# Search Satisfaction Guidelines

A guide to providing satisfaction ratings for search results

Version 1.4

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# Introduction

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A search service may return many different types of results. How are these graded? What is a **satisfying** search result? In these guidelines we talk about what constitutes a search query, the different types of results, and how to grade them. In addition we describe some typical grading tasks that use the principles learned in satisfaction grading.



A search need → a search query

You may assume all searches are made on an Apple iOS mobile device.

## **Search Needs and Satisfaction**

Search engine users are trying to accomplish a task (or achieve a goal) that requires some information or quick access to some other resource, such as an app.

A user's **information need** or **search need** is defined as the information or resource that the user needs in order to accomplish their task. The user's query is an attempt to express that need to the search engine. If the search results enable the user to accomplish their task, we say that the search need is satisfied.

We say that a result is **satisfying** if it satisfies the search need of a query. Results can be more satisfying or less satisfying depending on how well or how completely they satisfy the need.



A search query → results returned

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web search links
query (to research query meaning)

Query: [target] (Research on Google and Bing )

Query Context: Please assume that an English speaking user issued this query from us/pennsylvania/montgomery/norristown on 2021-06-01
user's language user's location date of search

A query and its associated information in the grading interface.

## **The Query**

The grading interface displays each query together with additional information that provides useful context. As shown in the figure above, this includes the following components:

- · The query itself
- Web Search links you will use to research the possible intents and interpretations of the query
- The **language** of the user. We do not want to return results in other languages
- The **location** of the user. We want to return results appropriate for their area (e.g. locations of business).
- Date of query. We want to return results that are relevant in time.

! Unless you have been specifically instructed otherwise, skip/release to the next task if any of the above information about the query is missing and their absence affects your ability to provide a grade

## **Steps in the Grading Process**

The grading of results consists of the following steps.

- 1. Click on the Google and Bing web search links and scan the results to make sure you understand what the query is about. Keep in mind queries can have more than one meaning.
- 2. Validate the result to make sure it can be graded, as explained in the "Result Validation" section. Following step (1) is crucial for correct validation.
- 3. Assign the satisfaction rating per the guidelines outlined in
  - Relevance Principles
  - · Assigning a Satisfaction Rating
  - Special Situations

When assigning your grade, be on the lookout for common mistakes! Details can be found in "Common Mistakes made."

! Search engines often correct query spelling errors and/or predict ("autocomplete") what a partially typed query was intended to be. If the web search results show results for a corrected or autocompleted version of the query, you should grade your result as if the user typed the corrected or completed query.

#### Examples:

- Query is "fac," result is "facebook.com". Grade as if the query was "facebook."
- Query is "ted cruise," result is a wikipedia page about U.S. senator Ted Cruz.
   Grade as if the query was "ted cruz."

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## **Definitions**

The following terms are used throughout these guidelines:

Term	Definition	Examples
Named Entity	A person, place, organization, business, product, service, or event whose name would normally be capitalized in English. (This includes fictional entities.)	<ul> <li>Stephen Curry</li> <li>Yellowstone National Park</li> <li>Jupiter</li> <li>Médecins Sans Frontières</li> <li>Starbucks</li> <li>Post-It Notes</li> <li>Skype</li> <li>Super Bowl LI</li> <li>Boxer Rebellion</li> <li>Frodo Baggins</li> </ul>
Knowledge Term	A word or phrase describing a concept or object of study (other than a named entity) that users may wish to learn more about. Knowledge terms may come from any field of study, including: science, technology, mathematics, medicine, history, philosophy, literature, art, economics, etc. They are most often noun phrases, but may also be other parts of speech.	<ul> <li>photosynthesis</li> <li>elephant</li> <li>ROC curve</li> <li>linear algebra</li> <li>cancer</li> <li>oligarchy</li> <li>veto</li> <li>existentialism</li> <li>metaphor</li> <li>impressionism</li> <li>interest rate</li> </ul>

What is Search Need and Relevance

Term	Definition	Examples
Official Site	A website provided by a named entity (or their employer or organization) that represents how they want to be presented to the world online.	<ul> <li>Microsoft (company): www.microsoft.com</li> <li>U.S. Internal Revenue Service (government organization): www.irs.gov</li> <li>Taylor Swift (performer): www.taylorswift.com</li> <li>Henry Louis Gates Jr. (professor at Harvard University): https://aaas.fas.harvard.edu/people/henry-louis-gates-jr</li> </ul>
Official Online Presence	A generalization of official site that includes not just official sites but also other online "homes" provided by an entity and existing on commercial services such as social networks. This may include: a Twitter feed, Facebook page, YouTube channel, Instagram feed, or other similar platform.	<ul> <li>https://twitter.com/StephenKing</li> <li>https://www.youtube.com/user/therock</li> <li>https://www.instagram.com/badbunnypr/</li> </ul>
Chain Business	A business (or organization) that consists of many locations that all provide basically the same product or service, AND where its customers' (or users') primary interaction with the business happens <b>in person</b> at those locations.	<ul><li>Starbucks</li><li>Taco Bell</li><li>Party City</li><li>California Department of Motor Vehicles</li></ul>
Visually Distinctive Entity	Anything whose concept or identity can be usefully conveyed by a visual image. People and places are visually distinctive entities, but so are certain tools, geometric figures, geological or architectural features, and visual artworks.	<ul> <li>Jacinda Ardern</li> <li>Taj Mahal</li> <li>ball-peen hammer</li> <li>dodecahedron</li> <li>mesa</li> <li>flying buttress</li> <li>"The Thinker" (sculpture by Rodin)</li> </ul>

What is Search Need and Relevance

# **Result Validation**

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Before you can grade the satisfaction of a result, you'll be asked to indicate whether there are any problems that would prevent you from judging it. There are three types of result problems you'll be asked to identify: wrong language, content unavailable, and inappropriate.

## **Wrong Language**

A result is in the wrong language if it is neither in English nor in the language of the user's locale.

However, there are a few exceptions that are NOT considered wrong language results:

- 1. Result (e.g. amazon.co.jp) is the same country-specific site as requested by the query ("amazon.co.jp"), even if the requested site is not in your locale.
- 2. Query and result are in the same language, even though it's not the primary language for this locale.
- 3. User is visiting another country, query is for a local business or attraction, result is in the language of the visited country (i.e. where query was submitted), and there is no equivalent result in the user's own locale language.

4. Query is in a foreign language and result is in locale language, but query is also the name of a popular song, movie, business, etc. in the current locale (e.g. "viva la vida" query in en-US).



English results are never considered Wrong Language

## **Content Unavailable**

Flag result as content unavailable in any of these situations:

- A result is a web/news or videos result but does not show a page when clicked.
- · If at least one image in web-images group result is not visible
- Result requires log-in or subscription to access, specifically where the user would be able to see the content of the page by logging in, but you cannot.
- The browser presents a dialog box warning of a privacy or security issue on the page.
- Required information for this result type is missing (e.g. no distance shown for Maps result).



Even if there is enough content to provide a rating but the page is behind a pay-wall/log-in, please check the Content Unavailable flag

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## **Inappropriate**

A result is considered inappropriate if it has any of the following:

pornography, adult advertising/services, sex toys, illegal drugs, hate speech, gambling, spam/phishing, pirated content(including those posing as free video streaming services), or gore/shock

In general, we want to connect users with useful content for their topic of interest while protecting them from being exposed to harmful information summarized below.

- Hateful: the result should not advocate discriminatory content that intentionally attacks someone's dignity. This can include references or commentary about religion, race, sexual orientation, gender, national/ethnic origin, or other targeted groups.
- Violent or harmful: the result should not intentionally incite imminent violent, physically dangerous, or illegal activities, nor provide information that leads to immediate harm.
- Sexually explicit: the result should not have overtly sexual or pornographic material, defined by Webster's Dictionary as "explicit descriptions or displays of sexual organs or activities that are principally intended to stimulate erotic without sufficient aesthetic or emotional feelings."
- Contradicting expert consensus on public interest topics: the result should not contradict well-established or expert consensus on a popular topic or issue. This includes misleading or inaccurate information.
- Spam Results that are malicious, deceptive, or manipulative.

  Examples: pages that contain phishing schemes, install viruses, or

attempt to artificially boost their relevance (e.g., link farming, keyword stuffing, etc).

- Results that do not contain original and useful content. Examples: pages with content scraped from Wikipedia or otherwise automatically-created content.
- Illegal: We also manually remove reported results in those circumstances that are required by law in the corresponding locale (e.g., images of child abuse, content related to sex trafficking, copyright infringement, etc.) and when action is required to keep people safe (e.g., involuntary posting of sensitive personal information, etc). Movie streaming sites such as those posing as free movies are also part of this category

! Content that might otherwise be considered inappropriate is acceptable if it occurs in a medical, educational, fine art, or journalistic context, and should not be flagged (e.g Wikipedia).

## **Examples**

- User searched for [tinyzone] and the result is https:// tinyzonetv.to/ which contains pirated content.
- User searched for [sdc.com] and result is http://sdc.com/, or user searched [olga 24k gold] and the result is https://www.lelo.com/

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blog/olga-24k-gold-review/. Both results contain adult advertising and should be flagged.

Irrespective of whether the user was searching for this, these results need to be flagged.

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# **Satisfaction Principles**

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Consider User Effort	13
Consider Source Quality	13

## **Satisfaction Scale**

When judging how satisfying each result is, you'll use the following scale









**Highly Satisfying** 

Almost all users would want to see this result. It's authoritative, accurate, up-to-date, and addresses the most likely search need(s). If the supplementary information that is "one step user is asking a specific question, the result gives the correct answer clearly and concisely.

Satisfying

Many users would be interested in seeing this result. Satisfying results often provide away" from the query topic.

For example, if the query is a restaurant, it might be a review of the restaurant; if the query is a company, it might be the current stock price, or news about the company.

**Somewhat Satisfying** 

Some users may find this result useful, but it's probably not what most searchers were looking for. It's often only indirectly related to the search need or assumes an uncommon interpretation of the query.

**Not Satisfying** 

This result has nothing to do with the query, or provides incorrect information, and should not be shown.

All results flagged as "Inappropriate", "Content Unavailable", or "Wrong Language" should be rated as Not Satisfying.

Satisfaction Scale

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## **Degrees of Separation**

Results are often associated with concepts in the real world, and different concepts are connected by their relationships.

For example, the concept of the singer "Beyoncé"

- · is related to the concept of her album "Lemonade,"
- · which in turn is related to a review of the album in Rolling Stone magazine,
- · which is related to the author of the review, Rob Sheffield.

