Sequence Diagram: Make Groups

Instructor

: GroupMaker

gss : GroupSizingStrategy

mps : MandatoryPartnerStrategy

fps : ForbiddenPartnerStrategy

pgcs : PartialGroupCompletionStrategy

sbs : SkillBalancingStrategy

classList[] : Student

groupList[] : Group

1: generateGroups() : void

2: assignGroupSizes(groupSize : int = groupSize, groupList : ArrayList<Group> = groupList, classList : ArrayList<Student> = classList) : void

3: add(new Group(group size): Group)

4: enforceGroups(groupList : ArrayList<Group> = groupList, classList : ArrayList<Student> = classList) : void

5: getMandatoryPartners() : ArrayList<Student>

6: getEmptyGroup(): Group

7: setGroupList(getMandatoryPartners(): ArrayList,Student>)

8: preventGroups(groupList : ArrayList<Group> = groupList, classList : ArrayList<Student> = classList) : void

9: getForbiddenPartners() : ArrayList<Student>

Loop Groups
10: hasForbiddenStudent(Student):bollean

if ! hasForbiddenStudent(Student)
11: addStudent(Student)

12: completeGroups(groupList : ArrayList<Group> = groupList, classList : ArrayList<Student> = classList) : void

Loop Groups
13: isFull()

if ! isFull()
14: addStudent(Student)

15: groupByScore(groupSize : int = groupSize, groupList : ArrayList<Group> = groupList, classList : ArrayList<Student> = classList) : void

16: sortByScore()

Loop Groups
17: addStudent(Student)

18: getGroupList() : ArrayList<Group>

19: groupList.toString()