

## > 3 years experienced candidates

### Task 1

Describe the steps for comprehensively testing of a pencil with an eraser on one end. Cases for all types of testing (such as functional, usability, performance, load, stress, security, etc.) are expected here.

First, description does only specify that there is an eraser on one end. We don't know what is expected to be on the other end so we can assume it's a standard pencil that comes not sharpened.

### Functional tests

Purpose of functional tests is to ensure the pencil and eraser work as intended.

Pencil:

- Can you use pencil on different types of surfaces? (paper, glossy paper etc)
- Can pencil write smoothly without breaking?
- When writing a text, is graphite consistent ? (text keeps its quality over time)

Eraser:

- Can it erase writing correctly ? (erased area is cleaned and there are no marks of graphite)
- Does eraser leave smudges on the paper
- Ensure that eraser lasts for specified number of erasings.

### Usability tests

Tests focused on user experience with product

- Does the pencil have comfortable shape to be used for long period of time?
- Is pencil well balanced? (not too heavy on one side)
- Can it be used by both left handed and right handed people
- Is it easy to sharpen ?
- Is it easy to use eraser ?
- Are labels like hardness visible and clear?

## **Performance tests**

- How long does one pencil lasts?
- How many words can be written ?
- How many time can you erase until eraser runs out?

## Load tests

- How many pages can you write before you need to sharpen the pencil?
- What happens when you keep using eraser without a break? (Does it produce heat that can damage paper or the eraser?)

## Stress tests

- Check if pencil can brake if you drop it from height
- Can pencil brake easily when you bend it, or press it hard?
- Can pencil deform when high temperature is applied?
- Can eraser harden in low temperature and make it unusable

## Security tests

- Is it safe for children? Is there any choking hazards?
- Is the graphite or eraser made of toxic materials?
- Can you easily remove eraser?

## Compatibility tests

- Is pencil compatible with different paper types? (Like textures)
- Can eraser handle different types of graphite? (Not only the one from the pencil)
- Is it compatible with most used sharpeners?

## Regression tests

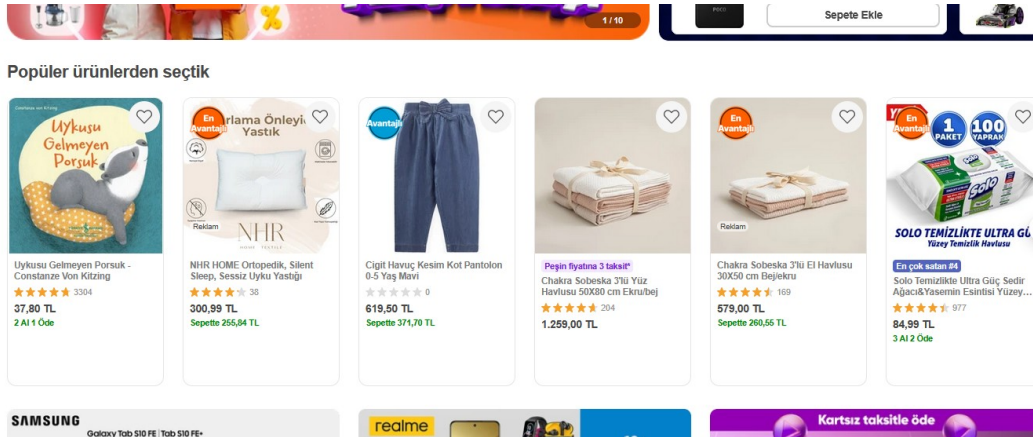
- Does new version of the pencil meets previous functionality
- Is new eraser rubber still erasing as well as previous one