Each time we pass through one of these relationships, we increase the distance from the original concept

Query : Beyoncé			Query: Rolling Stone Lemonade album review
Beyoncé's official website.	Highly Satisfying	•	The review of the album.
Her "Lemonade" album on iTunes.	Satisfying		The album.
A Rolling Stone magazine review of the album.	Somewhat Satisfying	••	The singer's official site and Rob Sheffield's Twitter.
The reviewer Rob Sheffield's Twitter.	Not Satisfying		Random article from same issue of Rolling Stone

Degrees of Separation

We can think of these relationships as "degrees of separation" so in this example, the review of the Lemonade album is two degrees of separation from Beyoncé.

When Grading results, each degree of separation from the concept mentioned in the query, that is, the number of relationships you have to traverse to get to the result, lowers the grade by one level. See table above.

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## **Think About the Meaning, Not Just Matching Words**

Note that some highly satisfying results may not contain all (or even any) of the query words; what matters is the meaning. For example:

- The result <a href="www.premierleague.com/home">www.premierleague.com/home</a> is highly satisfying for the query "english premier league soccer" even though that result doesn't contain the words "english" or "soccer."
- The result <a href="https://music.apple.com/us/album/25/1544494115">https://music.apple.com/us/album/25/1544494115</a> is highly satisfying for the query "adele's third album," even though it doesn't contain the word "third."

It's also possible for a result to contain all the query words and not be satisfying. For example:

• The result <a href="https://en.wikipedia.org/wiki/My\_Girl\_Has\_Gone">https://en.wikipedia.org/wiki/My\_Girl\_Has\_Gone</a> (a web page about a song from the 1960s) is not satisfying for the query "gone girl," even though the result contains both query words. Gone Girl is the title of a book and movie from the 2010s, and the song result is clearly not what the user intended.

## **Consider User Effort**

When the user is looking for specific information, a result that displays this information directly is preferable to a regular web result. For example, if the query is "how old is Obama", then a Knowledge card that directly displays his age without requiring any user action is better than a web result that the user needs to click on, wait for it to load, and scroll through to find the desired information.

## **Consider Source Quality**

Sources of results, including web sites and news providers, can have large differences in quality. When you are grading a result, particularly if the user's query is looking for specific information — pay attention to the quality of the source(see table "Source Quality"). For example, if you are interested in getting news about an event that happened in a certain city, a story in that city's newspaper is generally more reliable than a blog post by a random person who doesn't live there. If the source of a result is low quality, you should assign a lower grade than you would have otherwise.

	High Quality	Low Quality
Writing	Professionally written, clear and understandable.	Unclear, hard to read, filled with grammatical and spelling errors.
Motivation	Neutral point of view, or makes point of view clear.	Has "hidden agenda," such as pretending to offer information while actually trying to sell its services.
Reputation  Well-known and well-respected among those who provide this kind of service.		Unknown (or known to be unreliable and untrustworthy).
Use of Citations	If offering scientific or medical information, cites sources.	Makes medical or scientific claims without citations or evidence.

Source Quality

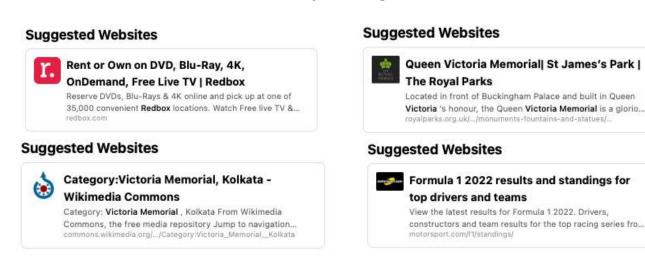
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# **Overview of Result Types**

There are many types of search results. Some results, when clicked, take you to a web page. Some others reveal rich user experiences when clicked. Others are self contained (not clickable) and answer search needs directly in the information presented, without the need for further user action. Rating advice is given sections <u>How to Assign Ratings</u> and <u>Special Advice for Result Types</u>.

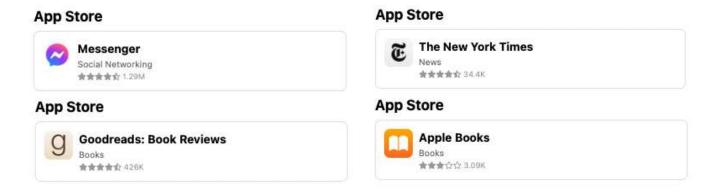
## **Web Results**

By far the most common result types. These 'cards' usually have an icon with a brief title of the webpage and are designed to be clicked by the user and taken to the corresponding website.



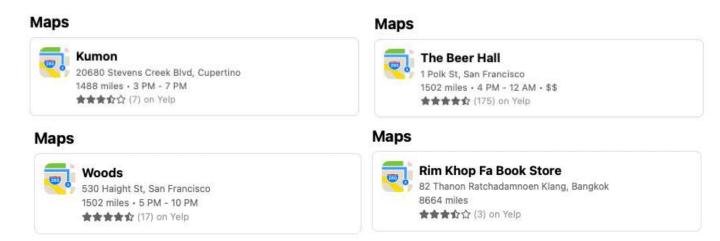
## **Apps**

Cards that take the user to the Apple app store (or open an app on the device). Usually they have an icon of the app and the star ratings.



## Maps

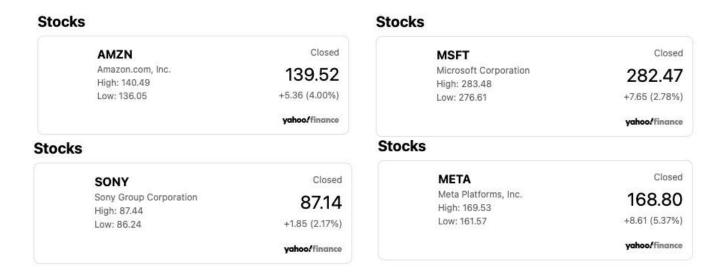
These results help the user navigate to a place. Usually they have address and distance from the user. If it's a business it often has hours of operation.



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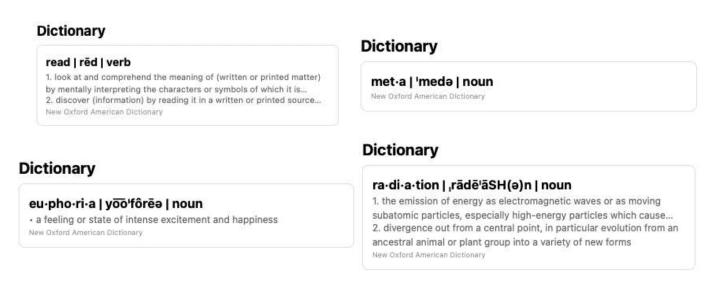
## **Stocks**

This card provides financial information related to stocks. They should show the ticker symbol, the company name and the stock price. When the user interacts with this card detailed stock information such historic price graphs are displayed.



## **Dictionary**

This card shows the definition of word. When the user interacts with this card it provides detailed usage.



#### Weather

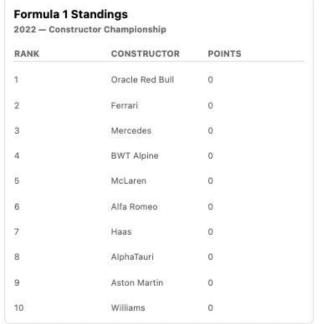
This card that shows the temperature of a location (and sometimes other weather conditions). When the user taps this card, they are shown detailed multi day weather forecasts.



## **Sports**

These cards are meant to display sports scores, or latest scores for a team (and dates of upcoming matches). Some examples

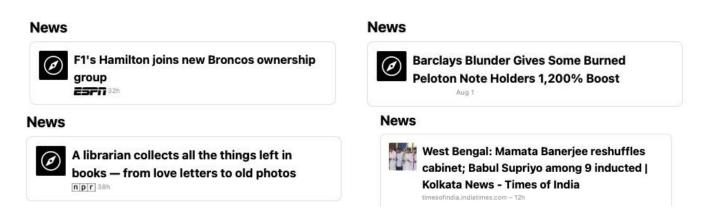




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#### News

These are often types of web results that are restricted to news sites (sports, fashion, political and so on). The usually have 'age of news' indicator at the bottom. They are designed to be clicked on and take the user to the destination news site.



## **Web Images**

Groups of images clustered together. Usually the user doesn't interact with the images and they provide visual information about the search query.



## **Web Video**

The user can click on these results which play a video (usually taken from video channels such as YouTube and Vimeo.







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## **Answers and Knowledge**

Users ask questions (implicit, explicit, grammatically incorrect) about a concept or knowledge term or general knowledge question. Knowledge cards can return exact answers or rich experiences about knowledge concepts and entities.

(Note, the term "Knowledge" might not appear)

#### Knowledge

#### How many stomachs does a cow have?

Cattle have one stomach with four compartments, the rumen, reticulum, omasum, and abomasum, with the rumen being the large... More on wikipedia.org

Query: Where is Olympics 2024

#### Knowledge



Paris

2024 Summer Olympics . Located in Wikipedia

#### Knowledge

#### How many arms does an octopus have?

An octopus has eight arms that can be divided into four pairs. More on tutsplus.com

#### Query: macron

#### Knowledge



#### **Emmanuel Macron**

Emmanuel Jean-Michel Frédéric Macron is a French politician who has been serving as the president of France since 2017. Prior to his presidency, he served as Minister of...

## Query: Bubonic plague

#### Knowledge



#### **Bubonic plague**

Bubonic plague is one of three types of plague caused by the plague bacterium. One to seven days after exposure to the bacteria, flu-like symptoms develop. These symptoms...

## Query: haiku

#### Knowledge



#### Haiku

Haiku is a type of short form poetry originally from Japan. Traditional Japanese haiku consist of three phrases that contain a kireji, or "cutting word", 17 on in a 5, 7, 5 pattern,...

## **Flights**

This will display flight status such arrival time, departure time and destinations. When the user taps on this result, detailed information about arrival/departure gates, baggage claims are displayed.

#### **Flights**



**United Airlines UA4821** SAF to DEN

Departing 8/4 at 1:20 PM MDT Arriving 8/4 at 2:52 PM MDT

#### **Flights**



Delta Air Lines DL1020

MSP (Term 1) to LGA (Term C) Departing 8/4 at 1:16 PM CDT Arriving 8/4 at 5:00 PM EDT

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## **Movies/TV Shows/Books/Music**

Cards that provide the user a very rich experience for example to watch movies/tv show, learn about the cast, social media links, links to media related sites (e.g IMDB), listen to music, get lyrics for songs, read books. From a graders' point of view that are not clickable(nor interactive). They usually show a picture, popularity ratings etc. Some examples:



#### Learn to Read with Max the Glow Train! Kids & Family • 2016

#### **Book Store**



#### Slash

Slash & Anthony Bozza Biographies & Memoirs 2009

480 Pages ★★★☆ (678)

#### iTunes Store

#### Westworld: Season 1 (Music from the HBO Series) Series)

Album by Ramin Djawadi (2016) 34 Songs 会会会会 (10)

#### TV Show



Friends Comedy, Romance 10 Seasons (1994-2004)

with Later by and and

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## When to Grade Highly Satisfying (HS)

Almost all users would want to see this result. It's authoritative, accurate, up-to-date, and addresses the most likely search need(s).

