

Stacks – Scenario Implementations (C++ Group Assignment)

Submission (one PDF per group)

Your single **PDF** must include:

- **Members** (names + student IDs)
- **Your solution** (key code snippets)
- **Your explanation** (design choices, edge cases, why your ops are enough)
- **Any diagrams/screenshots** (flow, sample runs, etc.)

Scenario – Balanced Brackets Linter (best with Array Stack)

Goal: Given a string containing any chars plus ()[]{}, decide valid/invalid and show where the first error occurs (1-based index).

Implementations to submit:

1. `ArrayStack<char>` solution
2. `LinkedStack<char>` solution

Spec

- Ignore non-bracket characters.
- A close must match the **last unmatched** open.

"()[]{}"	-> OK
-> OK	
-> ERROR pos=3 reason=mismatch	
"(((("	-> ERROR pos=1 reason=unclosed
-> ERROR pos=4 reason=extra-closing	
"if(a[0] == '{')"	-> OK