## Task 2

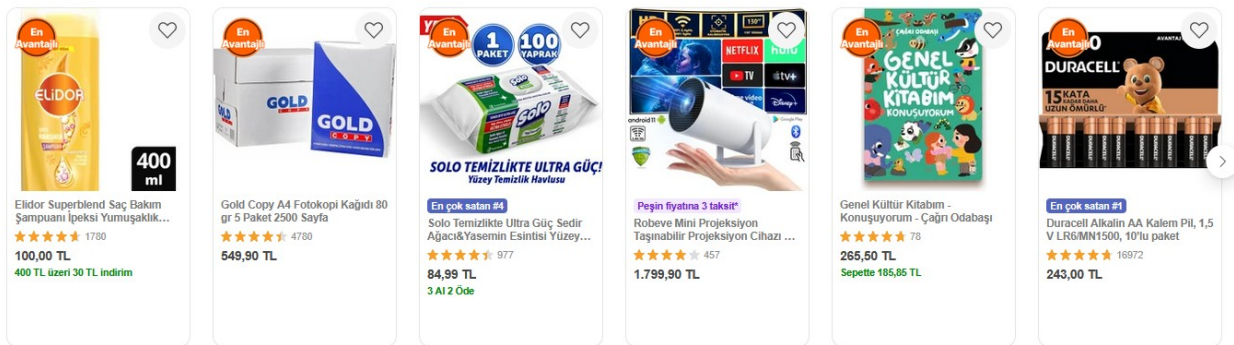
On the Main page of <https://www.hepsiburada.com/> you can see the different Recommendations section with different products. These sections are also shown on Product Detail and Cart pages. What are these product suggestions, what is the rule for listing these products and showing them to the user? Full analysis is expected here.

On landing page there are multiple sections with products list.

1. First section shows most popular items. They can be chosen by number of positive opinions or by number of sold products.




2. Second section good occasion like, low price, or free first installment




### 3. Third section are product on discount

Süper Fiyat, Süper Teklif

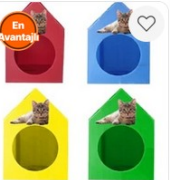
Tümü >




**Pegün fiyatına 3 taksit\***  
Fashcolle Black Star Işıklı - Masaj Özellikli Oyuncu Koltuğu Black  
★★★★★ 152  
5.499,00 TL




**Pegün fiyatına 9 taksit\***  
Dercos Anti-Dandruff Normal ve Yağlı Saçlar İçin Kepeğe Karşı...  
★★★★★ 1730  
1.684,00 TL  
2. Ürüne %30 indirim




**En Avantajlı**  
Özekim Su Geçirmez Plastik Kedi Evi 4'lü  
★★★★★ 237  
470,00 TL



**En Avantajlı**  
Cassa 8940 File Çöp Sepeti 10 Lt  
★★★★★ 459  
424,00-TL %1  
123,00 TL




**Pegün fiyatına 9 taksit\***  
Braun Ipl Silk-expert Pro 5, Evde Tüy Alma, Çanta, 1 Başlık ile...  
★★★★★ 34  
15.499,00 TL




**En Avantajlı**  
Rks MX25 Pro Katlanabilir Elektrikli Bisiklet - Mat Siyah  
★★★★★ 115  
19.999,00 TL  
Sepette 17.999,10 TL


### 4. Fourth section are products that the user recently viewed



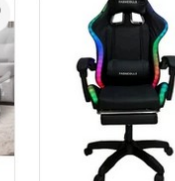
**En Avantajlı**  
Maylo Puf Mendil 150'li Tek Paket  
★★★★★ 2409  
44,00 TL




**En Avantajlı**  
Spigen 30W USB-C Ultra Mini Hızlı Şarj Aleti Samsung PPS / I...  
★★★★★ 10799  
279,00 TL



**En Avantajlı**  
Kıvı KCC-4325W Koltuk Ve Halı Yıkama Makinesi  
★★★★★ 3873  
5.919,00 TL




**Pegün fiyatına 3 taksit\***  
Fashcolle Black Star Işıklı - Masaj Özellikli Oyuncu Koltuğu Black  
★★★★★ 152  
5.499,00 TL




**Pegün fiyatına 9 taksit\***  
Gliss Full Hair Wonder Şampuan 400 ml  
★★★★★ 6  
150,00-TL %6  
140,90 TL  
800 TL üzeri 80 TL indirim

When we open a specific product and scroll down, recommended products seem to be from the same category, for example when I Open gaming chair I can see other gaming chairs recommendations:


#### Önerilen reklamlı ürünler



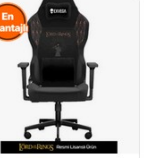
**Pegün fiyatına 3 taksit\***  
Hawk Gaming Chair Fab V5 Kumaş Oyuncu Koltuğu  
★★★★★ 3.213  
8.999,00 TL