If the user is asking a specific question, the result gives the correct answer clearly and concisely.



#### Note that some types of results can never be HS.

- News results can never be HS, because people have different preferences for where they get their news, so we can't say that almost all users would want to see a given story
- Results for advice or recommendation queries (e.g., "how to lose weight", "chicken parmesan recipe", "best beatles song", "thai restaurant") can never be HS, because we don't know if almost all users would agree with the recommendation.

#### When to grade Highly Satisfying

Rule	If query is	And result is	Description	Examples
1	App Query	Official App	Query is the name of a well-known app; result is the app with that name	<ul><li>a. Query is "facebook", result is the Facebook app.</li><li>b. Query is "calculator," result is the built-in Calculator app.</li></ul>
2	Business	App Regularly Used to Interact with Business	Query is the name of a business; result is an app regularly used to interact with that business. See details under "Apps" in "Additional Guidance".	<ul><li>a. Query is "b of a," result is the Bank of America mobile banking app.</li><li>b. Query is "dominos," result is the Domino's Pizza app, which allows users to place orders.</li></ul>
3	Maps Query	Closest Map	Query is looking for a specific location / business / institution / point of interest, or the closest example of a chain business / type of business, and the result showed that location on a map.  Queries with a map intent often have a distance qualifier e.g. "nearest", "closest", "near me". Also such queries often relate to business where one must physically go to e.g. gas stations, cinema halls	<ul> <li>a. Query is "1234 market street sf"; result is a Map for that exact address</li> <li>b. Query is "new york public library"; result is a Map to that location</li> <li>c. Query is "larry and joe's"; result is a Map to a restaurant with that name in the same town where user is located</li> <li>d. Query is "closest lowe's"; result is a Map showing the Lowe's store location closest to the user's location.</li> <li>e. Query is "starbucks"; result is a Map showing the closest Starbucks branch.</li> </ul>

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Rule	If query is	And result is	Description	Examples
4	Named Entity	Official Online Presence	Query is a named entity; result is an official online presence for that entity if it has one.	<ul> <li>a. Query is "facebook," result is Facebook's official website, facebook.com.</li> <li>b. Query is "taylor swift," result is the singer's official website, taylorswift.com.</li> <li>c. Query is "charli d'amelio" (social media personality/vlogger), result is her TikTok channel.</li> <li>d. Query is "joe biden," result is his Twitter profile https://twitter.com/JoeBiden.</li> <li>e. Query is "empire falls book," result is publisher's official page for the book, https://www.penguinrandomhouse.com/books/159148/empirefalls-by-richard-russo/9780375726408/.</li> <li>f. Query is "captain fantastic," result is official web site for the movie, https://bleeckerstreetmedia.com/captainfantastic.</li> </ul>
5	Named Entity	Wikipedia or Other Authoritative Reference	Query is a named entity; result is the wikipedia page for that entity, a page from another authoritative reference, or a knowledge card about that entity.	<ul> <li>a. Query is "taylor swift" (singer), result is <a href="https://en.wikipedia.org/wiki/Taylor_Swift">https://en.wikipedia.org/wiki/Taylor_Swift</a>.</li> <li>b. Query is "nope" (2022 movie), result is https://en.wikipedia.org/wiki/Nope_(film).</li> <li>c. Query is "iliad" (ancient epic poem), result is https://en.wikipedia.org/wiki/Iliad</li> <li>d. Query is "the school of athens" (Renaissance painting by Raphael), result is https://en.wikipedia.org/wiki/The_School_of_Athens</li> <li>e. Query is "marie curie" (Nobel-prize-winning scientist); result is https://en.wikipedia.org/wiki/Marie_Curie</li> <li>f. Query is "angkor wat" (ancient temple complex in Cambodia); result is https://en.wikipedia.org/wiki/Angkor_Wat</li> <li>g. Query is "aristotle," result is a page about the philosopher from the Stanford Encyclopedia of Philosophy</li> <li>h. Query is "jurassic world dominion," result is https://www.imdb.com/title/tt8041270/, IMDB page about that movie.</li> <li>i. Query is "mike trout," result is page of this player's official statistics in the Baseball Reference, https://www.baseball-reference.com/players/t/troutmi01.shtml.</li> </ul>

Rule	If query is	And result is	Description	Examples
6	Knowledge Term or "Learn About" Query	Wikipedia or Other Authoritative Reference	Query is a knowledge term or general request to learn about a subject; result is the wikipedia page for that term, a page from another authoritative reference, or a knowledge card. Common for medical queries.  Note that if "X" is a knowledge term, queries such as "what is X?" or "tell me about X" still count as a knowledge term queries.	<ul> <li>a. Query is "linguistics"; result is <a href="https://en.wikipedia.org/wiki/Linguistics">https://en.wikipedia.org/wiki/Linguistics</a></li> <li>b. Query is "what causes diabetes," result is a page about that disease from the Mayo Clinic website (https://www.mayoclinic.org/diseases-conditions/diabetes/symptoms-causes/syc-20371444).</li> <li>c. Query is "utilitarianism," result is a Dictionary info card giving the definition of the term.</li> <li>d. Query is "challenger disaster" (historical event); result is https://en.wikipedia.org/wiki/Space_Shuttle_Challenger_disaster</li> </ul>
7	Exact Question	Explicit Correct Answer	Query is asking for a specific piece of information that has a simple right answer, and the result showed that information directly without the need for further user action.	<ul> <li>a. Query is "when did wwi end," result is a direct answer or info card that says "November 11, 1918"</li> <li>b. Query is "dodgers score," result is a sports info card that shows the current score of the Dodgers' baseball game in progress, or (if no game is in progress), the final score of the most recent game they played.</li> <li>c. Query is "msft quote," result is an info card showing the latest stock price for Microsoft (which has the stock symbol MSFT).</li> <li>d. Query is "jet blue 334," result is an info card showing the current status of that airline flight.</li> <li>e. Query is "define attenuated," result is an info card showing the definition of that word.</li> <li>f. Query is "weather boston", result is an info card showing current weather for that city.</li> </ul>
8	Visually Distinctive Entity	Web Image	Query is (or asks about) a visually distinctive entity, and result is a high quality web image set showing that entity.	a. Query is "nelson mandela," result is the following set of images:

## When to Grade Satisfying (S)

Many users would be interested in seeing this result. Satisfying results often provide supplementary information that is "one step away" from the query topic. For example, if the query is a restaurant, it might be a review of the restaurant; if the query is a company, it might be the current stock price, or news about the company. Here are some common situations where a result is Satisfying:

#### When to grade Satisfying

Rule	If query is	And result is	Description	Examples
1	App Name	Variant of App	Query is the name of an app, result is a variant version (e.g., "Pro" or "Lite") of or sequel to that app, or another complementary app from the same vendor.	a. Query is "candy crush saga," result is app store result for "candy crush friends," a newer game in the same series.
2	App Description	App Performing That Function	Query is a description of a type of app or function that app needs to perform; result is an app (or web app) that performs that function.	<ul> <li>a. Query is "currency converter," result is "My Currency Converter" app.</li> <li>b. Query is "time in different countries," result is <a href="https://www.timeanddate.com/worldclock/">https://www.timeanddate.com/worldclock/</a>.</li> </ul>
3	Performer/Creator	Performer's/ Creator's Work	Query is the name of a performer (singer, actor, etc.) or creator (author, composer, artist, etc.); result is a representation of their work (album, song, movie, book, etc.), where user can view/hear/download/stream/learn about it.  a. Query is "taylor swift," result is Apple Music re recent album "Lover," https://music.apple.com/usic.1468058165.	
4	Creative Work	Performer/Creator	Query is the name of a creative work (music album, movie, etc.); result is a representation of the creator/performer (e.g., artist's official site).	a. Query is "fleabag," result is https://en.wikipedia.org/wiki/ Phoebe_Waller-Bridge, the wikipedia page about the creator and star of that television series.

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Rule	If query is	And result is	Description	Examples
5	Product	Reputable Vendor	Query is the name of a product (which may be media item such as a book, movie, song, etc.); result is a page from a well-known site where the item can be purchased, downloaded, or streamed.	<ul> <li>a. Query is "jbl bluetooth speaker," result is page of matching items from electronics retailer Best Buy.</li> <li>b. Query is "empire falls book," result is Amazon's detail page for that book, https://www.amazon.com/Empire-Falls-Richard-Russo/dp/0375726403</li> <li>c. Query is "captain fantastic," result is iTunes store page for that movie, https://itunes.apple.com/us/movie/captain-fantastic/id1127934488</li> <li>d. Query is "taylor swift lover album," result is Spotify page to stream that album, https://open.spotify.com/album/3rYkgtFOo9AlPaeKTtn6pM</li> </ul>
6	Named Entity	News	Query is a named entity, result is an authoritative page (other than official online presence) providing news about that entity.  a. Query is "facebook," result is news story "Facebook," result is newed to result is news story "Facebook," result is news story "Fac	
7	Exact Question	Embedded Correct Answer	3	
8	Knowledge Term or "Learn About" Query	News	Query is a knowledge term or request to learn about a subject, result is relevant and timely news about that subject.  a. Query is "ebola," result is New York Times of Outbreak in Congo Is Declared a Global Heal published the same day search was performed.	
9	Chain Business	Secondary Maps Result	Query is the name of a chain business; result is a Map showing a nearby branch of business, but not the closest one.	a. Query is "dunkin", [in location Sunnyvale, CA], map result presents San Jose, CA location, 6.8 miles from the user.
10	Type of Business	Maps or Multiple Official Websites	Query is a type of business, or a product or service; result is map entry or an official website for a business of that type or that offers that product/service. In the Maps case, business must be nearby.	<ul> <li>a. Query is "thai food" [in location Cambridge, MA], result is http://www.thesimilans.com, official site for local Thai restaurant.</li> <li>b. Query is "thai restaurant"; result is a nearby thai restaurant.</li> </ul>

## When to Grade Somewhat Satisfying (SS)

Some users may find this result useful, but it's probably not what most searchers were looking for. It's often only indirectly related to the search need or assumes an uncommon interpretation of the query.

