

Object of testing: ballpoint pen with replaceable blue refill.

Pen testing by testing levels:

1. Unit, module, component testing.

Check that the pen writes on the paper.

Take the pen in your hand.

Draw a straight line 5 cm long on a white sheet of paper.

Unit test:

we take a separate element of the pen, for example a cap, and check whether it is screwed to the pen, or fits onto the pen, or is not small, or not large, or holds well on the pen, or is a strong cap, etc.

2. Integration testing.

Make sure that the shaft is removed from the handle (system 1 is the shaft, system 2 is the body of the handle).

3. System testing.

Take the pen in your hand.

Draw a straight line 5 cm long on a white sheet of paper.

Make sure the line is blue.

Unscrew the cap and remove the rod.

Place the rod in place and screw on the cap.

4. Acceptance testing.

Check that the pen writes in blue on the paper and does not require significant effort.

Check that the pen is comfortable to hold in your hand.

5. Alpha testing.

Invite the pen development team and test the pen.

6. Beta testing.

Invite your neighbors and, under the supervision of a specialist from the development team, test the pen.

Pen testing by testing type:

1. Functional:

Take the pen in your hand.

Draw a straight line 5 cm long on a white sheet of paper.

Make sure the line is blue.

Unscrew the cap and remove the rod.

Place the rod in place and screw on the cap.

Functional testing is divided into: *Security, Interoperability, Functional.*

Security - we test whether the paste and the shape of the pen are safe for health.

Interoperability - can the handle be attached to clothing, etc.

2. Non-functional:

- **Stress.** Check that the refill in the pen is enough for 1.5 km when writing text.
- **Usability.** Check that the pen writes in red on the paper and does not require significant effort. Check that the pen is comfortable to hold in your hand.
- **Configuration.** Check that the pen writes if the room temperature is -20 degrees, 0 degrees, 20 degrees. Check that the pen writes on paper, cardboard, and leather.

UI Test:

Check line thickness when writing text on paper.

What color is the body of the pen itself?

Are there patterns on the handle?

3. Changes related: (let's say an elastic band is put on top of the screw cap of the pen to erase the paste of a ballpoint pen).

Regression.

Take the pen in your hand.

Draw a straight line 5 cm long on a white sheet of paper.

Make sure the line is blue.

Remove the rubber band from the cap.

Unscrew the cap and remove the rod.

Place the rod in place and screw on the cap.

Place an elastic band on top of the cap.

Re-testing.

Let's assume that the elastic does not fit on the cap.

The developer made a wider hole in the cap.

The tester checks whether it will be possible to put an elastic band on the cap.

Smoke.

Take the pen in your hand.

Draw a straight line on a white sheet of paper and make sure that the pen writes in blue.

Sanity.

Let's assume that the pen body was previously made of plastic, but then it was made of wood. Check that the pen is visually the same size, has a screw-on cap, and a blue rod.