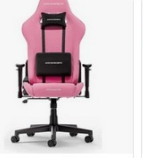
**Pegün fiyatına 9 taksit\***  
Zio Venom Deep Black Profesyonel Oyuncu...  
★★★★★ 4  
11.479,00 TL  
Sepette 9.757,15 TL



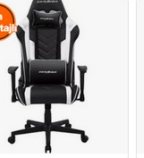
**En Avantajlı**  
Exvega Andromeda 2024 Premium Kumaş Masajlı...  
★★★★★ 425  
9.390,00 TL




**En Avantajlı**  
EXVEGA Andromeda 2025 Lord Of The Rings You Sh...  
★★★★★ 17  
11.990,00-TL %8  
10.990,00 TL



**Pegün fiyatına 3 taksit\***  
Dxracer Prince L Kumaş Serisi Su Geçirmez Oyuncu...  
★★★★★ 24  
9.499,00 TL




**En Avantajlı**  
Dxracer Prince Serisi L Siyah Beyaz Oyuncu...  
★★★★★ 24  
7.935,99 TL




**Pegün fiyatına 9 taksit\***  
Dxracer Airpro Serisi Oyuncu Koltuğu - Siyah  
★★★★★ 39  
15.999,00 TL

#### Bunlar da ilginizi çekebilir


Ürünü inceleyenlerin baktığı diğer ürünler




**Pegün fiyatına 3 taksit\***  
Fashcolle Dynamic Grey Masajlı Oyuncu Koltuğu  
★★★★★ 340  
4.799,00 TL  
Premium ile 4.099,00 TL



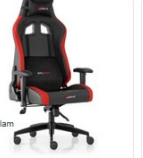
**Pegün fiyatına 3 taksit\***  
Hawk Gaming Chair Fab V4 Kumaş Oyuncu Koltuğu  
★★★★★ 3.213  
8.999,00 TL




**Pegün fiyatına 3 taksit\***  
Xdrive Toryum Oyuncu Koltuğu Mavi/siyah  
★★★★★ 2.043  
8.298,82 TL




**Pegün fiyatına 3 taksit\***  
Rebelx Oyuncu Koltuğu Lion Gri Renk  
★★★★★ 57  
2.999,00 TL



**Pegün fiyatına 3 taksit\***  
Xdrive 15'li Profesyonel Oyuncu Koltuğu Kırmızı...  
★★★★★ 2.499  
8.999,16 TL



**En Avantajlı**  
Exvega Andromeda 2024 Premium Kumaş Masajlı...  
★★★★★ 425  
9.390,00 TL



**Pegün fiyatına 3 taksit\***  
Türksit Çağrı Oyuncu Koltuğu Yeşil  
★★★★★ 1.034  
3.989,90 TL

The cart recommendations are split into 3 sections:

First one look like items that you recently viewed but you didn't add to cart.

Second one looks like upsell items that can work well with items you added to the cart

Third section is about items from the same category, different variants of the same item.

#### Son gezdiğin ürünler

**En Avantajlı**



Original Puf Yumuşak Mendil 150 Yaprak 3 Katlı

Maylo Puf Mendil 150'li Tek Paket

★★★★★ 2.409

44,00 TL

**En Avantajlı**



Peşin fiyatına 3 taksit\*

Kiwi KCC-4325W Koltuk Ve Halı Yıkama Makinesi

★★★★★ 3.873

5.919,00 TL

**En Avantajlı**



Gliss Full Hair Wonder Şampuan 400 ml


★★★★★ 6

450,00 TL %6

140,90 TL

800 TL üzeri 80 TL indirim

#### Sıklıkla birlikte alınanlar




Mcdodo CA-5631 36W 3A Usb-C To Lightning Şarj ve...

★★★★★ 21

298,00 TL

1500 TL üzeri 150 TL indirim

**En Avantajlı**



Spigen Essential USB-C to Lightning (1 Metre) Hızlı Şar...

