Inclusive Naming Initiative

Overview

Language recommendation lists

The Inclusive Naming Initiative produces three tiers of language recommendation. These are compiled into lists for easy consumption by adopters. Terms are separated into lists based on the severity of the term in question as well as the level of review the terms have received.

To add new terms to the lists, review the Wordlist template page.

Tier 1: Replace Immediately

Tier 1 terms should be replaced whenever encountered. Terms included in this list have one or all of the following:

- Strong social consensus within the software development community on replacements
- Are identified by the Inclusive Naming Initiative as high-severity terms in need of immediate replacement
- Terms where the impact of change or removal is low: for example, there is little entanglement in low-level systems or standardized language set by standards bodies
- Have passed through all the review stages in Tiers 2 and 3

Tier 2: Strongly Consider Replacing

Terms in this list should be replaced whenever possible, barring major breaking changes. Terms included in this list have one or all of the following:

- Are terms from Tier 3 that have undergone through external review by underrepresented minority groups and outside consultants
- Terms which would otherwise be in Tier 1 but have dependencies on language set by standards bodies, or are deeply embedded in low-level systems and thus difficult to change

Tier 3: Recommendations to Replace

Terms in this list should be considered for replacement. Terms included in this list have one or all of the following:

- Review by the Inclusive Naming Initiative, with particular attention paid to finding consensus among member companies and participants' companies for replacements
- Research conducted by the Inclusive Naming Initiative on the etymology of the word and non-tech cultural connotations, per the Language Evaluation Framework
- A consensus-based replacement term or terms proposed by the Language Workstream and sent for approval and review to the larger Initiative.

No-Change

This word list captures terms the Inclusive Naming Initiative and its partner organizations evaluated but did not recommend any changes for.

Terms

Word List: Tier 1

Term: abort

Definition

None

Related Terms

• abortion

Usage Context

Recommendation

Replace when possible.

Recommended Replacements

- User-Initiated Termination
- Force quit
- Cancel
- System-Initiated Termination
- Fail
- Close (app, program, connection)
- End
- Halt
- Hard stop
- Stop (something you triggered)

Unsuitable Replacements

• Kill (as in Linux systems)

Rationale

The term "abort" frequently appeared in Inclusive Language Initiative surveys and standards reviews. Multiple organizations felt that usage of the word posed an issue worth addressing in their individual companies and projects. Given this widespread interest, the INI has decided to offer its own guidance.

INI recommends replacing "abort" wherever possible. In accordance with the INI's language framework, the term does not necessarily constitute a first-order concern. However, because it is such a charged term outside of computing, "abort" fails to provide a clear description of the action being taken, and serves primarily to distract. There are numerous other words in the English language that can serve the same purpose in computing without invoking the emotionally charged cultural context of "abort."

Although the INI debated whether the word "abort" itself or the procedure commonly associated with it ("abortion") caused the aforementioned distractions, the etymology of the word has a direct and unambiguous link to the termination of a pregnancy. Alternative uses of the word "abort" are in use today, such as in rocketry. However, the INI concluded that the term itself was insufficiently distanced from its original meaning for those alternative definitions to be its primary association.

All this being said, the INI does not advocate for a blanket replacement of the term. "Abort" appears in many standards organization documents, and is deeply embedded in some operating systems. As such, the INI acknowledges that the

term may need to be retained in certain contexts to remain in compliance with those standards, or to preserve accurate documentation for bedrock functions and processes that are too fundamental to be changed.

Some organizations have noted that using "abort" in contexts other than the medical or political serves to de-stigmatize the term, thereby promoting reproductive rights and bodily autonomy. Conversely, discouraging the term could be interpreted as accepting a framing that denies a pregnant person's right to control their body. The judgment of the INI is that the term causes discomfort or offense without providing a necessary degree of technical clarity, and therefore it should be avoided. At some future point, because language changes over time, "abort" may become a less contentious term; at that juncture, the appropriateness of the term may be revisited.

Term Status

Version: 0.1 Created: August 2021

Review status:

- Reviewed by Inclusive Naming Initiative
- Approved by Inclusive Naming Initiative Language Workstream
- Reviewed by URM organizations and working groups
- Reviewed by professional diversity consultants

Supporting Content

None

Word List: Tier o

Term: blackbox

Definition

N/A

Related Terms

• whitebox

Usage Context

Recommendation

No change recommended. This term may be used without restriction. Blackbox refers to opacity, such as details that aren't visible or are not the focus. This term is not based on a good/bad binary where white is represented as good or black is represented as bad and so does not promote racial bias.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

N/A

Term Status

N/A

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier 1

Term: blackhat-whitehat

Definition

• None

Usage Context

Recommendation

Replace immediately.

