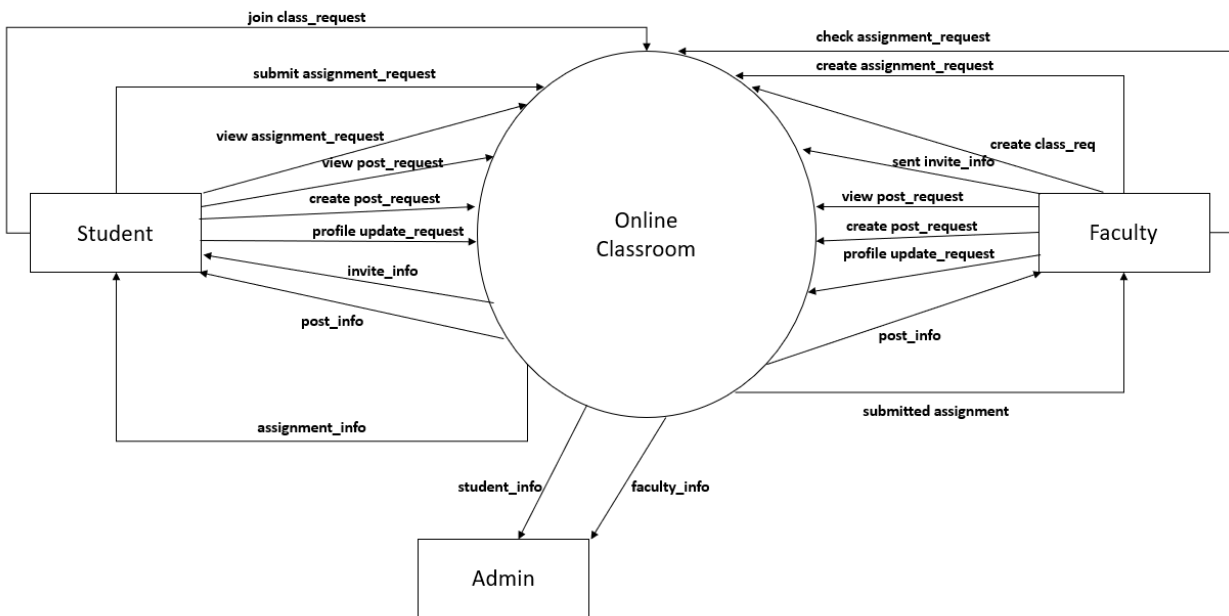


CSE471 Fall 2023  
Assignment 01  
Total Marks: 10  
Deadline: 3rd December, 2023



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

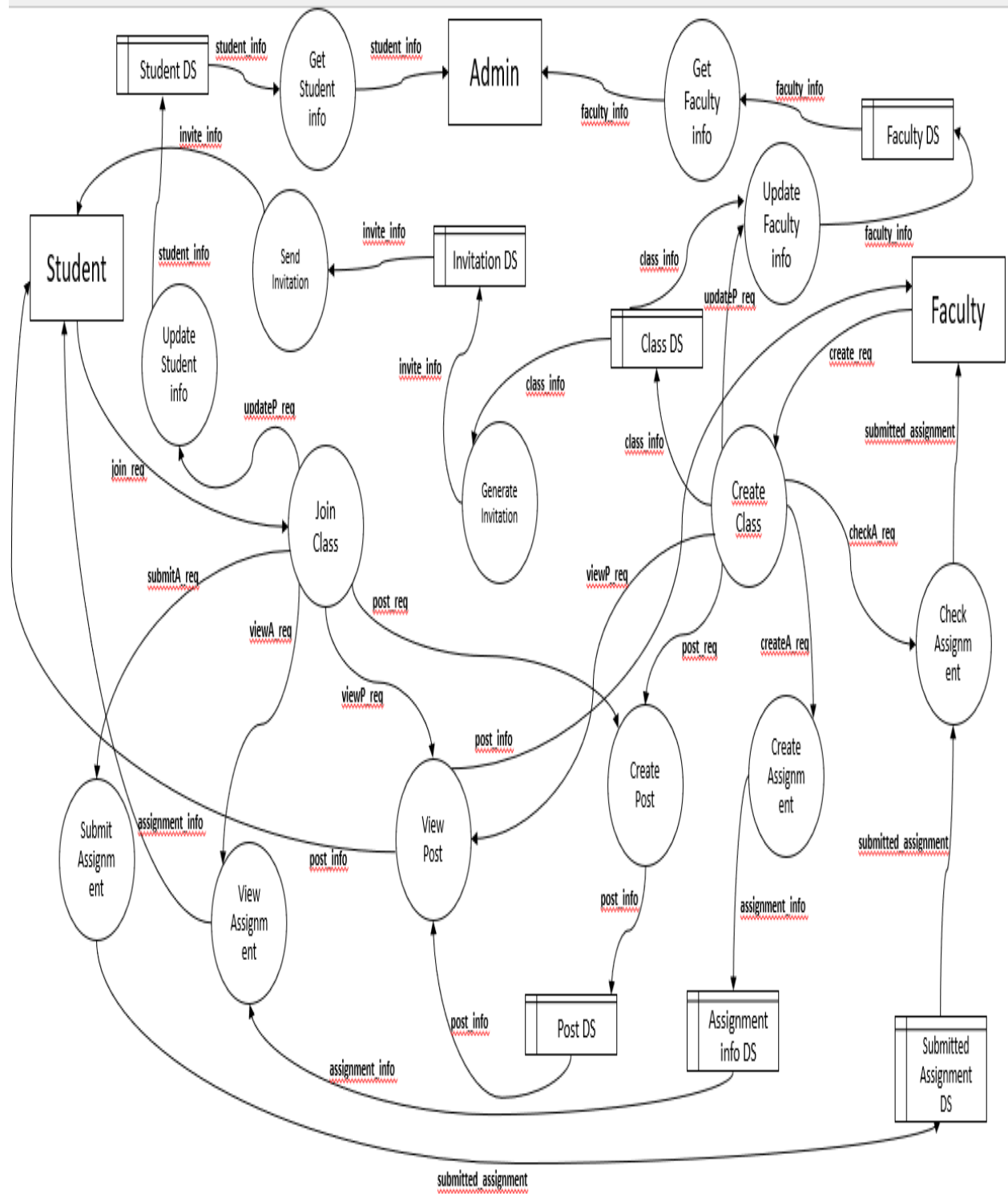
request it retrieves submitted\_assignment from submitted assignment data store and passes submitted\_assignment to faculty.

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]

**Solution:**

**Level 1 DFD:**



## Level 2 DFD:

