

**Lab report**

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| **Course**: | Class Libraries and Data Structures |
| **Semester**: | 1st semester of the academic year **2019-2020** |
| **Major**: | Software Engineering |
| **Class**: | 2018 |
| **Student Name**: |  |
| **Student ID:** |  |
| **Teacher:** | ZHAO, Hengjun (赵恒军) |

**School of Computer and Information Science**

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| Name | | C++ Tempaltes | | | |
| Date | | Oct 17，2019 | Type | | √ Confirmatory  √ Design  □Comprehensive |
| 1. **Objective & Requirements**    1. Understand the concept of containers; can use template to define generic containers    2. Understand the concept of generic algorithms; use generic method to implement container template    3. Understand the difference between contiguous memory allocation and linked memory allocation; use template to implement a container with linked storage | | | | | |
| 1. **Experimental environment (**platform and software**)**   Windows 7 (or higher versions) + Visual Studio 2010 (or higher versions) | | | | | |
| 1. **Experimental content and design** (Main Content, Procedure, Codes and Results) 2. Task 1    1. In the template container class sent to you, implement a method remove(i) that can remove the item of index **i** in the container (Note that the first item is of index 0)    2. Based on remove(i), implement a method removeEmployee() in the company class that allows the user to input an index i and then remove the employee of index **i.** (Note that the first employee is of index 0)    3. Test your implementation in the main() function 3. Task 2    1. Implement a method for adding a new element at the head of the linked list for the container template with linked storage  * void AddHead()   1. Based on AddHead(), implement the inputEmployee() method for the company class   2. Test your implementation in the main function | | | | | |
| 1. **Result analysis and discussion**（Analysis of experimental results and summing up the harvest and the existing problems） | | | | | |
| Comments & Evaluation | Content & Design (A-E) | | |  | |
| Procedure & Codes (A-E) | | |  | |
| Results (A-E) | | |  | |
| Analysis & Discussion (A-E) | | |  | |
| Score (A-E):  Feedback comments: | | | | |