Recommended Replacements

- ethical hacker
- unethical hacker, attacker

Unsuitable Replacements

• None

Rationale

The terms *white hat* and *black hat* promote racial bias because black is used to indicate malevolence while white indicates ethical, positive behavior.

Term Status

N/A

Supporting Content

Adapted from a recommendation originally published by the IBM Inclusive IT Language Initiative Words Matter working group.

Word List: Tier o

Term: Blackout

Definition

• None

Usage Context

Recommendation

No change recommended. This term may be used without restriction. This term is not based on a good/bad binary where white is represented as good or black is represented as bad and so does not promote racial bias.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

N/A

Term Status

N/A

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier 1

Term: cripple

Definition

- crippled
- crippleware

Usage Context

Recommendation

Adopt immediately.

Recommended Replacements

- Impacted
- Degraded
- Restricted
- Immobilized

Unsuitable Replacements

• None

Rationale

The terms cripple, crippled, and crippleware are sometimes used in writing about software or computer systems. These terms are rarely, if ever, used in software itself. These terms are used to indicate the following:

- To limit functionality in software or to degrade performance of a system
- An organization that is impacted, such as by a security breach`

The term is ableist, that is, a pejorative term for people with physical disabilities.

Example usage of recommended replacements:

- Crippled performance speed
 - Impacted
 - Degraded
- Crippled functionality
 - Restricted

- Security issues cripple an organization
 - Impacted
 - Immobilized
- Crippleware
 - Software with restricted functionality

Term Status

N/A

Supporting Content

N/A

Word List: Tier o

Term: disable

Definition

N/A

Related Terms

• disabled

Usage Context

Recommendation

Do not change. The terms 'disable' and 'disabled' are valid in the context of technology, such as disabling an application or a network component. In the context of talking about disabled people, however, follow the guidance around it from the AP Style Guide, the UK Government , the National Center for Disability and Journalism , or other sources. In most cases, the recommendation is to use the word 'disabled' to refer to disabled people rather than alternate terms. The National Center for Disability and Journalism recommends to specify the disability where relevant, instead of grouping all people under the general term.

Recommended Replacements

• Deactivate/activate

Unsuitable Replacements

• None

Rationale

N/A

Term Status

N/A

Supporting Content

N/A

Word List: Tier o

Term: fair hiring practice

Definition

N/A

Related Terms

• None

Usage Context

Recommendation

No change recommended. This term is not biased because it's easy to distinguish 'fair' in the sense of unbiased from 'fair' in the sense of a light-skinned person in context.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

N/A

Term Status

N/A

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier o

Term: fellow

Definition

N/A

Related Terms

• None

Usage Context

Recommendation

No change recommended. Fellow refers to the most senior rank or title one can achieve on a technical career in certain companies or a member of a learned or professional society, or a person who has been awarded a grant for studies, typically in the field of scientific research, or a person who has earned a fellowship. A Fellow can be of any gender. This term does not promote gender bias.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

N/A

Term Status

N/A

Supporting Content

N/A

Word List: Tier 3

Term: hallucinate

Definition

An artificial intelligence (AI) application generates information that has no basis in fact.

• None

Usage Context

Recommendation

Recommended to replace when possible.

Recommended Replacements

- inaccurate information (noun)
- *create* or *generate* inaccurate information (verb)

Unsuitable Replacements

• None

Rationale

Hallucinations – perceptions that are not based in reality – are often associated with mental illness or drug use. Using the term in a technology context, in either its noun or verb form, can be seen as insensitive to people who experience those conditions.

Term Status

N/A

Supporting Content

N/A

Word List: Tier 3

Term: man-in-the-middle

Definition

• None

Usage Context

Recommendation

Consider replacement

Recommended Replacements

- Adversary-in-the-middle attack
- Interceptor attack
- Intermediary attack

Unsuitable Replacements

• None

Rationale

When an attacker secretly intercepts and relays communications between two systems or people who believe that they are communicating directly with each other. Gendered language that can perpetuate bias and stereotypes. Implies that women do not have the skills to perpetrate this type of hacking.

Term Status

N/A

Supporting Content

Word List: Tier 1

Term: master

Definition

In computing, A "master" often refers to the original or main version of an entity.

Related Terms

• N/A

Usage Context

Recommendation

Adopt immediately.