## When to grade Somewhat Satisfying

Rule	If query is	And result is	Description	Examples
1	Chain Business/Type of Business	Moderately Distant Maps Result	Query is the name of a chain business or a type of business; result is a Map showing a branch of business that is not nearby, but still accessible (perhaps up to an hour's drive away)	a. Query is "starbucks", user is in San Jose, CA, result is a map result for starbucks, 17 miles away in Fremont, CA.
2	Type of Business/ Organization	Official Website of More Distant Instance	Query is a type of business or organization; result is the official website of an instance of this business or organization that is not nearby, but is still accessible.	a. Query is "vietnamese restaurant" [in Cupertino, CA]; result is https://www.slanteddoor.com, the official site of a particular vietnamese restaurant in San Francisco, CA, 50 miles from the user.
3	Company/Product/ Named Entity	Related Site/Video/ App	Query is the name of the entity; result is not their official website, but is a site, page, video, or app related to their business. For example, this might be a 3rd party site about that company or its products, or a site for a competing product or service.	<ul> <li>a. Query is "zillow", result is the video "Living Large in a Tiny Home" from Zillow's YouTube channel.</li> <li>b. Query is "sonicare" (brand of electric toothbrush), result is website for Oral-B (a competing brand of electric toothbrush).</li> <li>c. Query is "billy idol" (singer), result is wikipedia page for Generation X, a band from the 1970s he was in before he became famous.</li> </ul>
4	Named Entity or Event	Stale but Valid News Story	Query is the name of an event or named entity; result is a news story about an earlier event or early news about the entity. The news story must still be valid.	a. Query is "super bowl news," result is a news story "Patriots Come from. Behind to Defeat Falcons in Super Bowl LI." The story is still accurate, but it describes something that happened in 2017, not in the most recent or upcoming Super Bowl.
5	General Query	Overly Specific Result	Query is the name of a general concept or event (such as a TV show); result is about a specific instance of that concept or event (such as a particular episode of that show).	<ul> <li>a. Query is "dogs", result is wikipedia page for the dog breed Beagle.</li> <li>b. Query is "suits" (a TV show that ran for 9 seasons), result is https://www.peacocktv.com/watch-online/tv/suits/8003089882869075112/seasons/5, a page where viewers can stream the 5th season.</li> </ul>

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Rule	If query is	And result is	Description	Examples
6	App Name	Google Play Result	Query is the name of an app; result is that app on the Google Play store website. Since users are conducting their search on an Apple iOS device, we can assume most of them do not want an android app as a result.	a. Query is "slickdeals", result is https://play.google.com/store/apps/developer?id=Slickdeals&hl=en.

## When to Grade Not Satisfying (NS)

This result has nothing to do with the query, provides incorrect information, or fails the validation step, and should not be shown.

## When to grade Not Satisfying

Rule	If query is	And result is	Description	Examples
1	Any Query	Flagged During Validation Step	Result was flagged as <b>Wrong Language, Content Unavailable</b> , or <b>Inappropriate</b> during validation step.	a. Query is "uniqlo"; user is in en-US; result is "https://www.uniqlo.com/jp/ja/" which is in Japanese and was flagged as Wrong Language.
2	Any Query	Off-Topic Result	Result that is not about the query topic. Note that in some cases the URL may appear to be about the query, but clicking through shows that the destination page is not related.	<ul> <li>a. Query is "samsung tv", result is web page for Samsung washing machine.</li> <li>b. Query is "obama age", result gives the age of Joe Biden.</li> <li>c. Query is "Messi goals", (Messi is a soccer player) result is total goals by Barcelona (his team)</li> <li>d. Query is "target stores", result is about an Ace Hardware store location.</li> </ul>
3	Local Intent Query	Unreasonably Distant Result	Query indicates or assumes nearby location, result is so geographically distant that it makes no sense to show it.	<ul> <li>a. Query is "starbucks" [in San Francisco, CA], result is a Maps result for a Starbucks in San Diego, CA, 500 miles away.</li> <li>b. Query is "airport" [in Boston, MA], result is official website for Heathrow Airport in London, UK.</li> </ul>
4	Explicitly Locale- Sensitive Query	Wrong Locale Result	Query explicitly seeks result from a specific locale; result pertains to a locale different from the one specified.	Locale is en_US, query is "kit kat japan," result is https://     www.hersheys.com/kitkat/en_us/home.html

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Rule	If query is	And result is	Description	Examples
5	Implicitly Locale- Sensitive Query	Wrong Locale Result	Query does not mention a locale, but the user need implicitly requires results from the user's locale; result pertains to a locale different from the user's locale.	<ul> <li>a. Locale is en_US, query is "ticketmaster," result is UK-specific Ticketmaster app</li> <li>b. Locale is en_IN, query is "do I need a visa to visit japan," result is US government page <a href="https://travel.state.gov/content/travel/en/international-travel/International-Travel-Country-Information-Pages/Japan.html">https://travel.state.gov/content/travel/en/international-travel/International-Travel-Country-Information-Pages/Japan.html</a></li> </ul>
6	Exact Answer Query	Missing or Incorrect Answer	Query is asking for a specific answer; result is an info card that correctly identifies what the query is asking, but then fails to give that answer.	a. Query is "dmx real name," result is an info card that says "dmx birth name: dmx" (which is incorrect).
7	Any Query	Result Fails to Load / Inaccessible	Result is a blank page, a parked domain, a 404 error, something unavailable in user's country, or anything else where the content has been removed or is inaccessible.	<ul> <li>a. Query is "bisq restaurant cambridge", result is http://www.bisqcambridge.com</li> <li>b. Query is "brokerbot"; result is http://brokerbot.com</li> </ul>

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## **Ambiguous Queries (Multiple Interpretations)**

While most queries express several different user intents, some queries are also ambiguous in what they refer to (e.g., "apple" could be a company or a fruit). In this case you should still grade the result, using the following additional guidelines.

If you're not sure whether there is a dominant interpretation, look at the web search results for the query. If most of the highly ranked results on the first page are for one interpretation, then you should consider that to be the dominant interpretation.

#### Multiple Interpretations

Туре	Description	Examples
Dominant Interpretation Exists. When one interpretation is much more popular than the others.	<b>Dominant Interpretation</b> : If a result is for the dominant interpretation, you should grade using the normal guidelines.	<ol> <li>The query is "allegiant", result is the official website for the airline. Grade as HS, since the dominant interpretation of the query is the airline.</li> <li>The query is "apple", result is a map result for the apple store near the user, but not the closest. Grade as S, since the dominant interpretation of the query is the technology company.</li> </ol>
Dominant Interpretation Exists. When one interpretation is much more popular than the others (cont'd)	Secondary Interpretation: If a result would be relevant (HS/S/SS) for a secondary interpretation, you should grade it as "SS".	<ol> <li>Query is "michael jordan", result is IMDB page for actor Michael B. Jordan. Grade as SS, since dominant interpretation of query is for a different person, the former NBA basketball player.</li> <li>Query is "american eagle", result is home page of web developer americaneagle.com. Grade as SS (rather than HS), since the dominant interpretation of the query is clothing retailer American Eagle Outfitters.</li> <li>Query is "golden retriever", result is a song titled Golden Retriever. Grade as SS (rather than S/HS), since the the song is not the dominant interpretation of the query. The dog breed is the dominant interpretation for this query.</li> </ol>

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Туре	Description	Examples
Multiple Interpretations, None Dominant. When there are two or more interpretations of similar popularity.	Sometimes there are several reasonable interpretations but none of them are dominant. In that case you should grade normally for all of them, <b>except</b> that results that would have been HS if there were only one (or one dominant) interpretation should be graded S instead.  That's because if we can't say which interpretation is one that nearly all users would want to see.	<ol> <li>Query is "um athletics," (location is Texas) result is home page for the University of Miami athletics program. Grade as S (rather than HS), because "um athletics" could equally well refer to the University of Michigan or University of Maryland athletics programs, among others.</li> <li>Query is "um athletics," result is a photo gallery showing some athletic facilities under construction at the University of Michigan. Grade normally: it's SS, because although it relates to the query, it's not what most users doing that search are looking for.</li> </ol>

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## **Locale Sensitivity**

## Locale Sensitivity

Scenario	Grade	Examples
Explicitly Locale-Sensitive.  Query explicitly specifies that user is seeking results from a locale that differs from their current location.	Results that do not pertain to the locale specified in the query should be automatically graded as "NS".	Query is "amazon france". The user is in EN-GB locale. The result is https://amazon.co.uk. Grade as NS, since the Amazon page in the UK is not what the user is searching for.
Implicitly Locale-Sensitive.  Query does not explicitly ask for results in a particular locale, but the user need is inherently locale-specific (e.g., local law information, country-specific merchant sites, nearby real-world business).	Any results from a different locale (even if they're in the correct language) should be automatically graded as "NS".	Query is "ticketmaster"; user is located in US. Result is ticketmaster.co.uk. Grade as NS, since user did not express any interest in UK events.
Mildly Locale-Sensitive.  Query does not explicitly ask for results in a particular locale, but those in other locales may be somewhat less useful.	Foreign results (as long as they're in the correct language) should be SLIGHTLY penalized by assigning a grade one level lower than you would normally give.  • "HS" results should be downgraded to "S"  • "S" results should be downgraded to "SS"  • "SS" results should be downgraded to "NS"  • "NS" results should remain as "NS"	Query is "vaccine recommendations". User's locale is en-US, and the result is <a href="https://www.nhs.uk">https://www.nhs.uk</a> . The NHS is the UK's National Health Service that provides health care to all British residents. Since different countries provide different medical advice for their residents, the UK's advice would be less useful to a US resident than advice from a US medical agency. The result should be SLIGHTLY penalized from S, down to SS.
Not Locale-Sensitive. Results from any locale would be equally useful for this query.	Grade result without regard to locale.	Query is "tennis news." User is in en-US; result is news from the BBC about the latest results from the Wimbledon tennis tournament.

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## **English Results in Non-English Locales**

English is a widely-understood second language in many countries, and all our international graders are fluent in it. For this reason, rather than simply marking an English result in a non-English locale as "wrong language," graders should go ahead and grade the result, with the following locale-specific considerations. You will need to use your own knowledge of the locale to decide which guideline to apply.

English Results in Non English Locales

Scenario	Grade
The user's locale is one where <b>most</b> users understand English fluently (i.e. ES-US) and would <b>likely</b> be interested in English-language results.	Grade the result normally, the same way you would if it were in the locale language.
The user's locale is one where <b>many</b> users understand English fluently (i.e. Western Europe) and would <b>possibly</b> be interested in English-language results.	Grade the result one level lower than you would if it were in the locale language.  Results that would have been NS should still be graded as NS
The user's locale is one where relatively <b>few</b> users understand English fluently and would be <b>unlikely</b> to be interested in English-language results.	Grade the result as NS.

