

C16 - Lab: Implementing a Template Class Triplet

Objective

The goal of this lab is to reinforce students' understanding of C++ templates by implementing a template class Triplet that can hold three items of any data type. Students will practice working with class templates, constructors, getters, and utility functions.

Class Specification

Students must implement a class Triplet<T1, T2, T3>, where T1, T2, and T3 represent the data types of the three elements in the triplet. The class must include:

- A constructor to initialize the three elements.
- Getters to retrieve the values.
- A function display() to print the triplet.

Class Diagram

```
+-----+
| Triplet<T1,T2,T3> |
+-----+
| - first: T1      |
| - second: T2     |
| - third: T3      |
+-----+
| + Triplet(T1, T2, T3) |
| + getFirst(): T1      |
| + getSecond(): T2     |
| + getThird(): T3      |
| + display(): void     |
+-----+
```