Recommended Replacements

- main
- original
- source
- control plane

Unsuitable Replacements

• N/A

Rationale

While master in and of itself is potentially neutral, the propensity in which it is associated with the term slave in computing makes master on its own guilty by association. Though it is used as a standalone, it's impossible to remove the association with command and control entirely, and thus we recommend moving away from even singular use.

Term Status

Nill

Supporting Content

• github/renaming

Word List: Tier o

Term: master inventor

Definition

N/A

Related Terms

• None

Usage Context

Recommendation

No change recommended. This term does not fall under the criteria for replacing the term 'master'. It refers to a level of skill rather than a dominant/subordinate relationship.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

N/A

Term Status

N/A

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier 1

Term: master-slave

Definition

The "master/slave" metaphor in computing refers to a system with a single store of record and a set of replicas which maintain copies of the original data.

Related Terms

• N/A

Usage Context

Recommendation

Adopt immediately

Recommended Replacements

- Control plane/control plane node
- Controller/doer
- Primary/replica

- Primary/secondary
- Leader/follower
- Parent/child

Unsuitable Replacements

• N/A

Rationale

As the IETF puts it, "Master-slave is an oppressive metaphor that will and should never become fully detached from history." The word's origins and historicial use reveal use that is at best chauvinistic and racist, and in almost all cases connotative of ownership. While there is some small ambiguity about the term master, the term slave is unambiguously about the ownership and subjugation of another person, and has been since its inception.

The terms master/slave are harmful to Black and people of color contributors and employees. Slavery is a tradition barely 3 generations abolished – there are grandparents alive today who were actual, non-metaphorical slaves. Segregation and Apartheid are even more recent. In accordance with most open source codes of conduct and company handbooks, the mandate of all people in a project is to create a welcoming space, regardless of the level of experience, gender, gender identity and expression, sexual orientation, disability, personal appearance, body size, race, ethnicity, age, religion, or nationality. Master/slave are not welcoming words.

Term Status

Nill

Supporting Content

- Broken Metaphor: The Master-Slave Analogy in Technical Literature
- IETF Network Working Group: Terminology, Power and Oppressive Language
- django/django PR #2692
- Python issue #34605
- Drupal issue
- COUCHDB-2248

Word List: Tier o

Term: mastermind

Definition

N/A

Related Terms

• None

Usage Context

Recommendation

No change recommended. This term does not fall under the criteria for replacing the term 'master'. It refers to a level of skill rather than a dominant/subordinate relationship.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

N/A

Term Status

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier o

Term: parent child

Definition

N/A

Related Terms

• None

Usage Context

Recommendation

No change recommended. Although the relationship of parent and child is one of dependency, it is appropriate. Parents do have legal rights over children until a certain age, so it is a natural dependency relationship. Children falling victim to adult power is neither the main nor the intended result of this relationship, so this term does not typically represent an abuse of power.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

Term Status

N/A

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier o

Term: red team

Definition

N/A

Related Terms

• None

Usage Context

Recommendation

No change recommended. This use of 'red' does not refer to Indigenous people and does not reinforce a negative stereotype.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

N/A

Term Status

N/A

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier 2

Term: sanity-check

Definition

Recommendation donated from the IBM Inclusive IT Language Initiative Words Matter working group

Related Terms

• sanity-test

Usage Context

Recommendation

Replace

Recommended Replacements

- confidence check
- coherence check

- test
- verification

Unsuitable Replacements

• N/A

Rationale

This term might be derogatory to neurodiverse people. Jargon, such as "sanity test", is difficult to translate and is difficult to understand by readers whose first language is not English.

Note: The original recommendation via IBM's Words Matter group included different recommendations, but INI liked [Twitter's recommendations][twitter-recs] of "confidence check" and "coherence check" and have opted to use them instead.

Term Status

N/A

Supporting Content

 $[twitter-recs]\ (\ https://www.mediaite.com/news/twitter-bans-sanity-checks-com-pany-announces-plan-to-make-code-more-politically-correct/\)$

Word List: Tier 3

Term: Segregate

Definition

None

Related Terms

- All Derivatives
- Segregation

Usage Context

Recommendation

Replace

Recommended Replacements

- Segment/segmentation
- Separate/separation

Unsuitable Replacements

• Discriminate/discrimination

Rationale

The word segregation carries strong context in regard to civil rights movements in the US and South Africa, segregation in the US South, and racist history. Though the word appears etymologically neutral at first, Etymonline notes that the term has strong moral contexts prior to US segregation, and after US segregation is almost exclusively associated with the segregation of Black people from White people, an extremely racist context.

