**C++ Project Proposal**

**Project Title: FindList**

**Summary**

▶ This is a program that user can find the list what he or she wants.

**Description**

▶ The user can get a list that he or she wants.

▶ Among many items, only items that user wants can be extracted.

▶ Enter words that include or don’t include and modify the list.

▶ Use the length of the string to find the item user want.

**How to use**

1. Enter the list size.

2. Enter as many items as user entered.

3. Choose function and execute it.

- Enter 1, save current list and exit program.

- Enter 2, enter the word and leaves an item containing the word in the list.

- Enter 3, enter the word and leaves an item not containing the word in the list.

- Enter 4, enter a number and leave only items with a string length less than or equal to that number in the list.

- Enter 5, enter a number and leave only items with a string length more than or equal to that number in the list.

- Enter 6, show current list and enter number to use the function again.

**What the program needs**

▶ Use dynamic allocation to minimize memory usage.

▶ Divide into main.cpp, class.cpp, class.h files to facilitate management.

▶ Make it easy for users to use the program by using console size control and design.

▶ If an inappropriate input is received, user can see an error statement.

▶ If there are no items in the list, exit the program.

▶ When the program ends, write the list to the .txt file and save it.