

Java Error Cheatsheet for Rust-Brained Hackers

1. cannot find symbol

Meaning: Referencing something unknown to the compiler - wrong variable, method not declared, class not imported.

Fix: Add the correct import, check spelling, or define what you're referencing.

2. class, interface, enum, or record expected

Meaning: You tried to declare a method, class, or variable outside of a class.

Fix: Move the code inside a class.

3. illegal start of expression

Meaning: You wrote something unexpected, like a method inside another method.

Fix: Declare methods outside of other methods.

4. incompatible types

Meaning: Assigned a value of one type to a variable of another.

Fix: Use matching types or cast appropriately.

5. missing return statement

Meaning: Some code paths do not return a value.

Fix: Ensure all branches return a value.

6. variable might not have been initialized

Meaning: Variable declared but not given a value before use.

Fix: Initialize variables before use.

7. exception X is never thrown in body of corresponding try statement

Meaning: Catching an exception that is not thrown.

Fix: Remove the catch or throw a related exception.

8. non-static variable X cannot be referenced from a static context

Meaning: Static method accessing instance data.

Fix: Make the variable static or create an instance.

Rust vs Java Error Mindset

Rust	Java
Precise, compiler as teacher	Cryptic, compiler as annoyed parent

borrow of moved value	cannot find symbol
expected type but found other	incompatible types
match arms not exhaustive	No such check unless using enums well
Compiler gives fix hints	Java often just cries at you