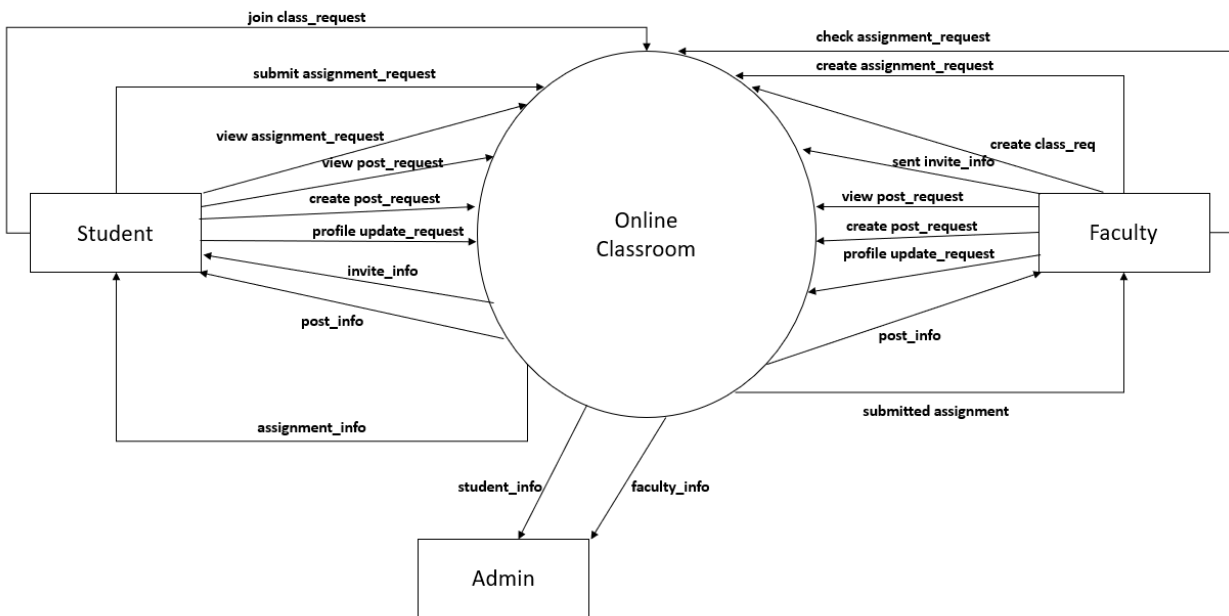


CSE471 Fall 2023
Assignment 01
Total Marks: 10
Deadline: 3rd December, 2023



Online classroom process is decomposed into create class, join class, generate invitation, send invitation, update faculty info, get faculty info, update student info, get student info, view post, create post, create assignment, view assignment, submit assignment and check assignment sub processes. Create class receives create_req from faculty and stores class_info to class data store and passes updateP_req to update faculty info. Update faculty info retrieves class_info from class data store and stores faculty_info into faculty data store. Get faculty info retrieves faculty_info from faculty data store and pass faculty_info to Admin. Generate invitation receives class_info from class data store and stores invite_info into invitation data store. Send invitation receives invite_info from invitation data store and passes invite_info to student. Join class gets join_req from student and it sends updateP_req to update student info process which stores student_info into student data store. Get student info receives student_info from student data store and passes student_info to Admin. Create post receives post_req from create class and join class and stores post_info into post data store. View post gets viewP_req from create class and join class. After receiving requests it retrieves post_info from post data store and sends post_info to faculty and student. Create assignment takes createA_req from create class and stores assignment_info into assignment info data store. View assignment receives viewA_req from join class and after receiving the request, it retrieves assignment_info from assignment info data store and sends assignment_info to student. Submit assignment takes submitA_req from join class and stores submitted_assignment into submitted assignment data store. Check assignment takes checkA_req from create class and after receiving the

request it retrieves submitted_assignment from submitted assignment data store and passes submitted_assignment to faculty.

Now, decompose the create assignment process into prepare assignment, add instructions, add attachments and finalize assignment sub processes. Prepare assignment receives createA_req. Add instructions gets instruction_req from prepare assignment and sends instruction_info to finalize assignment. Add attachments receives attachment_req from prepare assignment and sends attachment_info to finalize assignment. After receiving instruction_info and attachment_info, finalize assignment stores assignment_info into assignment info data store.

1. **Design** a level 1 DFD based on the above scenario.
2. **Design** a level 2 DFD based on the above scenario.[CO2]