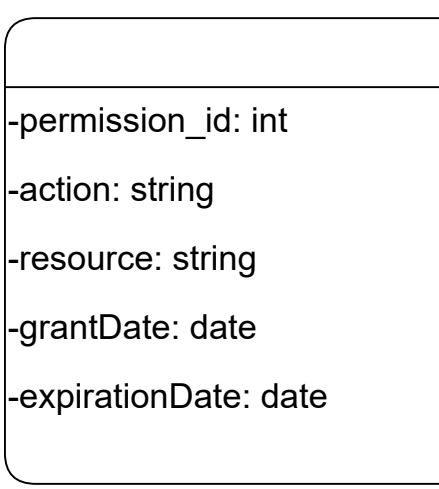
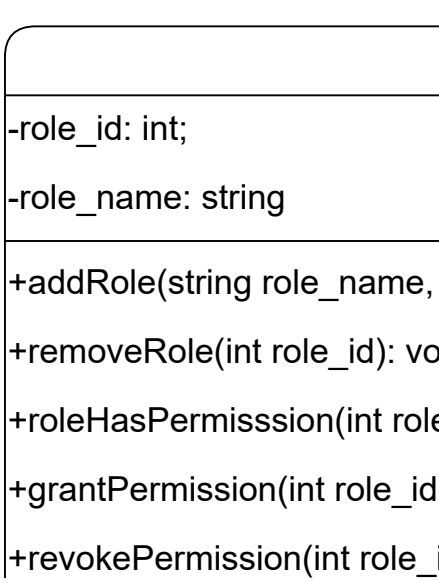
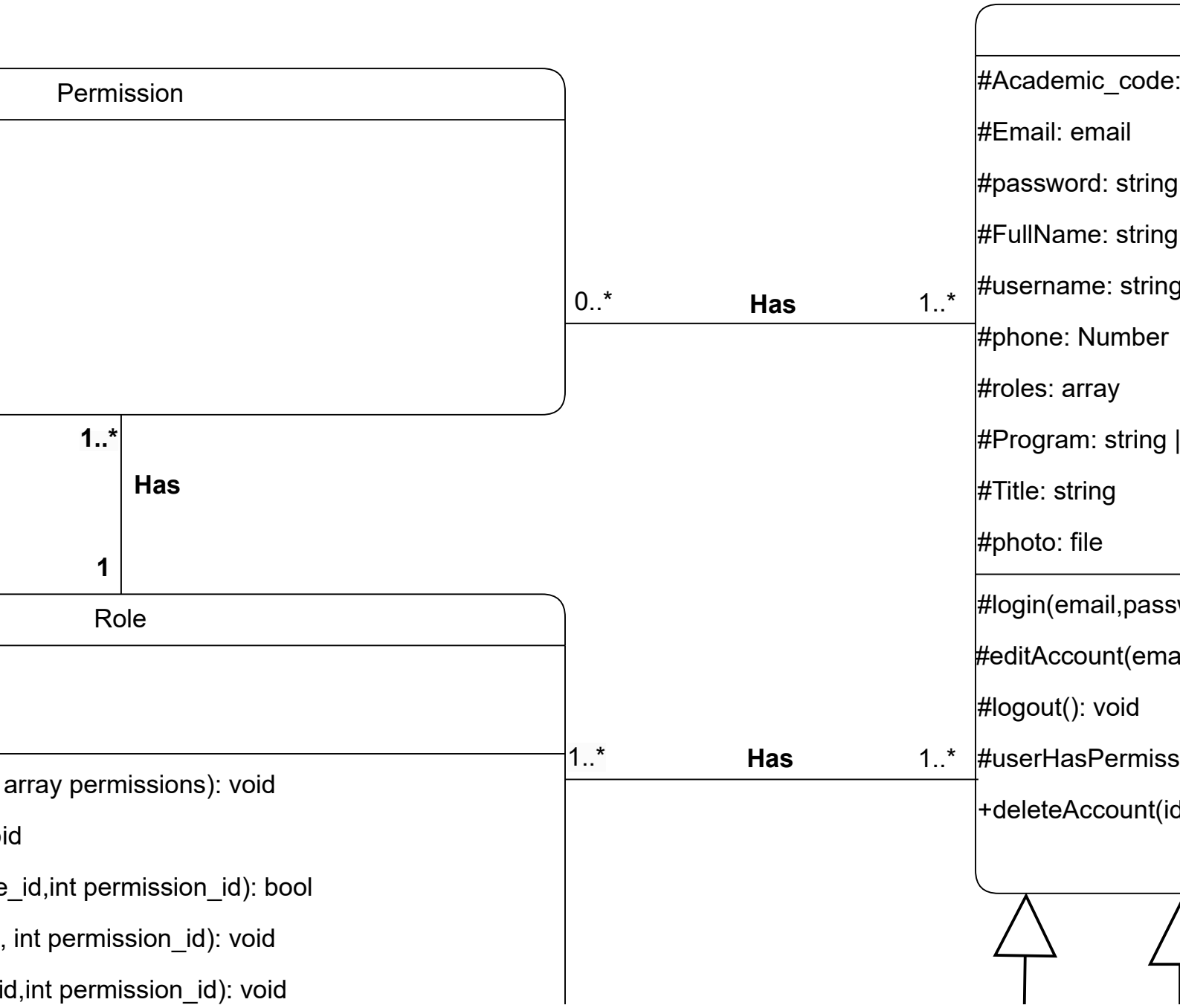
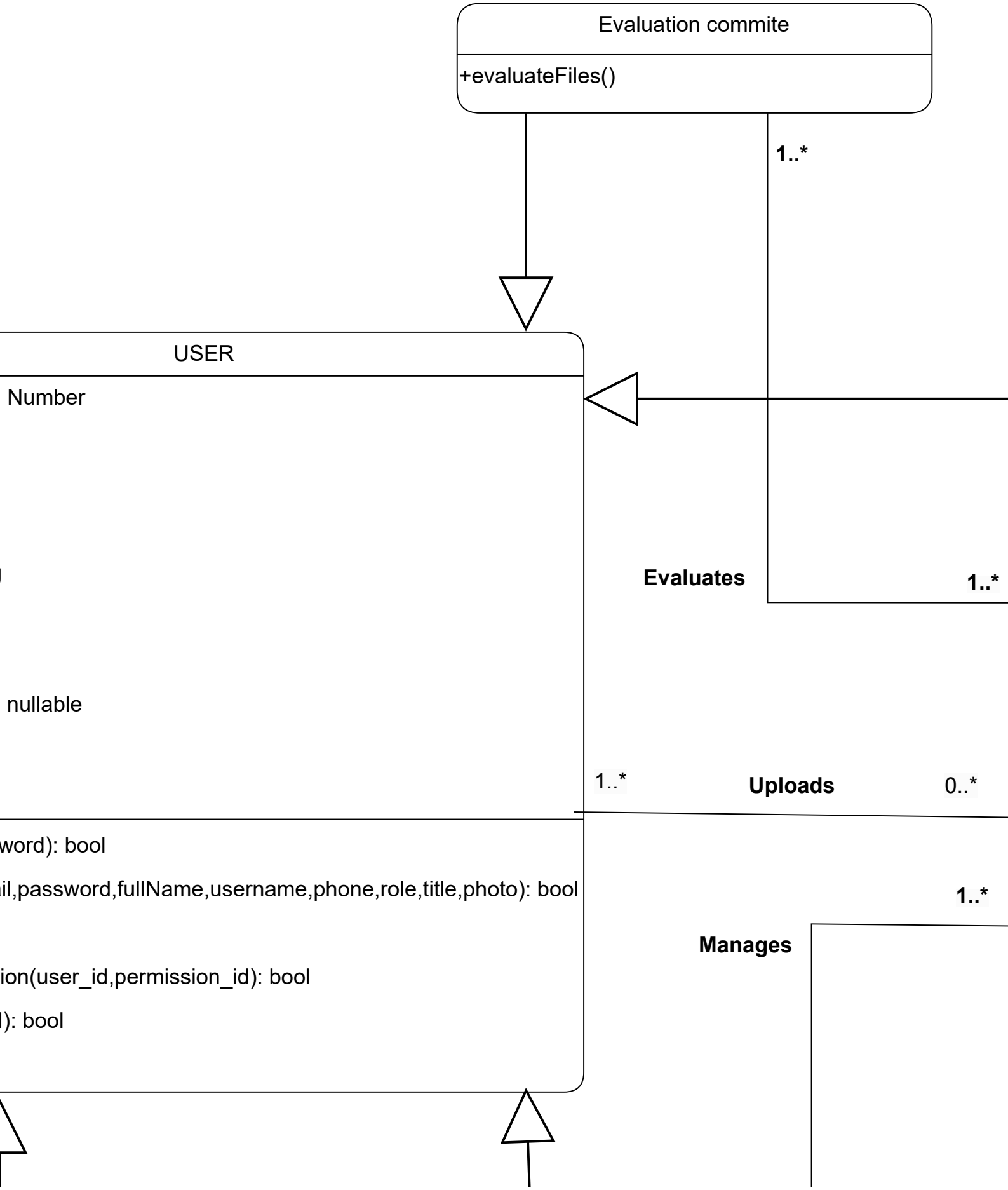
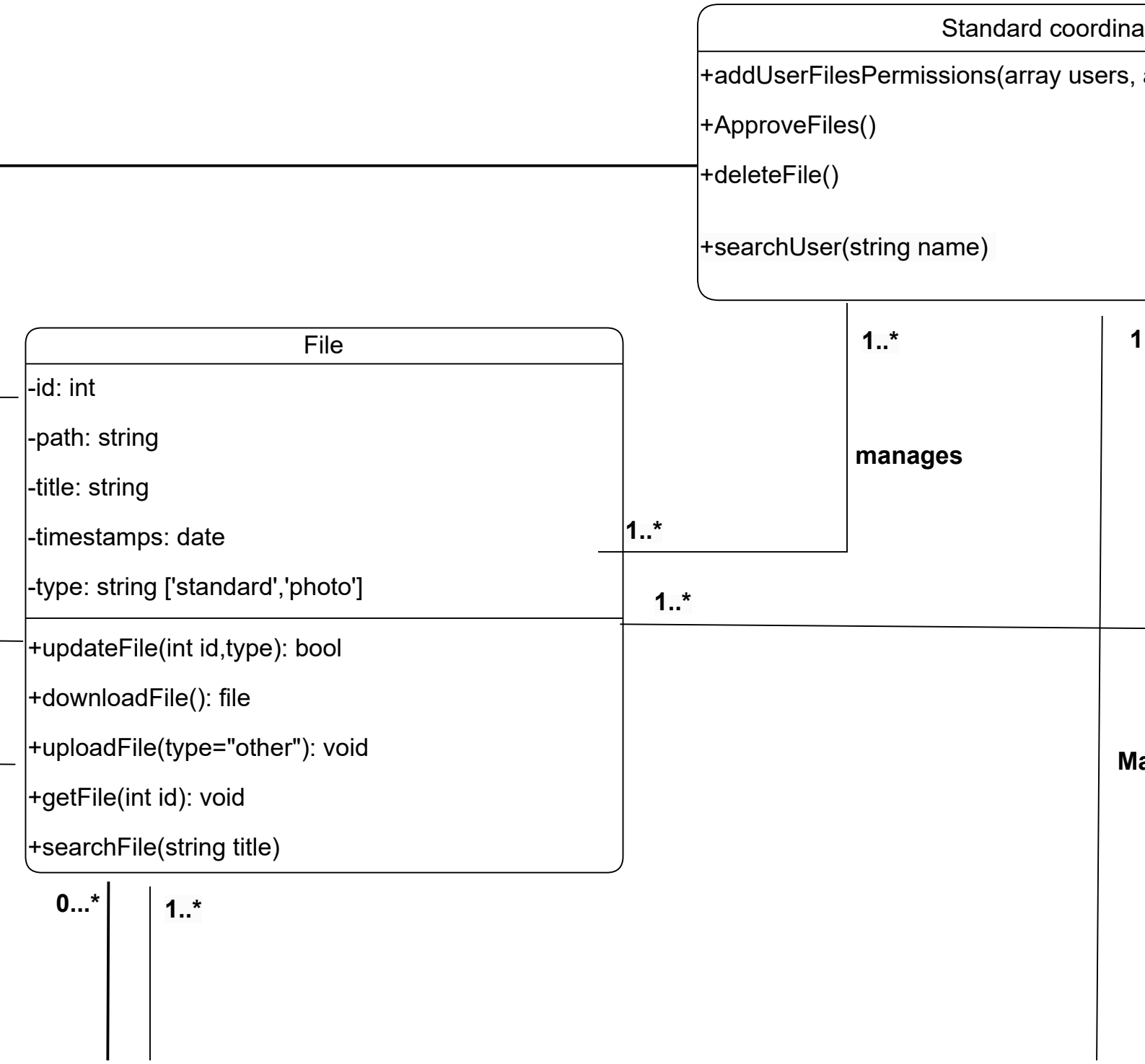
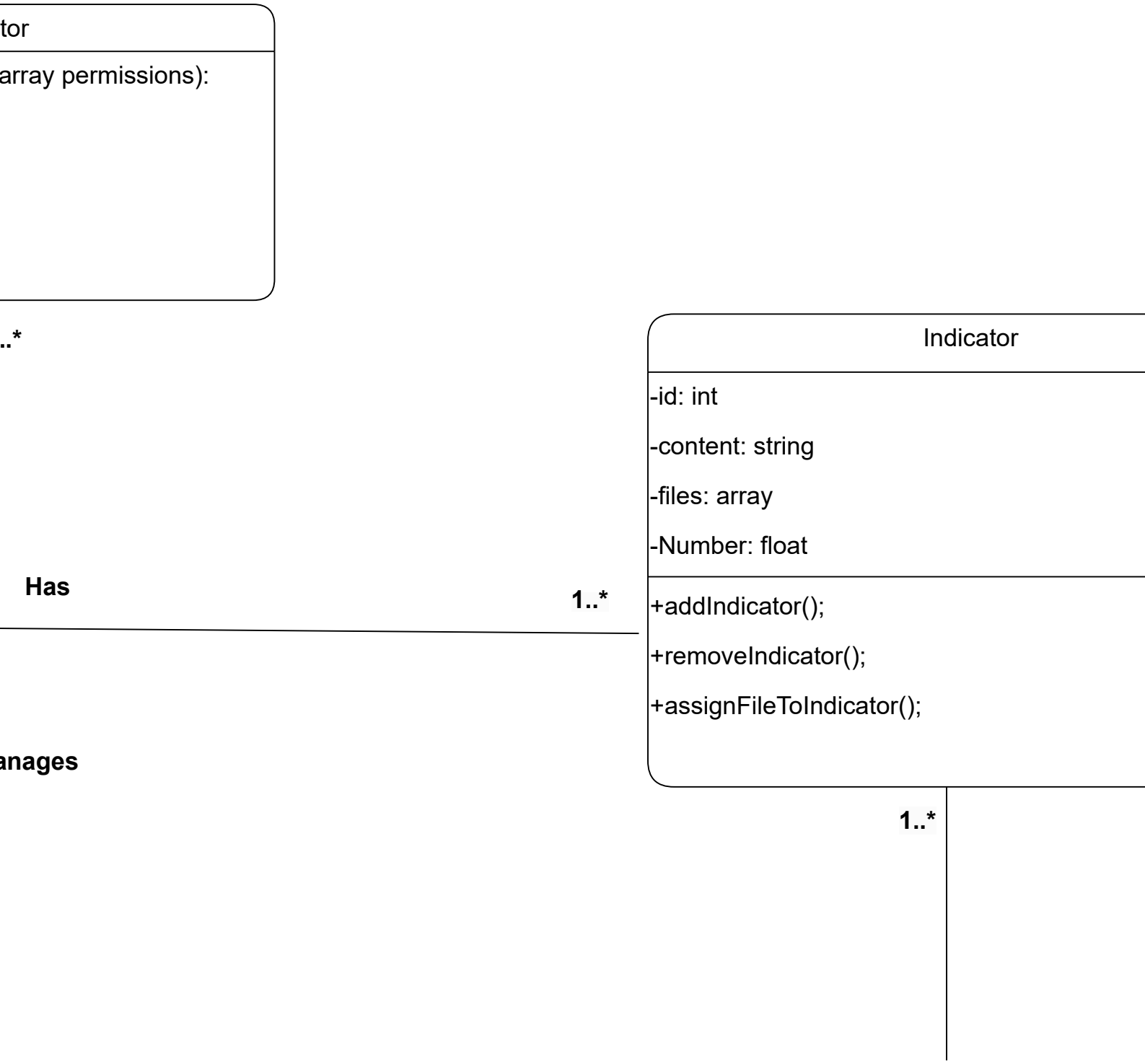

-permission_id: int
-action: string
-resource: string
-grantDate: date
-expirationDate: date


-role_id: int;
-role_name: string
