

## Assignment 5

### OCL Document

- Context user::  
Invariant: self.login == true
- Context super\_admin:: group\_request(group\_id: int): bool  
Pre: group\_id > 0  
Post: group->exists()
- Context super\_admin:: remove\_user(user\_id: int): bool  
Pre: user\_id > 0 and user->exists()  
Post: user->delete()
- Context super\_admin:: delete\_group(group\_id: int): bool  
Pre : group\_id > 0 and group->exists()  
Post: group->delete()
- Context group\_admin:: user\_request(user\_id: int): bool  
Pre: user\_id > 0  
Post: user->exists()
- Context group\_admin:: remove\_user(user\_id: int): bool  
Pre: user->exists()  
Post: user->delete()
- Context group\_admin:: delete\_event(event\_id: int): bool  
Pre: event\_id > 0 and event->exists()  
Post: event->delete()
- Context group::  
Inv: user->exists()
- Context group:: create\_group(user): bool  
Pre: user->exists()  
Post: group->exists()

- Context events::  
Inv: group->exists()
- Context events:: create\_event(event\_id: int, event\_name: String, event\_description: String, members: int):  
Pre: event\_id > 0 and event\_name.length > 0 and event\_description.length > 0 and members > 0  
Post: event->exists()
- Context post::  
Inv: group->exists()
- Context post:: create\_post(post\_id: int, content: string, reply\_id: int): bool  
Pre: post\_id > 0 and group->exists()  
Post: post->exists()
- Context post:: delete\_post(post\_id: int): bool  
Pre: post\_id > 0 and post->exists()  
Post: post->delete()