

Software Engineering Lab - CS 3111

CM

Assignment # 1

Instructor: Abdul Basit

(Total Score: 15 points)

Instructions: (Each student should submit the soft copy of the Assignment on Google Classroom in pdf and also submit the project “.vsdx” file for each diagram).

Q 1 . Draw a use case diagram of an online examination system where students can both login from their respective accounts. Faculty can create, update, edit, delete and view the exam questions. Students can take exams after they get registered and approved from the faculty. After submitting their exams students can view their results after it is declared by the teacher.

*Use include, extend where it is necessary

Q2 . Draw activity diagram describing behavior of the Document Management Process. Some kind of formal and properly communicated document management. Process is usually required in any major corporation especially under a regulatory compliance.

A document goes through different state or stages - it is created, reviewed, updated, approved, and at some point archived. Different roles participating in this process are Author, Reviewer, Approver, and Owner. These roles are represented on the diagram by partitions rendered as horizontal "swim lanes".

Q3. Draw activity diagram describing behavior of the Purchase Ticket use case.

Activity is started by a Commuter actor who needs to buy a ticket. Ticket vending machine will request trip information from Commuter. This information will include number and type of tickets, e.g. whether it is a monthly pass, one way or round ticket, route number, destination or zone number, etc.

Based on the provided trip info ticket vending machine will calculate payment due and request payment options. Those options include payment by cash, or by credit or debit card. If payment by card was selected by Commuter, another actor, Bank will participate in the activity by authorizing the payment.