

**CISB254 Intro to OOP using Java**

**Semester I 2014/2015**

**Mini Project (Group of maximum 4 students only)**

You are working as a programmer at Malacca Zoo. You have been asked to create a program which keeps track of animal records in the zoo. For now, there are 3 animal types which are elephant, giraffe and panda. Create a java program which does the followings:

1. Prompt user with a menu selection

```
Enter menu selection:  
[A] Enter data  
[B] Print data  
[C] Delete data  
[D] Exit
```

2. If the user chooses A, prompt the user to enter the type of animal they want to record

```
Enter animal type:  
[1] Elephant  
[2] Giraffe  
[3] Panda  
[4] Go to menu selection
```

3. Once the user has selected the animal type, prompt the user to key in number of animals they want to enter, and ask the user to enter the details of the animal.

```
You have selected to enter record on Elephant.  
How many records do you want to enter? 2  
Record 1  
Enter the name: Mike  
Enter the age: 34  
Record 2  
Enter the name: Mus  
Enter the age: 49  
2 records have been successfully added.  
Enter menu selection:  
[A] Enter data  
[B] Print data  
[C] Delete data  
[D] Exit
```

4. If the user chooses B, your program should print the list of animals available in your program.

You have selected to print data.

Enter animal type:

[1] Elephant

[2] Giraffe

[3] Panda

1

Record on elephant:

1. Mike (34)

2. Mus (49)

Enter menu selection:

[A] Enter data

[B] Print data

[C] Delete data

[D] Exit

5. If the user chooses C, your program should prompt the user the index of the data he/she wants to delete. Your program should be able to handle error so that user gets warning if he/she enters an index bigger than the size of your record.

You have selected to delete data.

Enter animal type:

[1] Elephant

[2] Giraffe

[3] Panda

1

Enter the index you want to delete: 4

Warning! There are only 2 records for Elephant. Index must be between 0-1 only.

Enter the index you want to delete: 1

Data at index 1 has been successfully deleted

Enter menu selection:

[A] Enter data

[B] Print data

[C] Delete data

[D] Exit

6. If the user chooses B, the user should only get the remaining records in the program

You have selected to print data.

Enter animal type:

[1] Elephant

[2] Giraffe

[3] Panda

1

Record on elephant:

1. Mike (34)

Enter menu selection:

[A] Enter data

[B] Print data

[C] Delete data

[D] Exit

7. If the user selects D, then the program will terminate.

**Program requirements:**

- Your program should make use of methods. **DO NOT** put everything inside the main method.
- Your program should be free of error.
- Include comments for each of the method used in your program so that others can understand your program as well.

**Presentation:**

- You are required to submit your program, as well as the documentation and the CD to me by **August 29<sup>th</sup> 2014 (Friday) by 4 pm**. Late submission **WILL NOT** be entertained.
- You will be presenting your program during the following slots in my office:
 

Tuesday 2<sup>nd</sup> August 2014      9 am – 11 am (4 groups)  
 Monday 8<sup>th</sup> September 2014    2 pm – 6 pm (8 groups)  
 Tuesday 9<sup>th</sup> September 2014    9 am – 11 am (4 groups)
- You are expected to explain the details of your program during the presentation. Each of the team member **MUST** present his/her piece of codes. Therefore, please make sure that everybody contributes to the whole program.
- The slot for the presentation will be available outside my office starting from Monday 11<sup>th</sup> August 2014. You may select your own slot. The slot is solely meant for presentation. I'll use your submitted program during your presentation.

**Grading criteria:**

The following grading scheme will be used for grading your mini project

Item	Score
<b>Program</b>	
1. Appropriate access modifier is used for accessing member variables and methods	5
2. Appropriate names of identifiers (member variables, methods) are being used	5
3. Appropriate use array or arraylist	5
4. All required functions are working correctly	
a. Add data	20
b. Delete data	10
c. Print data	10
d. Exit	5
5. Appropriate use of comments for commenting the details about the program/methods	10
<b>Documentation</b>	
1. Sample screen shots for all functionalities are included	15
2. Program codes in hardcopy (Courier new, 11)	
3. A CD which contains the program	
<b>Presentation</b>	
Presentation style	5
Questions are answered correctly	10
<b>TOTAL</b>	<b>100</b>