

Practice #7

Lists

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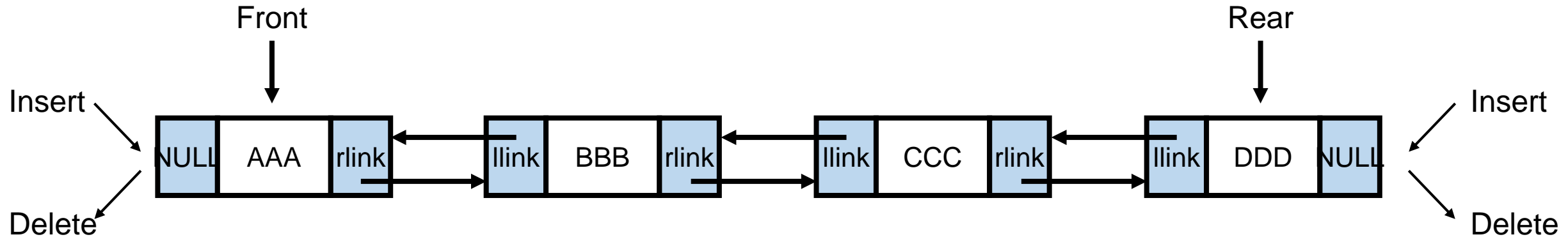
Practice #7 TO-DO List

| To-Do | Submission | Notes |
|--------------------------------|--|--------------------|
| Deque using Doubly Linked List | Screenshot and source code (Deque.cpp) | p.37-40, Chapter 4 |

- Upload your screenshot and source codes on LMS by 11pm on 4/13 (Wed).
 - All your screenshots should be merged in one pdf file, screenshot.pdf.
 - Your pdf and all source codes should be compressed into zip file.
- File name: practice07_Your Student ID_Name.zip (only zip, not pdf, docx, c, etc)
 - ex) practice07_20400022_고윤민.zip

Deque

- Implement a deque class using doubly linked list
 - Skeleton code: Deque.cpp (Dequeclient.cpp: no need to change)
 - Refer to p.37-40, Chapter 4
 - Deque is a double-ended queue (pronounced deck) is a linear list in which additions and deletions may be made at either end (front and rear).



Deque

- Implement a deque class using doubly linked list
 - Implement following member functions
 - InsertFront(): Insert a new node at front end
 - InsertRear(): Insert a new node at rear end
 - DeleteFront(): Delete a node at front end
 - DeleteRear(): Delete a node at rear end
 - GetLength(): Return the number of nodes in deque
 - IsEmpty(): Return true if deque is empty. Otherwise return false.
 - PrintFromFront(): Print all data start from front end
 - ex) AAA BBB CCC DDD
 - PrintFromRear(): Print all data start from rear end
 - ex) DDD CCC BBB AAA

Deque

- Expected results

```
PS C:\ds\practice07> .\Dequeclient.exe  
Print from Front(size=5): 222 111 AAA BBB CCC  
Print from Rear(size=5): CCC BBB AAA 111 222  
Print from Front(size=2): 111 AAA  
Print from Rear(size=4): 333 DDD AAA 111
```