**LAB# 08**

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**Section: II**

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**TASK :01**

PhotoViweris one of the most used web apps which comes pre-installed on windows 10 devices and there are several different apps that are present in Google Play to view the media files present in your device. You must create a PhotoViwerapp in which you can view all the photos which you have stored on your device. Along with that, you can view the individual photos in our app as well.The PhotoViwerapplication is having the following view functions1.Previous: View Previous image2.Next:View the next image3.SlideShow:display all stored imagesOther functions of PhotoViwer are1.Addnew image2.Rename/Updatean image3.Deletean image4.Search any image5.Counter: display the total number of images stored

class Node<T> {  
 T data;  
 Node head;  
 Node next;  
 Node prev;  
 int size = 1;  
  
 public Node(T data) {  
 this.data = data;  
 next = null;  
 prev = null;  
 }  
  
 public void addAtFirst(T data) {  
 Node<T> newNode = new Node<>(data);  
 if (size == 1)  
 head = newNode;  
 else {  
 head.prev = newNode;  
 newNode.next = head;  
 head = newNode;  
 }  
 size++;}  
  
 public void deletionAtFirst(){  
 if (head==null){  
 System.*out*.println("Linked list is not exist");  
 }else {  
 head.next.prev=null;  
 next=head.next.next;  
 head=head.next;  
  
 }  
size--;  
 }  
  
 public Node deletionAtLast(){  
 Node p;  
 for (p=head;p.next.next!=null;p=p.next){}  
 p.next=null;  
 size--;  
return head;  
  
 }  
  
 public void slideShow(){  
 for (Node p=head;p!=null;p=p.next){  
 System.*out*.print(p.data+" ");  
 }  
 }  
  
 public void counter(){  
 System.*out*.println("length : "+ size);  
 }  
  
public boolean search(String name){  
 for (Node p=head ;p!=null;p=p.next){  
 if (p.data==name) return true;  
 }  
return false;  
 }  
  
 public void NextImage(String name) {  
 Node p=head;  
 boolean check= search(name);  
 if (check==true){  
 for ( p=head ;p.next.data!=name;p=p.next){}  
 }System.*out*.println("next image: "+p.data);  
  
 }  
  
  
 public void previous(String name) {  
 Node p = head;  
 boolean check=search(name);  
 if (check){  
 for ( p=head ;p.next.data!=name;p=p.next){}  
 }  
 System.*out*.println("previous Node data is: "+p.data);  
 }  
  
  
  
  
 public void rename(String name, String newName){  
 boolean check= search(name);  
 if (check==true){  
 Node p;  
 for ( p=head ;p.data!=name;p=p.next){}  
 p.data=newName;  
 }else System.*out*.println("this image does not exist ");  
 }  
}

class LAB\_8 {  
 public static void main(String[] args) {  
 Node<String> list = new Node<>("create list");  
 list.addAtFirst("image 1");  
 list.addAtFirst("image 2");  
 list.addAtFirst("image 3");  
 list.addAtFirst("image 4");  
 list.addAtFirst("image 5");  
 list.slideShow();  
 System.*out*.println();  
 list.previous("image 4 ");  
 // list.NextImage("image 2 ");  
 // System.out.println(list.search("image 4"));  
// System.out.println();  
// System.out.println(list.search("image 6"));  
 list.counter();  
// list.deletionAtLast();  
// list.display();  
 list.rename("image 5","imagenew ");  
 list.slideShow();  
  
// list.display();  
// list.deletionAtFirst();  
// System.out.println();  
// list.display();  
// list.deletionAtLast();  
// System.out.println();  
// list.display();  
  
  
 }}

**OUTPUT:**

"C:\Program Files\Java\jdk-17.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.1\lib\idea\_rt.jar=63768:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.1\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\hp\IdeaProjects\DSA\_ALL\_LABS\out\production\DSA\_ALL\_LABS LAB\_8

image 5 image 4 image 3 image 2 image 1  
 previous Node data is: image 5  
 length : 6  
 imagenew image 4 image 3 image 2 image 1  
 Process finished with exit code 0