

le cnam

Main Title Class subtitle

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 $\begin{array}{c} \textbf{Tom Planche} \\ 2024\text{-}2025 \end{array}$

Class name

Main title Tom Planche

I - Main title

I. I - Subtitle

I. I.I - Subsubtitle

Custom Block

Custom Blockquote

Basic inline raw text

This code block uses #code() macro.

```
1 // src/string_utils.rs
                                                                                                  Rust
 2 /// Extension traits and utilities for string manipulation
 4 /// This module provides additional functionality for working with strings,
 5 /// including title case conversion and other string transformations.
 6 use std::string::String;
 8 /// Trait that adds title case functionality to String and &str types
9 pub trait TitleCase {
10
       /// Converts the string to title case where each word starts with an uppercase letter
       /// and the rest are lowercase
11
12
13
       fn to_title_case(&self) → String;
14 }
15
16 impl TitleCase for str {
       fn to_title_case(&self) → String {
17
           self.split(|c: char| c.is\_whitespace() || c = '_' || c = '-')
18
               .filter(|s| !s.is_empty())
19
               .map(|word| {
20
21
                   // If the word is all uppercase and longer than 1 character, preserve it
                   if word.chars().all(|c| c.is_uppercase()) & word.len() > 1 {
22
                       word.to_string()
23
24
                   } else {
25
                       let mut chars = word.chars();
26
                       match chars.next() {
                            None ⇒ String::new(),
27
                            Some(first) \Rightarrow \{
                                let first_upper = first.to_uppercase().collect::<String>();
29
                                let rest_lower = chars.as_str().to_lowercase();
30
                                format!("{}{}", first_upper, rest_lower)
                            }
                       }
34
               })
36
               .collect::<Vec<String>>()
               .join(" ")
37
38
       }
39 }
40
```

```
41 impl TitleCase for String {
             fn to_title_case(&self) → String {
43
                     self.as_str().to_title_case()
44
45 }
46
47 #[cfg(test)]
48 mod tests {
49
             use super::*;
50
51
             #[test]
             fn test_title_case_str() {
52
                     assert_eq!("hello world".to_title_case(), "Hello World");
assert_eq!("HASH_TABLE".to_title_case(), "HASH TABLE");
53
54
                    assert_eq!("dynamic-programming".to_title_case(), "Dynamic Programming");
assert_eq!("BFS".to_title_case(), "BFS");
assert_eq!("two-sum".to_title_case(), "Two Sum");
assert_eq!("binary_search_tree".to_title_case(), "Binary Search Tree");
assert_eq!(" spaced words ".to_title_case(), "Spaced Words");
assert_eq!("".to_title_case(), "");
55
56
57
58
59
60
             }
61
62 }
```