Programming Assignment Due 7/5/15

|  |  |
| --- | --- |
| Homework 2 | |
| **Instructions** |  |
| **Implementing Lists**  A doubly linked list is a list for which besides the next element in the list, a pointer to the previous element is kept, at the level of each element.  A circular list is a list in which the last element is linked to the first element in the list.    **Requirements:**Design a circular doubly linked list, for which the following operations should be implemented:   * + Search for a given element in the structure   + Insert an element after some element, specified as argument   + Delete an element specified as argument   + List (forwards and backwards) all the elements present in the doubly linked list.   **Approach:**You should show the functionality by repeatedly inserting a few (at least 5) elements, followed by at least one search and one delete operation. After ***each*** operation performed, display the elements in the list. The elements should be displayed either in the output window of the IDE, or in a GUI (however, designing a GUI is not mandatory; your work is considered for full grade without a GUI).    **Deliverables**: You should submit (1) the souce (.java) files, (2) an output sample (screenshot showing program execution and the results of your testing) and (3) a document file describing your solution. The solution description document should include the following elements: a short problem analysis, main design decisions, user interface, testing and test cases, error handling and lessons learned. The size of the document should be of 1-2 pages, single spaced, font size 12. All solution description elements should be properly formatted using APA style.    Wrapp all the files in a single .zip archive and name it Hw2\_your\_name.zip (if I were you, it would be Hw2\_Rodica\_Potolea.zip). | |