Assignment #1
Instructor: Engr. Abdul Rahman
OOAD, Fall 2019, 13-09-2017

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In a teaching hospital there are different rooms, offices and departments. There are multiple offices in a department. Every department has a unique name. A person working at the hospital has a unique ID and can be a doctor, professor, nurse, compounder, staff or an employee. A professor can be a full, associate or assistant professor and he/she is enrolled in one department. Offices and rooms have a number ID, and a room has a number of seats. Every employee works in an office. Medical Students also work as an assistant to the professors. A Patient can book an appointment with the doctor once he is in the hospital with the help of receptionist at each department, but this can be done for outpatient only. For hospitalized relevant doctors regularly visit their patients every morning from 8 am to 10 am. After 10 am all doctors and professors are available in the consultant OPD clinics till 1 pm. There is a central pharmacy of the hospital which is connected with all the departments of the hospital and in case of emergency they can deliver medicine for inpatient only over the phone request. Pharmacy also serves normal customers and patients who purchase medicine from window. There is one emergency department which guarantees that at least one specialists or consultant is always available from each department.

a. Create a domain model of the above scenario.
b. Create all Use Case Diagrams for the teaching hospital. And also document a use case description of the use cases. (E.g, Use Case: "book an appointment with doctor").
c. Create class diagrams, Generalization and inheritance, all types of possible UML Associations (including dual associations, self-associations etc. whatever applies in this scenario), aggregation, composition, interface classes, parameterized Classes and enumerations, Generated UML Classes Code using papyrus.

Important Note:
1. Date assigned: 13-09-2019. Last date of submission is 17-09-2019 3 PM.
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.
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. Use only Papyrus for modeling and submit the project files.
8. Archive the assignment and name it "FASTAssign01YourRollNo.zip"
9. Cover Page of Assignment document must contain: Student name, Roll no, Date of submission.