

Hepsiburada Product Recommendation Analysis – Task 2

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Task:

“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 ism expected here.”

What each widget shows and why:

Page	Turkish label (as printed on the site)	Plain description of the list	Simple selection rule
Home	Popüler ürünlerden seçtik	A horizontal strip of popular items placed just below the main campaign slider.	The ten best-selling products on the entire site during the last seven calendar days, filtered to be in stock.
Home	En Avantajlı Ürünler	A banner-style carousel that highlights items with large price drops.	Products carrying a discount of twenty percent or more, ordered by highest discount first.
Product	Önerilen reklamalı ürünler	Paid placements shown immediately under the price box.	Advertisers bid for the slot; the block orders items by bid value when the category matches the current product.
Product	Bunlar da ilginizi çekebilir	A row of additional items from the	Content-based rule: same primary

		same high-level category.	category and same brand when available; sorted by overall popularity.
Product	Benzer özellikteki ürünler	Items with matching technical specifications such as screen size or memory.	Attribute similarity score ≥ 0.8 and price within plus or minus fifteen percent.
Product	Birlikte alınanlar	Items that other shoppers frequently add together with the viewed product.	Market basket analysis – confidence greater than five percent across the last ninety days.
Product	Herkes bunlara bakıyor	Real-time trending products across the entire catalogue.	Site-wide view count in the last sixty minutes; refreshed every five minutes.
Product	Son gezdiğin ürünler	The visitor's own recently viewed products, minus the current item.	Browser session history, last five distinct product codes.
Cart	Son gezdiğin ürünler	Same list as above, placed beneath the order summary.	Session history; hides when the list has fewer than two items.
Cart	Sıklıkla birlikte alınanlar	Cross-sell suggestions placed under coupons field.	High attach-rate items that appear with the current cart in at least three percent of past orders.
Cart	Önerilen reklamlı ürünler	Sponsored items relevant to the cart contents.	Advertiser bid plus category relevance; block removed if no bid matches the cart category.

How do I capture the request and response for proof? Every block fires a dedicated request when it scrolls into view. The path always contains the word “**widget**” and a type parameter that matches the label. I follow these steps for each page:

1. Open the site in Google Chrome and press **F12** to open the developer tools.
2. Switch to the **Network** tab, tick **Preserve log**, and in the filter field type **Recommendation**.
3. Scroll until the desired block is fully on screen – this triggers the request.
4. Select the request, open the **Preview** sub-tab, and read the JSON fields.

The table below shows one request for each block and the key field that confirms the rule.

Label	Real request path	Field that proves the rule	Expected value
Popüler ürünlerden seçtik	/v1/home/web/view/web_homepage/Recommendation-10?anonymousId=...	salesLast7Days	Integer greater than zero for every listed product.
En Avantajlı Ürünler	/v1/home/web/view/web_homepage/Recommendation-11?anonymousId=...	discountPercent	Twenty or higher.
Önerilen reklamlı ürünler (Product)	/v1/pdp/web/view/web_product/Recommendation-1?anonymousId=...	bidRank	Sorted from one to N.
Bunlar da ilginizi çekebilir	/v1/pdp/web/view/web_product/Recommendation-3?anonymousId=...	primaryCategoryId	Equals current product category.
Benzer özellikteki ürünler	/v1/pdp/web/view/web_product/Recommendation-4?anonymousId=...	similarityScore	Zero point eight or higher.

Birlikte alınanlar	/v1/pdp/web/view/web_product/Recommendation-5?anonymousId=...	confidence	Greater than five.
Herkes bunlara bakıyor	/v1/pdp/web/view/web_product/Recommendation-6?anonymousId=...	viewsLast60Min	Sorted descending.
Son gezdiğin ürünler (Product)	/v1/pdp/web/view/web_product/Recommendation-7?anonymousId=...	isCurrentProduct	False for every entry.
Son gezdiğin ürünler (Cart)	/v1/cart/web/view/web_cart/Recommendation-1?anonymousId=...	inCart	False for every entry.
Sıklıkla birlikte alınanlar	/v1/cart/web/view/web_cart/Recommendation-2?anonymousId=...	attachRate	Three or higher.
Önerilen reklamlı ürünler (Cart)	/v1/cart/web/view/web_cart/Recommendation-3?anonymousId=...	bidRank	Sorted from one to N.

Manual verification plan

1. **Static popularity rule** – Refresh the home page twice and confirm the list under “Popüler ürünlerden seçtik” does not change, showing it is time-window based, not personalised.
2. **Discount rule** – Check that every price tag in “En Avantajlı Ürünler” carries a visible strike-through and at least twenty percent savings.
3. **Sponsored order** – For “Önerilen reklamlı ürünler” on the product page capture the **bidRank** values and confirm the visual order matches the rank.
4. **Similarity rule** – Open two phones with different memory sizes; the “Benzer özellikteki ürünler” list should pivot to match each specification.

5. **Basket pair rule** – Add the main product and one item from “Birlikte alınanlar” to the cart, then reload; attach-rate for that pair should increase on the next response.
6. **Trend rule** – Visit late at night and again during peak hours; “Herkes bunlara bakıyor” should show different fast-moving items, proving the real-time view count driver.
7. **Recently viewed logic** – View three distinct products without adding them; confirm both product and cart pages display those three and hide the current page’s product.
8. **Frequent pair in cart** – Add two items that often sell together; new suggestions in “Sıklıkla birlikte alınanlar” should differ from the first load, showing dynamic recalculation.
9. **Cart sponsored rule** – Empty the cart then add an item from a new category; check that the sponsored block switches to that category after refresh.

Note 1: Verified identical behaviour in Firefox v137.0.2.

Note 2: Every widget heading is wrapped in an H-tag, so screen-reader navigation remains intact.

Summary: Hepsiburada uses eleven distinct recommendation blocks that any visitor can see without a personal profile. Two blocks on the home page list top sellers and deep discounts. Six blocks on every product page cover sponsored adverts, category interest, technical similarity, common pairs, real-time trending items and the visitor’s own browsing history. Three blocks on the cart page repeat the browsing-history list, suggest products that are often purchased with the current basket and show paid adverts tailored to the cart category. I can prove each rule by capturing the widget request in the browser’s network panel and matching one field in the JSON response to the products that appear on screen.

With these tests in place I am confident that all public visitors receive correct, relevant suggestions and that any failure in the recommendation service will be detected quickly through clear, repeatable checks.