## **Redirected Pages**

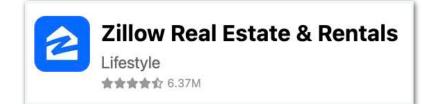
If the result displayed URL gets redirected to a different URL, then you should grade the page you're redirected to as if that were the result.

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## Apps

When a **user** clicks these results it takes them to app store (usually Apple app store) or opens the app if present on the device.





## App Rating Guidance

Rule	Additional Details
Rule 1 under HS refers to cases where the query is the name of a well-known app — a service that is best known as an app.  A well-known app is not the same thing as a well-known company!	Examples: Instagram, Spotify, and Candy Crush
Rule 3 under HS refers to cases where the query is a business and the result is an app "regularly used to interact with that business." Meaning, the app is a common way that customers or clients perform the ordinary tasks they need to do business with that company.	If the query is the name of a bank, then the app should allow the user to perform mobile banking tasks.
! Just because a company has an app does not mean that it's regularly used to interact with that business. For example, the query "dell" refers to the name of a computer company. But their app "Dell@Retail 2019" is described as "a chance for our global retail partners to immerse themselves in the design, performance, and vision driving Dell's innovation." This app is NOT used regularly by Dell's customers and should NOT be graded HS.	<ol> <li>If the query is the name of a restaurant chain, then the app should allow the user to order food at that restaurant.</li> <li>If the query is the name of an airline, then the app should allow the user to make reservations, choose their seat assignment, and check flight status.</li> <li>If the query is the name of a retail chain, then the app should allow the user to browse and purchase items sold by that chain.</li> </ol>

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## News

News articles usually have the word "News" prepended to them. The are specific web results that link to news websites.

- The relevance grade for a news article depends in part on the amount of time between the date the search was done and the date of the article.
- The search date is shown in the result preview itself.
- · Keep in mind validity flags (Inappropriate, Wrong language, and Content Unavailable).

Grading time Sensitive News Articles



A news item result with the recency below the title

Туре	Scenario	Grade
Current Event	Timely Article: up to 3 months older than the search date	Either S or SS if it's about the query topic.
	Stale Article: more than 3 months older than the search date	May never be graded better than SS even if it's about the query topic.
Historical Events	Time sensitivity does not impact the relevance grade of the results for these types of queries. Examples of historical events are Notre Dame fire, Harry and Meghan wedding, Sandy Hook shooting, Pope Benedict resigns, etc.	

1 You might see articles with dates in the future! For these rare occurrences, grade it the same way as a timely article, as long as the date is not more than 3 months newer than the search date.

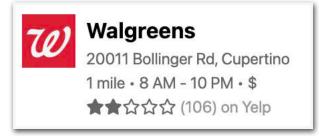
News items are never HS. Why? one news organization – even one reporter – may actually write several stories about the same event. Maybe one person wants to get an overview of an event while another wants the latest updates. Or one person only likes stories from Fox News while another prefers MSNBC. For these reasons, we can't say that a given news story is one that almost everyone wants to see. So it is mistake to rate a news result as Highly Satisfying.

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## Maps

The relevance of Maps results depends in part on the distance from the user. You should check to see if the info card has distance displayed. If not, this result cannot be judged.





Maps Results

**Grading Maps** 

Туре	Scenario	Grade
Business	Maps result is correct and is the closest one.	HS
	Maps result is correct and near the user, but is not the closest one	S
	Maps result is correct, and is still accessible to the user but is not close.	SS
	Maps result is correct but is too far away.	NS
Point of Interest (e.g., cities, parks, landmarks, monuments)	Maps result is correct.	HS

- 1. **Grade on what is visible:** Only use what is in the title and description to grade. Do not grade NS just because clicking the result takes you nowhere or the wrong place.
- 2. Distant results are not always NS. For example:

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- People looking for expensive, rarely purchased items (cars, furniture, etc.) are generally willing to travel longer distances to find the right one than people looking for inexpensive, common items (e.g., a cup of coffee). So if the query is "Lexus dealer," a result 30 miles away might be S (or even HS if it's the closest match), while if the query is "donuts," it would be NS.
- People living in sparsely populated rural areas are generally willing to travel longer distances than people in cities. If the query "restaurants" is issued in Wilsall, MT (population 237), then a result 39 miles away in Bozeman (population 39,860) might be S. But if the same guery were issued in New York City, a result 36 miles away in Greenwich, CT would be NS
- 3. Keep in mind Intent and Distance! For some queries, users are looking for a Maps result. For other queries, they aren't. If a Maps result is shown for a non-Maps intent query, then grade it as NS. Use the distance to guide you. If a Maps result is very far away, that's often a sign that the user was not looking for a map.
  - Query is "prime video" and result description is: "prime time video, 2511 springs rd ne, hickory, nc 28601- distance: 529 mi"
  - Query is "Lakers" and result description is: "great lakes brewing company, 2516 market ave, cleveland, oh 44113 distance: 2,165 miles

## Web Video

- If a query specifically refers to a particular video (e.g., "lemonade official video," "stepanov elements of programming lecture"), the desired result should be graded as Highly Satisfying regardless of its popularity.
- For other results, and for more general gueries where many different video results could satisfy the user's need (e.g., "guitar lesson"), then popularity may factor into your decision; you may want to grade a video with millions of views higher than a similar one with only a handful.
- When deciding on your grade, think about whether video results are what user is looking for when typing the query.



1 You are not required to watch the entire video to arrive at a rating

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## Dictionary, Stocks, Weather, Knowledge / Answers, Sports

Grade these cards based on what is visible. Thee grader cannot click on them but a user is provided self contained snippets of information and which can often be interacted with to learn more (e.g. the Stock card opens up to show historic prince graphs)

- **Dictionary**: Is the user seeking a definition or a concept? If the card precisely answers the need, this is Highly Satisfying. In all cases it must be the correct interpretation for that word
- Stocks: check for correct stock symbol and presence of price.
- Weather: the result's location should match the location specified in the query (e.g. "weather boston"), or the user's location if location is not mentioned in query.
- Answers: If the query is an explicit question, see HS7. Grade on what is visible.

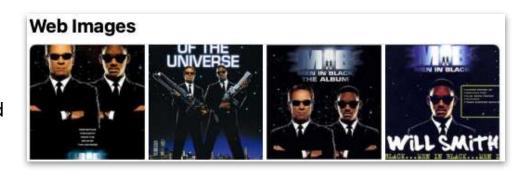
## Web Results (also called Suggested Web Sites)

Please click on the thumbnail and grade the destination page(after redirects).

## **Web Images**

A group of web images should be graded as a single result. Check to see if all the images have the following properties:

- 1. **Image displays correct subject.** The image must actually show the subject of the query. For example, if the query is "dodecahedron," the image must actually show that geometric figure and not some other one. Missing images (or ones that do not load) do not have this property.
- 2. **Subject clearly shown**. All images in the set must clearly show the subject of the query. The subject should not be blocked, out of focus, too far away, or otherwise difficult to see clearly.
- 3. **Subject is focus of image**. In cases where the image includes multiple people or objects, it should be clear who or what is the subject of the query. (For example, if the query is "Joe Biden,"





Specific Situations & Result Types

Query: David Beckham

it's fine to have people in the background of a picture of President Biden giving a speech, but it's not fine to have a picture of Presidents Biden and Macron shaking hands.)

- 4. **Image shows representative version of subject.** For example, if the query is the name of a currently popular actor, the image should show that person as they look today (or how their character looks in a currently popular movie), not how they looked many years ago. If the query is the name of a famous person from the past who is no longer alive, the image should show them as they were best known. For example, if the query is "Richard Nixon," a picture should show him during the time he was U.S. president, not 20 years later when he was near the end of his life.
- 5. No duplicates. The images in the set should all be different.

If ALL the images have all of the above properties (1,2,3,4, and 5), grade the result Highly Satisfying. Otherwise, downgrade the results as shown in the table below.:

Property	If	Then
1	All images exhibit all properties	Grade as Highly Satisfying
2	All but 1 or 2 images in the set exhibit all properties	Grade as Satisfying
3	Up to half of the images exhibit all properties	Grade as Somewhat Satisfying
4	Property #1 violated for any image	Mark as Content Unavailable <b>and</b> Grade as Not Satisfying

#### Examples:

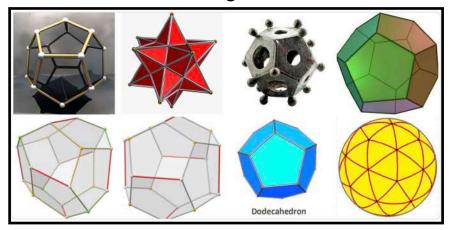
- · Query is David Beckham, result is set shown above. It has all the desired properties, so you would grade as Highly Satisfying.
- Query is "dodacahedron" (a geometric shape); result set is shown on the left below. Neither the second image nor the last image in this set are dodecahedrons, so they violate property #1. Therefore you would grade this **Not Satisfying**.
- Query is "taffy brodesser-akner" (an author); result set is on the right below. Two of the images in the set are problematic; one shows part of a poster for an event featuring the author, and another shows her with another person, both partly cut off. Neither of these violates property #1 because both attempt to represent the author and not something else that would confuse or mislead the user, like a picture of a different author. But

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each violates at least one of properties 2-4. Overall you would grade this Satisfying because all but two images have all the desired properties.



Web image results for query "taffy brodesser-akner"



Web image results for query "dodecahedron"

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# **Common Grading Mistakes**

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### **Failing to Use Web Search**

- 1. **Misunderstanding Query Meaning**. The guery may be a common word that you think you know. But the web search may show that the primary meaning is something entirely different.
  - **Example**: Query is "canada goose"; result is the wikipedia page about that kind of bird. If you had not heard of the Canada Goose clothing brand, you might assume that the bird page is what almost all users would want to see. But by looking at the web search results, you can tell that this is not the case.
- 2. Misunderstanding Dominant Interpretation. This is a slight variation of the previous error. Based on your personal experience, you may know that there is more than one interpretation of the query, but you may not realize that one is dominant.
  - **Example**: Query is "jaguar"; result is the home page for the car company. If you believe the animal is the dominant interpretation, you would downgrade the car company result. But by doing the web search, you can see that the car company is actually the dominant interpretation, accounting for all but one of the results on the first page of both Google and Bing results.

- 3. Falsely Assuming Dominant Interpretation. If you have heard of a result, you may assume that it's the dominant interpretation. But this is not always true.
  - Example: Query is "u of m scholarships," result is a page about scholarships at the University of Michigan. A grader who knew nothing about the subject might conclude that this is a great result, and rate it Highly Satisfying. But looking at the web results shows that the query has no dominant intent. It might be referring to the University of Minnesota, or the University of Manitoba, or many other things. Therefore the grade cannot be HS.



