

Sanity

-Carry out compliance tests, after changes, at the stage of production of the pen