## Assignment #1

Instructor: Engr. Abdul Rahman SDA (CS-3004), Fall 2021, 27-09-2021





a. Code all the examples of OOP in Java given in the following resource: https://raygun.com/blog/oop-concepts-java/

Submit the code along with the screenshots of all program outputs. (Also given as home exercise in week 1 and demonstrated how to code in eclipse / java in class.)

- b. Domain Model & code generation: Design any scenario yourself of approximately 500 words (approx. 1 page) in which you need to describe a scenario for any domain requirement. After that you need to create a domain model of that scenario in papyrus tool. In domain model you identify only name of classes and their relationships and attributes. After that you need to generate java code using Papyrus Designer plugin of the same domain model. Note: you need to utilize a scenario where you can use all kinds of relationships such as dependency, aggregation, composition, generalization.
- c. Use case diagram: Design any scenario yourself of approximately 500 words (approx. 1 page) in which you need to describe a scenario for any domain requirement. After that you need to create a Use case diagram of that scenario in papyrus tool. Note: you need to utilize a scenario where there is minimum 2-3 actors and you can use all kinds of relationships such as extend, include, dependency and generalization in use cases. (Use maximum possible use case relationships).

## **Important Note:**

- 1. Date assigned: 27-09-2019. Last date of submission is **05-10-2021 11 AM sharp.**
- 2. Assignments will not be accepted after due date.
- 3. Students are required to submit the assignment individually.
- 4. Plagiarism, if detected, will result in zero marks.
- 5. Assignment must be submitted via slate. Only one submission is allowed.
- 6. Submit the assignment after making a single zip archive of the assignment files.
- 7. Folder hierarchy: MS Word document report in /doc folder, generated source code in /code folder (if any), all exported PNG diagrams in /dia folder and Papyrus models and project files in /model directory are required. (See the directory structure as shown in figure above). Use only Papyrus for modeling and submit the project files.
- 8. Archive the assignment and name it "FASTAssignO1YourRollNo.zip"
- 9. Cover Page of Assignment document must contain: Student name, Roll no, Date of submission.
- 10. Do not submit assignment on  $11^{th}$  hour, always submit assignment 3-4 hours or one day earlier then deadline, if you do it on  $11^{th}$  hour, then due to connectivity issues you may not be able to submit the assignment on time.
- 11. Deadline will not extend.s