This meets one of the INI's evaluation framework's first-order concerns : the term is loaded, problematic, or politically charged outside of technology contexts, even if the language is itself etymologically neutral. As such, we recommend replacing it to remove the distracting, racist, and negative connotations of the word.

While the word is in use in security contexts and in GDPR and data protection contexts, it does not appear to be codified into any laws, policies, or other difficult to change or heavily embedded frameworks. Moreover, the replacement terms recommended—"segmentation" and "separation"—are both equally descriptive and in common use in technology, so we recommend replacing as you see the term.

We acknowledge that switching from "segregation" to "segmentation" or "separation" loses a small amount of nuance: specifically, "segregation" implies "separation" based on a policy or human-defined ruleset. If this is an issue in the context in which you use the word, we recommend using descriptive words along with the replacement, such as "policy-based segmentation."

Term Status

N/A

Supporting Content

N/A

Word List: Tier 1

Term: Tribe

Definition

N/A

Related Terms

• N/A

Usage Context

Recommendation

Use with caution. Do not use to refer to a group formed to accomplish a task.

Recommended Replacements

- Squad of squads
- Team

Unsuitable Replacements

• None

Rationale

"Tribe" is a term that can be associated with colonialism or can be considered cultural appropriation. The word has a history of being used to describe division along ethnic or racial lines. As such, choose other words to describe groups of people.

Term Status

N/A

Supporting Content

Recommendation from the IBM Inclusive IT Language Initiative Words Matter working group

Word List: Tier o

Term: white-label

Definition

From Wikipedia :

A white-label product is a product or service produced by one company (the producer) that other companies (the marketers) rebrand to make it appear as if they had made it. The name derives from the image of a white label on the packaging that can be filled in with the marketer's trade dress. White label products are sold by retailers with their own trademark but the products themselves are manufactured by a third party.

Related Terms

- white-label product
- white-labeling

Usage Context

Recommendation

No change recommended. This term may be used without restriction.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

In this context, white refers to the most common background color of package paper. A white-label product lacks the printing, hence is fully white. This term is not based on a good/bad binary where white is represented as good or black is represented as bad and so does not promote racial bias.

Term Status

Supporting Content

Word List: Tier o

Term: whitebox

Definition

From Wikipedia :

White-box testing (also known as clear box testing, glass box testing, transparent box testing, and structural testing) is a method of software testing that tests internal structures or workings of an application, as opposed to its functionality (i.e. black-box testing).

• blackbox

Usage Context

Recommendation

No change recommended. This term may be used without restriction.

Recommended Replacements

• None

Unsuitable Replacements

• None

Rationale

White box refers to transparency, i.e., internal details are visible to the tester. This term is not based on a good/bad binary where white is represented as good or black is represented as bad and so does not promote racial bias.

Term Status

N/A

Supporting Content

Word List: Tier 1

Term: whitelist

Definition

Lists which permit or deny a set of nouns, or select enabled features.

• blacklist

Usage Context

Recommendation

Adopt immediately

Recommended Replacements

- allowedNouns/deniedNouns (or other verbs)
- allowlist/denylist

Unsuitable Replacements

• N/A

Rationale

The underlying assumption of the whitelist/blacklist metaphor is that white = good and black = bad. Because colors in and of themselves have no predetermined meaning, any meaning we assign to them is cultural: for example, the color red in many Southeast Asian countries is lucky, and is often associated with events like marriages, whereas the color white carries the same connotations in many European countries.

From a technical communication perspective, using whitelist/blacklist as a naming convention applies metaphor (and, in turn, unintended meaning) when it isn't needed. A suitable verb or adjective enhances understanding by replacing the metaphor with a direct description.

In English, "whitelist" and "blacklist" can be used as either verbs or nouns. As a verb, commonly used words such as "allow" or "deny" can be used directly. Depending on the context, other verbs such as "skip", "ignore", "block", "waive", "disable" can be used instead. As a noun, words such as "allowlist" and "denylist" are in use and are more descriptive than whitelist/blacklist, but they may be difficult to translate to other human languages. Consider prefixed forms instead, such as "allowedRecipients" as a replacement for "recipientWhitelist"; in descriptive text (as opposed to code) you may want to prepend "list of", as in "list of allowed recipients".

Term Status

N/A

Supporting Content

(1) "Blacklists" and "whitelists": a salutary warning concerning the prevalence of racist language in discussions of predatory publishing (2) IETF Network Working Group: Terminology, Power and Oppressive Language (3) Android PR (4) cURL PR

Word List: Tier

Term:

Definition

Related Terms

Usage Context

Recommendation

Recommended Replacements

Unsuitable Replacements

Rationale

Term Status

Supporting Content

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