#### Do not use web search ranking to determine grade!

The only purpose of looking at the web search (Google and Bing) results is to make sure you understand the possible meaning(s) of the query, and which meaning is dominant.

You should never use the ranking on the search result page to decide your grade. In other words, you should never think (for example) "Google says this is the #1 result, so it must be Highly Satisfying," or "Bing puts this at the bottom of the page, so it must not be that good." Once you understand the query, only these guidelines and your judgment should determine the grade.

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### **Failing to Visit Destination Page**

Another class of mistakes can occur when the grader fails to visit the destination page of a web/news result, and in particular, if they try to grade a web/news result based only on the URL and/or snippet.

- 1. **Missing Error Condition**. The URL and/or snippet may make this look like a perfect result perhaps the home page of a company. But if you actually clicked on it, you'd discover that the page does not load, or redirects to some entirely unrelated page.
  - Example: Query "vallco shopping center," result is www.vallcoshoppingcenter.com. If you click no the result, you'll be taken to an advertising page that has nothing to do with the shopping center (which is out of business).
- 2. **Incorrect Page Owner Assumption.** The URL may be a perfect match for the name of a company or product you're familiar with. But if you visited the destination page, you'd see that it's actually for an entirely different company with a similar name.
  - Example: Query "american eagle," result is www.americaneagle.com. Since American Eagle is a well-known clothing brand, you assume the page is the home page of that company. But it isn't. Clicking on the result would have shown that it's the home page of a web design company, which is not what most searchers are looking for.

# **Ignoring Time and Place**

Many grading mistakes happen when the grader doesn't pay attention to the time or place of the query and/or result.

- 1. **Mismatched Location**. Graders usually notice when the user is in one location and the result is a Map to a very distant location. But they frequently miss the case where the result is a web result for a very distant location.
  - Example: User is in Virginia (state in Eastern U.S.), query is "harold's kitchen menu." Result is home page for Harold's Kitchen and Bar. At first glance, this looks like a Highly Satisfying result. It's a restaurant with a matching name, and the page shows their menu. But a closer look shows that this restaurant is actually in Richmond, British Columbia, Canada nearly 3000 miles (5000 km) away from the user. It is extremely unlikely that this was the result the user was looking for (especially since there is a different restaurant named Harold's Kitchen close to the user's location).
- 2. **Mismatched Date**. Graders may notice the date of a news story, but forget to notice the date of the search. Or they may not notice an implicit date in the content of a web result.
  - **Example**: Query dated 2022 is "presidential election results"; result is a page showing the results of the 2016 U.S. presidential election. The user was almost certainly looking for the most recent presidential election results, not one from six years earlier.

## **Ignoring Conceptual Distance**

Some mistakes involve the conceptual distance between the result and what the user was looking for.

1. **Too Specific or Too General.** Graders sometimes incorrectly give a result a high grade without realizing that it is too specific or too general.

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- Example: Query is "dog," result is wikipedia page about the welsh corgi, a particular breed of dog. This is too specific.
- Example: Query is "new england patriots news," result is home page for a regional sports news network that covers many different sports teams in New England, not just the New England Patriots. This is too general.
- 2. Wrong Level of Web Page. Pages on a given web site often form a hierarchy, with a home page for the site, subpages for different topics, sub-sub-pages, and so on. A common mistake is not to notice that a page is too high or too low in the hierarchy, compared to what the user is looking for.
  - Example: Query is "us passport information"; result is www.state.gov. This page is too high in the hierarchy of this web site. It is about everything the U.S. State Department does (diplomatic relations, trade policies, etc.), not just passports.
  - Example: Query is "us passport information"; result is a page from the U.S. State Department about what to do if your passport is lost or stolen. This page is too low in the hierarchy of the site. The user never said anything about their passport being lost or stolen
     – in fact, we don't even know if the user already has a passport.
- 3. **Ignoring Degrees of Separation**. Graders often ignore the principle of degrees of separation. A result that's associated with the thing the user is looking for is not the same as the thing the user is looking for.
  - Example: Query is "chez panisse," result is Yelp's page of reviews for that restaurant. This is a very useful result, but it is not Highly Satisfying, because it is one degree of separation from what the user was looking for.

## **Ignoring Relevance Grading Principles**

- 1. Matching Words Instead of Meaning. Graders sometimes forget the principle "Think about meaning, not just matching words."

  Just because the query words appear in the result does not mean the result is a good one, and just because the query words are missing does not mean the result is a bad one.
  - Example: Query is "far alone," result is a page containing the inspirational quote "If you want to go quickly, go alone. If you want to go far, go together." The result contains both query words, but they match only incidentally. It's clear that this is not what the user was looking for, and in fact the web search results show that "Far Alone" is the name of a song.
- 2. Rating News Results Highly Satisfying. When a news event happens, it is often reported by many different news organizations, whether it's local TV stations, newspapers, or major news networks. Furthermore, one news organization even one reporter may actually write several stories about the same event. Maybe one person wants to get an overview of an event while another wants the latest updates. Or one person only likes stories from Fox News while another prefers MSNBC. For these reasons, we can't say that a given news story is one that almost everyone wants to see. So it is mistake to rate a news result as Highly Satisfying.
  - Example: Query is "brittney greiner sentencing" and result is a timely news article about the event on the news website theguardian.com. Although this result is about the topic, it should not be Highly Satisfying because it is a news result.
- 3. **Ignoring Basic Definitions of Grading Scale**. A common mistake is to ignore the basic definitions of each grade and only look at the

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individual rules. The rules are meant to **illustrate** the definitions in different situations, not to replace them. If you're faced with a grading situation where you don't see a rule that applies, just go back to the definitions: Is this a result most users would want to see? Etc.

• Example: Query is "el pais" (name of several newspapers, including one in Cali, Colombia and one in Madrid, Spain); user is in Colombia but result is for a more popular one in Madrid, elpais.com. There's no rule about matching similarly-named results in different countries, and the guidance about locale-sensitivity doesn't exactly address this example. It's clear that the Spain result is not what most Colombian users are looking for, but it might be useful to some. By definition, that means it's Slightly Satisfying.

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# **Examples: Satisfaction Rating**

Note: "defn" in Rule column means that the grade follows from the grading scale definitions.

# **Highly Satisfying**

Query	Result(s)	Rating	Explanation
instagram	Instagram app	HS	Instagram is best known as an app, so result is what almost all users would want to see. (Rule HS1)
olivia rodrigo	Official website for the pop star, oliviarodrigo.com	HS	Almost all users searching for a celebrity would want to see that person's official web site. (HS4)
olivia rodrigo	Wikipedia entry for Olivia Rodrigo	HS	Wikipedia is a high quality source of information about the artist (HS5)
microsoft	Their official website, microsoft.com	HS	Almost all users searching for a company or organization would want to see its official web site. (HS4)
jane austen	Wikipedia page about the early 1800s author	HS	Wikipedia is a highly satisfying result for any named entity. (HS5)
facebook	facebook.com, Facebook app	HS	Since it's both a company and an app, both of these are "official" results that most users would want to see. (HS4 & HS1)
top english soccer league	Home page of the Premier League, premierleague.com	HS	The Premier League is the top english soccer league. Note that this is a result most users would want to see even though it doesn't use the words "English" or "Soccer." (HS4)

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Query	Result(s)			
how many stomachs does a cow have	How many stomachs does a cow have?  Cattle have one stomach with four compartments, the rumen, reticulum, omasum, and abomasum, with the rumen being the largest compartment.  More on wikipedia.org			
beat the bomb	official website : https://beatthebomb.com			
french open highlights	https://www.youtube.com/channel/UCF3K1Jf8hjFW8qliei8fQ3A			
mountain mike's pizza [user is in Berkeley, California]	Mountain Mike's Pizza  Mountain Mike's Pizza  1610 San Pablo Ave, Berkeley 1610 San Pablo Ave Berkeley, CA 94702 United States 1 mile • 10 AM - 10 PM			
how tall is gwen stefani	5 ft 6 in Gwen Stefani • Height Wikipedia			
iphone 11	iPhone 11 - Wikipedia The iPhone 11 is a smartphone designed, developed, and marketed by Apple Inc. It is the 13th generation, lower-priced iPhone , succeeding the iPhone X en.wikipedia.org/wiki/iPhone_11			
eric stonestreet	Web Images  More results  LL  AIT			

Rating	Explanation
HS	The result (knowledge card with the answer) immediately gives the user all the information they asked for. (HS6)
HS	Almost all users searching for a business or service would want to see its official web site. (HS4)
HS	Result is the official Roland Garros (French Open) YouTube channel. Although there is no specific rule for this case, it clearly satisfies the definition of Highly Satisfying.
HS	Result provides authoritative map information to the closest location of a chain business. (HS3)
HS	The info card immediately gives the user all information they asked for. (HS6)
HS	This info card provides relevant and accurate information, even though it is not the official site for the product. (HS5)
HS	All of the images satisfy the properties described in the section on how to grade Web Image results. (HS8)

Query	Result(s)	Rating	Explanation
saw	SAW Now Available on 4K Ultra HD, Blu-ray, DVD and Digital sawmovie.com	HS	The official page for the movie. Contains streaming links and descriptions about the movie. (HS4)
Wonder Woman	Wonder Woman (2017 film)  Wonder Woman is a 2017 American superhero film based on the DC Comics character of the same name, produced by DC Films in association with RatPac Entertainment and Chinese company Tencent Pictures and distributed by  Wikipedia	HS	The wikipedia page for a named entity is Highly Satisfying. (HS5)
gilmore girls	Gilmore Girls  Gilmore Girls is an American comedy-drama television series created by Amy Sherman-Palladino and starring Lauren Graham and Alexis Bledel. The show debuted on October 5, 2000, on The WB and became a flagship series for th  Wikipedia	HS	The wikipedia page for a named entity is Highly Satisfying. (HS5)
saw	Saw (2004 film)  Saw is a 2004 American horror film directed by James Wan, in his feature directorial debut, and written by Leigh Whannell from a story by Wan and Whannell. It is the first  Wikipedia	HS	A knowledge card for a named entity is Highly Satisfying. (HS5)

# **Satisfying Examples**

Query	Result(s)	Rating	Explanation
instagram.com change pass	Official instructions on how to change instagram password	S	The query is asking an implicit question (how to change Instagram password. This web page has the authoritative answer, but the user has to click on the result to visit the page in order to see the answer. (S7)

Query	Result(s)	Rating	Explanation
u m sociology (location: texas)	Home page for University of Michigan sociology department	S	The Google/Bing results from Step 1 show that there is no dominant meaning of the query. The user might have wanted University of Montana, or University of Miami, among others(and the user is located far away from both states). So we can't say that almost all users would have wanted this result.
how many stomachs does a cow have	Wikipedia page about cows.	S	The page contains the answer, but the user has to do some extra work to find it clicking on the result, reading and scrolling through it. (S7)
warriors vs lakers (searched on 06/01/2021)	https://www.youtube.com/watch?v=p478C35sgzA (highlight video of most recent game on official NBA channel).	S	We don't really know what user wanted. Maybe it's a video of recent game highlights, but could also be a schedule of upcoming games between these teams, or an info card with the latest score.
indiana tax calculator	web page containing an Indiana tax calculator, from a financial services company	S	We do not know exactly which taxes the user has in mind and there are other websites (including an official one from the state government) that offer similar information, so we can't say that almost all users would have wanted this result. (S2)
qr reader	An app to read QR codes	S	The link is to a highly rated QR reader app, however there are other highly rated QR reader apps and we do not know if the result would entirely meet the user's search needs. (S2)
premier league news [searched on 29 July 2022]	A BBC News article, "Why Premier League teams are flocking back to Asia" dated 28 July 2022.	S	The news article is timely and about the query topic.
bts	Official video of a recent song by the band BTS, https://www.youtube.com/watch?v=WMweEpGlu U	S	Since there are several possible results for popular BTS songs, and the user didn't express a preference for a particular song, this is at best Satisfying. (S3)
plaza suite new york	Official website for the Plaza, a hotel in New York City that has rooms and suites	S	User could be searching for a suite in the Plaza Hotel, but "Plaza Suite" is also a famous play, often performed on Broadway in New York. There is no dominant meaning.

