#### VIRTUAL CAMPUS

- --admin number:integer
- -admins[\*]:Administrator
- -prof\_number:integer
- -proflist[\*]:Professor
- -degree\_number:integer
- -degreelist[\*]:Degree
- -seminar number:integer
- -seminalist[\*]:Seminar
- -currentuser:User\*
- -fdp\_number:integer
- -projectlist:FDP\*
- +VirtualCampus()
- +~VirtualCampus()
- +addDegree()
- +addFDP()
- +addSeminar()
- +addCourse()
- +start()
- +run()
- +end()

#### DATE

- -day:integer
- -month:integer
- -year:integer
- +Date(d=1: integer, m=1: integer, y=1: integer)
- +Date(other: const Date&)
- +getday():integer
- +setday(d: Integer)
- +getmonth():integer
- +setmonth(m: integer)
- +getyear():integer
- +setyear(y: integer)

### COURSE

- -credits:integer
- -studentlist[\*]: Link us res
- -degree: Degree\*
- teachers[2]: Link us res\*
- +Course (id="undefined":string, d=nullptr: Degree\*, c=6:integer, s="unknown":string, t=nullptr: Link\_us\_res \*\*)
- +Course (const Course&)
- +getcredits():integer
- +setcredits(c:integer)
- +addteacher(newteacher: Link\_us\_res\*)
- +addStudent(newstudent: Link\_us\_res\*)

#### **ADMINISTRATOR**

- -mycampus:VirtualCampus\*
- -createUser()
- -createResource()
- -createDeegree()
- +Administrator(id="xxxxxxx":string, vc=nullptr: VirtulCampus\*)
- +Administrator (ident:string, admin: const Administrator&)
- +menu()

## **RESOURCE**

#identification:string

### #status:string

- +Resource (id="undefined":string, s="unknown":string)
- +Resource(const Resource&)
- + ~Resource()
- +setIdentification(id:string)
- +getIdentification():string
- +setstatus(s:string)
- +getstatus():string
- +addteacher(newteacher: Link\_us\_res\*)
- +addstudent(newstudent: Link us res\*)

#### MARK

- -value:float
- -date\_graded:Mark
- +Mark(v=-1:float)
- +Mark(v:float, when:Date)
- +setvalue(v:float)
- +getvalue():float
- +setdate graded(when:Date)
- +setdate\_graded(day:integer, month:integer, year:integer)
- +getdate\_graded:Date

## PROFESSOR

#identifier:string

#courselist[\*]:Link\_us\_res
#fdplist[\*]:Link\_us\_res

#seminarlist[\*]:Link\_us\_res\*

- +Professor()
- + Professor(ident:string)
- +setidentifier(ident:string)
- +getidentifier:string
- + menu()

#### **USER**

+~ *User()* 

+menu()

+getidentifier():string

#### LINK US RES

- -userPtr: User
- -resourcePtr: Resource
- -partial[4]:Mark
- -final:Mark
- +Link\_us\_res(u=nullptr: User \*, r=nullptr:Resource \*)
- +checkHealth()
- +connectCourseUser()
- +checkUserKind():bool

# DEGREE -name:string -student number:integer -stulist: Student\* -course number:integer -courselist:Course\* +Degree() +Degree(n:string) +~Degree() +getname():string +searchStudentbyid(id:string): Student\* +getstudent number():integer +setname(n:string) +addCourse() +addStudent() +addFDP()

+showstudents()

+showcourses()

# **STUDENT** -SIN:integer -mydegree: const Degree\* -mycourses[\*]:Link\_us\_res -myseminars[\*]:Link us res -myfdp: Link us res\* -addCourse(link: Link\_us\_res \*) -addSeminar(link: Link us res \*) -addFDP(link: Link us res \*) +Student(sin=0:integer) +Student (sin:integer, d: Degree &) +Student(const Student &) +getSIN():integer +setSIN(s:integer) +getidentifier():string +enroll(res: Resource \*) +menu()

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SEMINAR
-coordinator: Link_us_res*
-speaker:Link us res*
-eventDate:Date
-maxseats:integer
-freeseats:integer
-students: Link_us_res*
+Seminar(id="undefined":string, s="unknown":string,
seatsValue=0:integer, spe=null:User*, coord=null:User*)
+Seminar(id="undefined":string, s="unknown":string,
seatsValue=0:integer, when:Date, spe=null:User*,
coord=null:User*)
+getmaxseats():const int
+setmaxseats(s:int)
+setdate(when:Date)
+getdate():const Date
setspeaker(spe:User *)
getspeaker():const Link us res
setcoordinator(coord:User *)
getcoordinator(:)const Link us res
addteacher(newteacher:Link us res*)
addstudent(newstudent:Link us res *)
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-tutor:Link_us_res*
-co_tutor:Link_us_res*
-student:Link_us_res*
+FDP(id="undefined":string, stu=nullptr: Link_us_res*, s="unknown":string, t=nullptr:Link_us_res*,
c_t=nullptr:Link_us_res*)
+FDP(other: const FDP&)
+gettuttor():const Link_us_res&
+settuttor(t:Link_us_res*)
+getco_tuttor():const Link_us_res&
+setco_tuttor(c_t:Link_us_res*)
+getstudent():const Link_us_res&
+setstudent(stu:Link_us_res*)
+addteacher(newteacher:Link_us_res*)
+addstudent(newstudent:Link_us_res*)
```