NATIONAL UNIVERSITY OF COMPUTER AND EMERGING
science
CS3005– Software Design & Architecture Lab
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Task 01

Analysis and Design the Component Diagram given for mechanism of email service system. Let's suppose in this scenario we will discuss how emails handled by email management and what type of service we used. For this situation we have three different objects, "Inbox", "Outbox", "EmailManagment". External applicant sent multiple emails to EmailManagment, EmailManagment component provided two different service through port to inbox and out box, Inbox receive the list of email from EmailManagment, and against this EmailManagment have to provide all emails for backup and place in priority basis using service port. Outbox contained all those who still not sent from server and found as queue due to some network issue, but for this feature email must sent.

Task 02

Analysis and Design the Component Diagram given For Hotel Reservation Management system. In the Hotel Reservation Management system we have three components: user, Hotel and Bank. User component required to implement the "request for reservation" interface, for this request the hotel component must have to provide a "check reservation" interface to the user. After reservation hotel management request for "confirm transaction" interface from Bank component, bank management provided "check transaction" interface to the hotel request, at the same time user required to implement "request payment" interface, For this bank component have generate "make payment" interface for user request. Make sure each component implements each interface with ports.

Task 03

Timing Diagram

       1. compact lifeline shape.

       2. Full-lifeline shape.

       Google Class Room (GCR) is the global collaboration and teaching management system. It provides an online space where students access learning resources within course sites, participate in online activities, and communicate with faculty, staff and other students. Submit their course work assignments and deliverable; take their online quizzes and exams. All courses offered by the University have a corresponding course Site. GCR websites which are used to support a range of other teaching and learning activities. Create Timing Diagram to show the assignment submission process using GCR platform, this timing collaboration showing by student, teacher and GCR server. A Teacher login GCR and uploads an assignment at 8:00am which has the closing deadline at 11:00am. GCR server take 10sec-15sec to upload the assignment, student will download the assignment at 8:00 am to 11:00 and upload the assignment that will take 30sec-35sec.