Query	Result(s)	Rating	Explanation
gpa calculator	https://gpacalculator.net	S	There are several GPA calculators and though this site is credible, users might want to see alternatives. It is impossible to conclude that almost all users would wish to see this result. (S2)
beat the bomb	reviews page for the experience	S	The result is from a trusted website and has a description of the experience and user submitted reviews. This is a good example of a result that is "one step away" it isn't the official site for the service, but it gives the user helpful information about that service. (S6)
	Movies		
Wonder Woman	Wonder Woman	S	Query is a product (a movie) and result allows a user to buy/ rent the movie. (S5). Do not penalize movie/tv show results because they are not clickable.
gilmore girls	Gilmore Girls Comedy, Drama 7 Seasons (2000-2007)	S	Query is a product (a movie) and result allows a user to buy/rent the movie. (S5)
	Movies		
saw	Saw	S	Query is a product (a movie) and result allows a user to buy/rent the movie. (S5).

# **Somewhat Satisfying Examples**

Query	Result(s)	Rating	Explanation
steve mcqueen	IMDB page about the director of the 2013 movie 12 Years a Slave	SS	The Google/Bing results from Step 1 show that the dominant meaning of the query is a different person, an actor from the 1960s & 70s with the same name. So this result is not what most users are looking for.
vietnamese restaurant [user is in San Jose, California]	The Slanted Door  (5633)  1 Ferry Building, San Francisco  1 Ferry Building  Unit 3  San Francisco, CA 94111  United States  42 miles	SS	This result, for a restaurant in San Francisco, is 43 miles from the user's location in San Jose, and there are dozens of closer Vietnamese restaurants. (SS1)
camden county college	Home page for library at the college	SS	Probably not what most users were looking for. (If they had wanted the library, they would have mentioned it in the query.)
bts [searched in 2022]	2018 video of interview with the band	SS	A very popular interview with BTS. and tv show host, but not very relevant given that it is several years old, and several newer interviews are available.
cao [user is in Florida]	Irish website about applying to undergraduate programs in Ireland.	SS	There is a grocery chain in Florida called CAO, so it's unlikely that the user had the Irish website in mind.
alica schmidt	https://hotsportsgirls.com/alica-schmidt/		Query is about a German track and field star, so the most satisfying results will be about her competitions, her athletic achievements, etc. In contrast, this result is solely about her physical appearance, which will be of interest to only some searchers.
Pitbull	Web Images  Images	SS	The dominant interpretation is the singer. Furthermore, the dog breed is correctly spelled as two words ("pit bull"), while the singer is spelled as one. So these dog pictures are not likely to be of interest to most searchers.

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Query	Result(s)	Rating	Explanation
Tim Cook	Tim Cook (historian)  Tim Cook is a Canadian military historian and author. Cook is an historian at the Canadian War Museum and the author of thirteen books about the military history of Canada. Having written extensively about World War I, Cook's focus shifted to  Wikipedia	SS	Most users who do this search are looking for the Apple CEO, not the historian and author.
fleeting meaning	fleet   flēt   verb  · move or pass quickly  New Oxford American Dictionary	SS	Definition of a related word but not the word the user asked for

# **Not Satisfying Examples**

Query	Result(s)	Rating	Explanation
nearest subway [user is in Seattle, WA]	Subway 2799 El Camino Real, Santa Clara 2799 El Camino Real Santa Clara, CA 95051 United States 710 miles • 8 AM - 9 PM	NS	User may either be looking for public transportation or the restaurant. In either case, a result 710 miles away is not satisfying. (NS3)
harold's kitchen menu [user is in Virginia, US]	Home page for <u>Harold's Kitchen &amp; Bar</u> in British Columbia, Canada		Despite the similar name, this result is for a restaurant 3000 miles away from the user. (And there is a different Harold's Kitchen near the user.) (NS3)
how many weeks has it been since march 25th [query issued in April 2021]	nce march 25th  How many weeks has it been since April 27 2009		Despite matching some words in the query, this result is for a totally different year and does not give the user any useful information. (NS6)
instagram.com change pass	Low-quality website describing instructions		Poorly written website and talks about resetting password when it has been forgotten (which is a different meaning of the query)
farmers insurance [user is in Texas]	farmers hawaii		Though the result is from Farmers Insurance, it has information about a different state, so is not likely what most users would want to see.
what year did james watt invent the steam engine	TOP HIT  What year did james watt invent the steam engine?  James Watt the Scottish engineer who invented the steam engine, 1745.  More on gettyimages.com		James Watt did not invent the steam engine, which already existed by 1712, before he was born. He did make some important improvements to it in the 1760s and 1770s. This result contains only incorrect or misleading information. (NS6)

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Query	Result(s)	Rating	Explanation	
tour de france stage 1 (queried on 29 July 2022)	NBC <u>video</u> of stage 18 of 2021 Tour de France.		Result is for a previous year's Tour de France, and is not even the stage the user asked for.	

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# Other Aspects Related to Search Satisfaction Grading

# **Overall Preference Rating (OPR)**

In some grading tasks you will be presented with two sets of results presented side by side for the same query, as shown on the right

After providing satisfaction ratings for every result, you will be asked to choose which side you prefer. This is called the **Overall Preference Rating** (OPR).

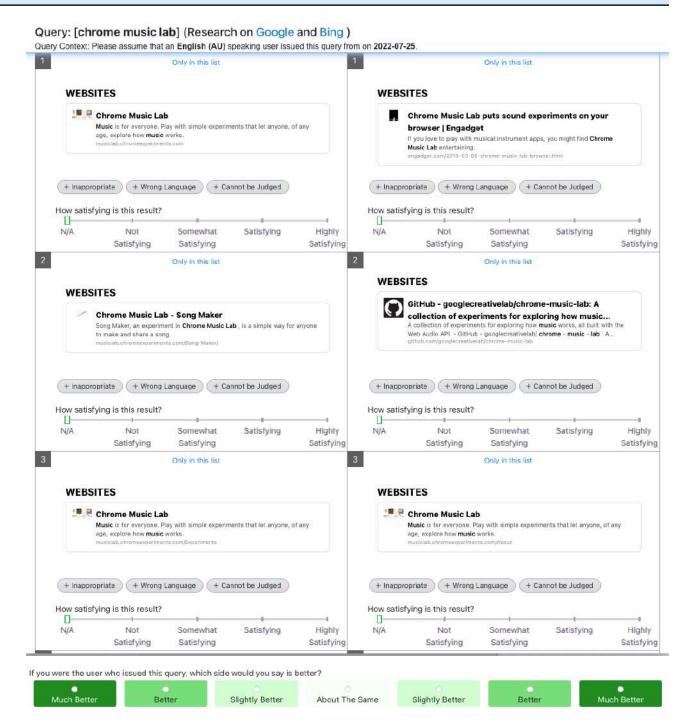
The rating scale is About the Same, Slightly Better, Better and Much Better.

#### **OPR Criteria:**

Use the following criteria to decide on the OPR:

- 1. Prefer the side whose results have higher satisfaction grades.
- 2. If there are multiple results, prefer the side where results with higher satisfaction are ranked higher.
- 3. If there are multiple results, prefer the side with a more varied result set. This might be a variety of result types (maps, apps, web pages, etc.), satisfying a variety of meanings of the query.
- 4. Note that the side with more results is not necessarily better.
- 5. If you're having trouble deciding which side is better, choose About the Same.

How much these criteria affect OPR also depend on the position of the result. For example, if the satisfaction rating of the results in position 1 are different, that should have a bigger impact on OPR than if the satisfaction rating of results in position 4 are different.



Overall Preference Rating

### **Writing Comments**

You might be asked to leave a comment (written in English) for why you chose the OPR. These are very helpful to the clients of the grading task. It helps understand the reasoning behind the rating for complex grading tasks and especially in locales the clients doesn't understand.

I came to the conclusion that the left side offers more suitable results and therefore should be rated as better

The query intent is Yahoo News and is most likely to visit the main page of headlines of the queried website. The 1st and 2nd results are the same on the both sides. The rest of the results are similar on both sides showing some specific pages from sports, entertainment and weather categories on Yahoo News website and there is a little better news among them (R5) on the right than the left which is a breaking news from domestic news category. Thus the right side is slightly better due to better relevance and freshness.

Poor Comment

**Excellent Comment** 

The comment on the left can be improved by providing reasons why the left is "more suitable".

For the comment on the right, the writer states presumed search need and then goes on to describe how the results help meet that and ultimately why they chose one over the other.

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# **OPR & Comment Examples**

#### **Query 1: tdecu**

Location: Richwood, TX

	LEFT			RIGHT			
Official TDE	CU Digital Ba	inking App		Official TDE	ECU Digital Ba	nking App	
TDECU Mo	rtgage Simp	lified App	TDECU Mortgage Simplified App				
Maps info card brand	with direction ch, 3 miles av			TDECU.org official website			
·	ard with dire eranch 4 mile			TDECU.org "About Us" page			
				@TDEC twitter page			
Much Better	Better	Slightly Better	About the Same	Slightly Better Bette Better Better			

**OPR Explanation:** The query refers to a credit union (essentially, a bank) with two branches near the user. We can assume the user wants to either do a bank transaction, go to the bank, or get information about the bank.