★★★★★ 2

499,00 TL

**En Avantajlı**



Peşin fiyatına 3 taksit\*

servetavcı Cooper Oyuncu Masası - 103X50X80

★★★★★ 36

1.999,90 TL

**En Avantajlı**



iPhone 8 Plus Kılıf Lüks Şeffaf Silikon Kılıf

★★★★★ 1

149,99 TL

Sepette 134,99 TL

**En Avantajlı**



S-Case Samsung S24 Fe Snoppy Tasarımı Glossy..

199,90 TL

#### Önerilen reklamalı ürünler

**En Avantajlı**



Spigen 20W USB-C Mini Hızlı Şarj Aleti/Şarj Isısını Düşürü...

★★★★★ 412

199,00 TL

**5 YIL GARANTİ**



Peşin fiyatına 3 taksit\*

Anker 511 Nano Pro 30W USB-C Şarj Cihazı - Beyaz -...

★★★★★ 115

1.049,00 TL

**En Avantajlı**




Spigen 65W USB-C 2 Port Yüksek Hızlı Şarj Aleti / Şarj...

★★★★★ 572

598,99 TL

**En Avantajlı**




Spigen 48W USB-C 2 Port Araç içi Hızlı Şarj Aleti...

★★★★★ 4.551

449,00 TL

**En Avantajlı**



Peşin fiyatına 3 taksit\*

Anker 323 (52.5W) Type-C Çıkışlı Hızlı Araç Şarj Cih...

★★★★★ 100

1.019,00 TL

## Task 3

Automate the scenario below:

1. Visit <https://useinsider.com/> and check Insider home page is opened or not
  2. Select "Company" menu in navigation bar, select "Careers" and check Career page, its Locations, Teams and Life at Insider blocks are opened or not
  3. Go to <https://useinsider.com/careers/quality-assurance/>, click "See all QA jobs", filter jobs by Location - Istanbul, Turkey and department - Quality Assurance, check presence of jobs list
  4. Check that all jobs' Position contains "Quality Assurance", Department contains "Quality Assurance", Location contains "Istanbul, Turkey"
  5. Click "View Role" button and check that this action redirects us to Lever Application form page
- Test case should be written using any programming language and framework (Python or Java + Selenium would be preferable)
  - No BDD(Cucumber, Quantum, Codeception, etc.) frameworks are allowed
  - Screenshot should be taken If test fails one of steps
  - Test case should be able to run in Chrome and Firefox browsers and ensure that the browser is parametrically changeable.
  - Test code should fully meet POM requirements.

Code for this task can be found in this repository:

<https://github.com/MBrylka/insider-qa-tech-task>

Description:

There are 2 test scenarios:

1. We check if clicking menu item company > careers opens a careers page correctly and if all sections are visible.

There are 2 pages involved here: home page and careers page.

Many different checks can be done on careers page:

- Are the sections visible
- If you click "See all teams" are more departments loading
- Are arrows working for locations section,



- can you see different time based on what location is hovered

For purpose of this task I only checked visibility of different sections.

Framework uses POM for pages management. There is BasePage main class that provides basic functionality like selecting or interacting with elements + wait mechanism and other pages derive from that class.

In testconf.py a command line parameter was added “—browser chrome,firefox”. You can specify which browser tests should be executed on. Adding a new browser is straight forward 1 line code in a fixture.

2. We check if careers/quality-assurance page redirects to open-positions page correctly. From there we check filtering and also check if opening a specific job open a new tab with job description.

For test results, report.html file is generated, if a test fails screenshot is added.

Problems: I noticed that website behave differently in selenium browser, looks like it has some kind of detection mechanism implemented which result in very flaky tests. Maybe the purpose of this test is to stop bots from scraping the page. To address this issue I would need to consult with the team how it works to fix tests accordingly.

## Task 4

Test Automation - API

Using “pet” endpoints from <https://petstore.swagger.io/> write CRUD operations API tests with positive and negative scenarios

Code for this task can be found in this repository:

<https://github.com/MBrylka/insider-qa-tech-task>

Description:

/pet endpoint have total of 8 endpoints. For this task purpose I only used 4 of them:

- create new pet,
- update pet,
- find pet by id
- remove pet.

Those endpoints fully cover CRUD functionality.

It would be nice to add database requests for creating, updating and removing pets

Problems: This API seem to return random data sometimes so its hard to check changes, for example when I remove a pet, and then try to fetch it by ID, I expect api to return 404 but it returns a different pet.