

Coursework 1 Requirements

- 1- Use Papyrus to draw the class diagram for the attached classes showing the followings: **(25 Marks)**
 - A. Methods of each class
 - B. Attributes of each class
 - C. Inheritance
 - D. Aggregation.
 - E. Access specifiers for each attribute and method.
- 2- Explain the overall purpose of this project? What is it about? What does it do? **(15 Marks)**
- 3- Polymorphism is used in more than one place in the project. **(10 Marks)**
 - A. Identify all polymorphism cases by identifying their classes and the methods.
 - B. Take one case and explain the need for polymorphism.
- 4- The **class** Device **extends** Observable, Runnable. **(10 Marks)**
 - A. Explain what is Observable, Runnable.
 - B. Why they are used in this example?
- 5- The Class Car contains *Final Static* attributes. Explain why these attributes are defined as Final Static. **(5 Marks)**
- 6- The attached folder contains four Excel files (ChangeeState, Create, Delete, Mode). **(10 Marks)**
 - A. What do these files represent?
 - B. Explain the meaning of the contents of the Create file.
 - C. Show how we can read the values of these files.
- 7- The project uses Collection classes as containers for certain values. **(10 Marks)**
 - A. Identify the classes in which collections are used.
 - B. What are these Collections
 - C. Describe what they contain.
- 8- Write any missing code in *main()* such that the program will execute. Show the output. **(15 Marks)**

You should pay special attention on how to read the input from the excel files.