

ACTIVITY

```
public abstract class TeachingActivity {  
  
    private Long id;  
  
    private Subject subject;  
  
    private DayOfWeek day;  
  
    private int startHour;  
  
    private int durationInHours;  
  
    private String roomId;  
  
    private Set<Teacher> teachers = new HashSet<>();  
...}
```

```
public class CourseActivity extends TeachingActivity {  
  
    private StudentsYear year;  
...}
```

```
public class LabActivity extends TeachingActivity {  
  
    private StudentsGroup group;  
...}
```

YEAR-GROUP

```
public class StudentsGroup {  
  
    private Long id;  
  
    private String code;  
  
    private StudentsYear year;  
  
    private Set<LabActivity> labs = new HashSet<>();  
  
    private List<String> emails = new ArrayList<>();  
    ...}
```

```
public class StudentsYear {  
  
    private Long id;  
  
    private String code;  
  
    private List<StudentsGroup> groups = new ArrayList<>();  
  
    private Set<CourseActivity> courses = new HashSet<>();  
    ...}
```

← Preserving Order !

TEACHER-SUBJECT

```
public class Teacher {  
    public enum Grade { LECTURER, PROFESSOR, ASSISTENT}  
  
    private Long id;  
  
    private String name;  
  
    private Grade grade;  
  
    private TeacherDetails details;  
  
    private List<ContactChannel> channels = new ArrayList<>();  
  
    private Set<Subject> heldSubjects = new HashSet<>() ;  
  
    private Set<TeachingActivity> activities = new HashSet<>();  
  
    private DayOfWeek counselingDay;  
    private int counselingStartHour;  
    private int counselingDurationInHours;  
    private String counselingRoomId;  
...}
```

← sorted by type,
then by value

```
public class Subject {  
  
    private Long id;  
    private String name;  
    private boolean active;  
  
    private Teacher holderTeacher;  
  
    private List<TeachingActivity> activities = new ArrayList<>();  
...}
```

DETAILS

```
public class TeacherDetails {  
  
    private Long id;  
  
    private String cv; // large! Maybe byte[]  
    ...}
```

```
public class ContactChannel {  
    public enum Type { PERSONAL_PHONE, WORK_PHONE,... }  
  
    private Type type;  
  
    private String value;  
    ...}
```

```
public class TimeSlot { // hm...  
  
    private DayOfWeek day;  
  
    private int startHour;  
  
    private int durationInHours;  
  
    private String roomId;  
    ...}
```