The official app, the official website, and the map results for the nearest locations are all Highly Satisfying. The map results appear on the left but not the right, while the official website appears on the right but not the left.

The left side addresses three search needs (it satisfies people looking for the main app, the mortgage app, and the map) while the right addresses four (the main app, the mortgage app, the web page, and the Twitter feed). So the right has a slightly more diverse result set. However, the user gave no indication that they were interested in the Twitter feed, so this is a very unlikely intent.

Since we don't know whether more people are interested in the map or the official site, the two sides are About the Same.

#### **Query 2: diesel**

Location: Cambridge, MA

	LEFT				RIGHT	
Diesel Online Store ( <u>shop.diesel.com/en/homepage</u> )				Diesel Online	Store (shop.die homepage)	esel.com/en/
DIESEL(ディーゼル)公式オンライン ストア( <u>diesel.co.jp</u> )					el Fuel - Wikipe dia.org/wiki/Die	
	el Fuel - Wikipe dia.org/wiki/Die			Diesel [Maps result], 339 Newbury S Boston (2 miles)		
Much Better	Better	Slightly Better	About the Same	Retter		Much Better

**OPR Explanation**: The query could refer to a clothing store or a kind of fuel.

• Two out of three results are the same on both sides, so they aren't that different.

- The left side has a wrong language result, which is Not Satisfying to users.
- The right side ranks the diesel fuel result higher, showing both likely interpretations near the top.
- The right side has more diversity of result types (web pages and maps, instead of only web pages).

Since the are multiple reasons to prefer the right side, that side should be more than Slightly Better. But since the lists aren't that different, it's not Much Better. So we choose Better.

#### Query 3: apollo project

Location: Cincinnati, OH on Feb. 13, 2020.

	LEFT				RIGHT		
	Program wikip oorg/wiki/Apollo				e Program wikip a.org/wiki/Apoll		
Project Apollo documentary [Movie]				Project Apo	ollo documenta	ry [Movie]	
Project Apollo — Moonlight Richards 50 songs to the moon, an Apollo 11 space mission tribute [Apple Music result]			of Sarcelles	al Video Project by Apollo Thea YouTube video]	iter, Harlem		
Much Better	Better	Slightly Better	About the Same	Slightly Better Much Better Better			

**OPR Explanation**: The query refers to the space program from the 1960s that first put a human on the moon.

- · The first two results are the same on both sides.
- Both result sets have three types of search results.
- The third result on the left is only vaguely related to the Apollo space program. It seems unlikely that someone searching for "apollo project" would find an obscure artist's ambient music useful in satisfying their search need.
- The third result on the right is **not at all** related to the Apollo space program; it has something to do with a project of the Apollo Theater. Based on the web results, it's **extremely unlikely** that this was the user's intended interpretation of the query.

Since only the last result is different, and the last result on the left is less bad than the one on the right, we conclude that the left side is Slightly Better.

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#### Query: best actor winner

Location: Bellevue, WA on Feb. 13, 2020.

	LEFT				RIGHT	
Support	vards Best Acto ing Actor — W .org/bestactor2	inners		•	enix — Acaden or — Winner [Ir	-
_	for Best Actor deo from 2011]	-		Suppor	wards Best Act ting Actor — W e.org/bestactor	/inners
The Best Actors Who Won Oscars for Their First Movie ( <a href="https://www.ranker.com/list/actors-who-won-oscars-for-their-first-movie/ranker-film">www.ranker.com/list/actors-who-won-oscars-for-their-first-movie/ranker-film</a> )				Picture, Dra	oenix: Best Ac ima: 2020 Gold YouTube video)	den Globes
Much Better	Better	Slightly Better	About the Same	Slightly Better	Better	Much Better

**OPR Explanation**: The query very likely refers to the winner of the Academy Award (aka "Oscar") in the best actor category. Since the query was on Feb. 13, 2020, we assume the user wanted the most recent award winner at the time, announced at the ceremony on February 8, 2020.

- Result #1 on the left (same as #2 on right) contains the answer, but requires visiting the page and scrolling all the way to the bottom to find it. Result #1 on the right gives us the answer right away, without even having to click on it.
- Result #2 on the left is a YouTube video from a non-authoritative source (a random fan), and it's very outdated from 2011.
- Result #3 on the left is related to best actor winners, but doesn't actually contain the answer the user is looking for.

• Result #3 on the right tells us about another recent best actor award — the Golden Globes, rather than the Oscars — which had the same winner, Joaquin Phoenix. Even though we assume the user was looking for the Oscar winner, they might also be interested in other awards won by the same actor for the same role.

Since **all** of these observations suggest that the right side is better than the left, you would conclude that the right side is Much Better than the left.

#### Query: anthony ramos

Location: Fairfax, VA on April 17, 2021.

	LEFT				RIGHT		
Anthony Ramos wikipedia page				Anthor	Anthony Ramos official site		
Official video for Ramos' 2021 song "Lose My Mind"					eo for Ramos' 2 Lose My Mind"	_	
Official vide	Official video for Ramos' 2021 song "Blessings"			NBC News article from February 2021			
Official vide	Official video for Ramos' 2021 song "Say Less"			Anthony Ramos instagram page			
Much Better	Better	Slightly Better	About the Same	Slightly Better Better Much Better			

**OPR Explanation**: The query refers to an actor and singer who appeared in the original cast of the musical Hamilton.

- Results L1, R1, and R4 all all Highly Satisfying. All the rest of the results on both sides are Satisfying.
- The set on the right is more diverse, providing more different types of results.

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Since the only differences favor the right side, it is Better.

#### Query: dana

Location: Hampton, VA on 2021-08-17.

	LEFT				RIGHT	
Dana (Indo	nesian digital w	allet) <u>app</u>		( <u>www.dan</u>	e page for Dana a.com), a comp etrain parts for vehicles	oany that
Home page for Nigerian airline Dana Air				Video of Israeli singer Dana Internationa performing the winning song at the 1998 Eurovision contest		
<u>Video</u> of 2021 song "Dana Dana" by Now United				Wikipedia pa	ge for South Ko Dana	orean singer
Much Better	Better	Slightly Better	About the Same	Slightly Better Much Better Better		

**OPR Explanation:** The query can refer to many different things or people, and the web search results make it clear that none of them is a dominant interpretation. Furthermore, these results all seem to be only Somewhat Satisfying, since it isn't likely that most users in the United States were searching for (say) an Indonesian app or an Israeli Singer from the 1990s. Therefore the two sides are About the Same.

#### Query: tina turner movie

Location: Kansas City, MO on 2021-08-17.

	LEFT				RIGHT	
1985 movie "Mad Max: Beyond Thunderdome" (which co-starred Tina Turner)				Web page fo	r 2021 docume on HBO	ntary "Tina"
1993 movie "What's Love Got to Do With It," about the life of Tina Turner				1993 movie "What's Love Got to Do With It," about the life of Tina Turner		
Web page for 2021 documentary "Tina" on HBO				1985 movie "Mad Max: Beyond Thunderdome" (which co-starred Tina Turner)		
Much Better	Better	Slightly Better	About the Same	Slightly Better Better Much Better		

**OPR Explanation**: Both sides have the same results, but they are ranked differently. Since the search was done in 2021, it's most likely that the new 2021 documentary about Tina Turner ("Tina") is what the user was looking for. Since the only difference is the ranking, and the right side ranking is clearly better than the left side (moving the best result into position #1), it's Better.

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#### Query: hannah waddingham

Location: Dickinson, TX on 2021-09-22.

	LEFT			RIGHT		
A <u>news article</u> on her winning an Emmy award for her character in the tv series Ted Lasso				The IMDB r	oage for the act Waddingham	or Hannah
A <u>website</u> listing the Emmy 2021 winners			Emmy award	ews article on he d for her charac eries Ted Lasso	ter in the tv	
Much Better	Better	Slightly Better	About the Same	Slightly Better	Better	Much Better

**OPR Explanation**: Both sides have a fresh and relevant news article but the second result on the left doesn't add any additional value. On the right, we have an excellent ranking, the first result is a professional page about the actor and her experience and the second a fresh news article.

## Query: monster hunter stories 2

Location: Miami, FL on 2021-08-10.

LEFT					RIGHT	
Wikipedia entry for the video game Monster Hunter Stories				k to Monster Hu : Wings of Ruin		
Much Better	Better	Slightly Better	About the Same	Slightly Better	Better	Much Better

**OPR Explanation:** The user specifically asked for "Monster Hunter Stories 2". The left side has a more general result (it's about the entire video game series), while the right is about the exact thing the user asked about, so the right is **Better**. To be Much Better, the right side

would have needed some additional content that added diversity, such as the link to official page.

#### Query: audra mcdonald

Location: Bergen, NJ on 2021-09-22.

	LEFT				RIGHT	
A Knowledge Card describing the singer/actor including links to her official site and Twitter handle				describing	Knowledge Car the singer/acto r official site ar handle	r including
A <u>web video</u> of a lesser well known song "My Man's Gone Now" from 2007				<u>(</u>	Official website	
A <u>web video</u>	of another son High"	g "Rainbow			Twitter <u>handle</u>	
Much Better	Better	Slightly Better	About the Same	Slightly Better Better Better		

**OPR Explanation**: Both sides have the brief Knowledge card describing the person (with links to her official website and twitter feed). The left side also has web videos for two of her songs, while the right side also has her official website and Twitter feedResults R2 and R3 are more valuable than L2 and L3, but the lack of any videos makes the right side only Slightly Better.

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#### **Query: sunrise**

Location: West Melbourne, FL on 2021-09-01

	LEFT				RIGHT	
Weather Info card for West Melbourne (with sunrise/sunset times)					selling the dom://www.sunrise.	
App store link for sunrise/sunset times					card for West unrise/sunset t	
Knowledge Info card about the topic Sunrise				Knowledge	Info card abou Sunrise	t the topic
Much Better	Better	Slightly Better	About the Same	Slightly Better Much Better		

**OPR Explanation**: Both have same third result. Both have the same Highly Satisfying info card, but it's ranked better on the left. Of the remaining results, the one on the left might be useful, while the one on the right is Not Satisfying. Both of these differences favor the left side, so it is Better.

## Query: huffington post

Location: Paxtonia, PA 2021-09-22.

LEFT				RIGHT		
Official website				Official UK website		
Twitter <u>handle</u>				Huffington Post News App		
Much Better	Better	Slightly Better	About the Same	Slightly Better	Better	Much Better

**OPR Explanation**: The user is looking for the news site Huffington Post. Official website,app, and Twitter feed are all Highly Satisfying. The UK site is Somewhat Satisfying. Left is better due to more satisfying results.

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