Kotlin static code analysis: Unicodeaware versions of character classes should be preferred

1 minute

When using POSIX classes like $p{Alpha}$ without the (?U) to include Unicode characters or when using hard-coded character classes like "[a-zA-Z]", letters outside of the ASCII range, such as umlauts, accented letters or letter from non-Latin languages, won't be matched. This may cause code to incorrectly handle input containing such letters.

To correctly handle non-ASCII input, it is recommended to use Unicode classes like $p{IsAlphabetic}$. When using POSIX classes, Unicode support should be enabled by using (?U) inside the regex.

Noncompliant Code Example

Regex("[a-zA-Z]")
Regex("\\p{Alpha}")
Regex("""\p{Alpha}""")

Compliant Solution

Regex("""\p{IsAlphabetic}""") // matches all letters from all languages
Regex("""\p{IsLatin}""") // matches latin letters, including umlauts and other non-ASCII variations
Regex("""(?U)\p{Alpha}"")
Regex("(?U)\\p{Alpha}")