+addRole(string role_name,
+removeRole(int role_id): vo
+roleHasPermisssion(int role
+grantPermission(int role_id
+revokePermission(int role_


Permission
0..*
Has
1..*
#Academic_code:
#Email: email
#password: string
#FullName: string
#username: string
#phone: Number
#roles: array
#Program: string |
#Title: string
#photo: file
1..*
Has
1
Role
1..*
Has
1..*
#login(email,passv
#editAccount(ema
#logout(): void
#userHasPermiss
+deleteAccount(id
array permissions): void
id
e_id,int permission_id): bool
, int permission_id): void
id,int permission_id): void


Evaluation commite
+evaluateFiles()
1..*
USER
Number
Evaluates
1..*
nullable
1..*
Uploads
0..*
word): bool
il,password,fullName,username,phone,role,title,photo): bool
1..*
Manages
ion(user_id,permission_id): bool
): bool


Standard coordina
+addUserFilesPermissions(array users,
+ApproveFiles()
+deleteFile()
+searchUser(string name)
1..*
manages
1..*
1
File
-id: int
-path: string
-title: string
-timestamps: date
-type: string ['standard','photo']
+updateFile(int id,type): bool
+downloadFile(): file
+uploadFile(type="other"): void
+getFile(int id): void
+searchFile(string title)
1..*
Ma
0...*
1..*

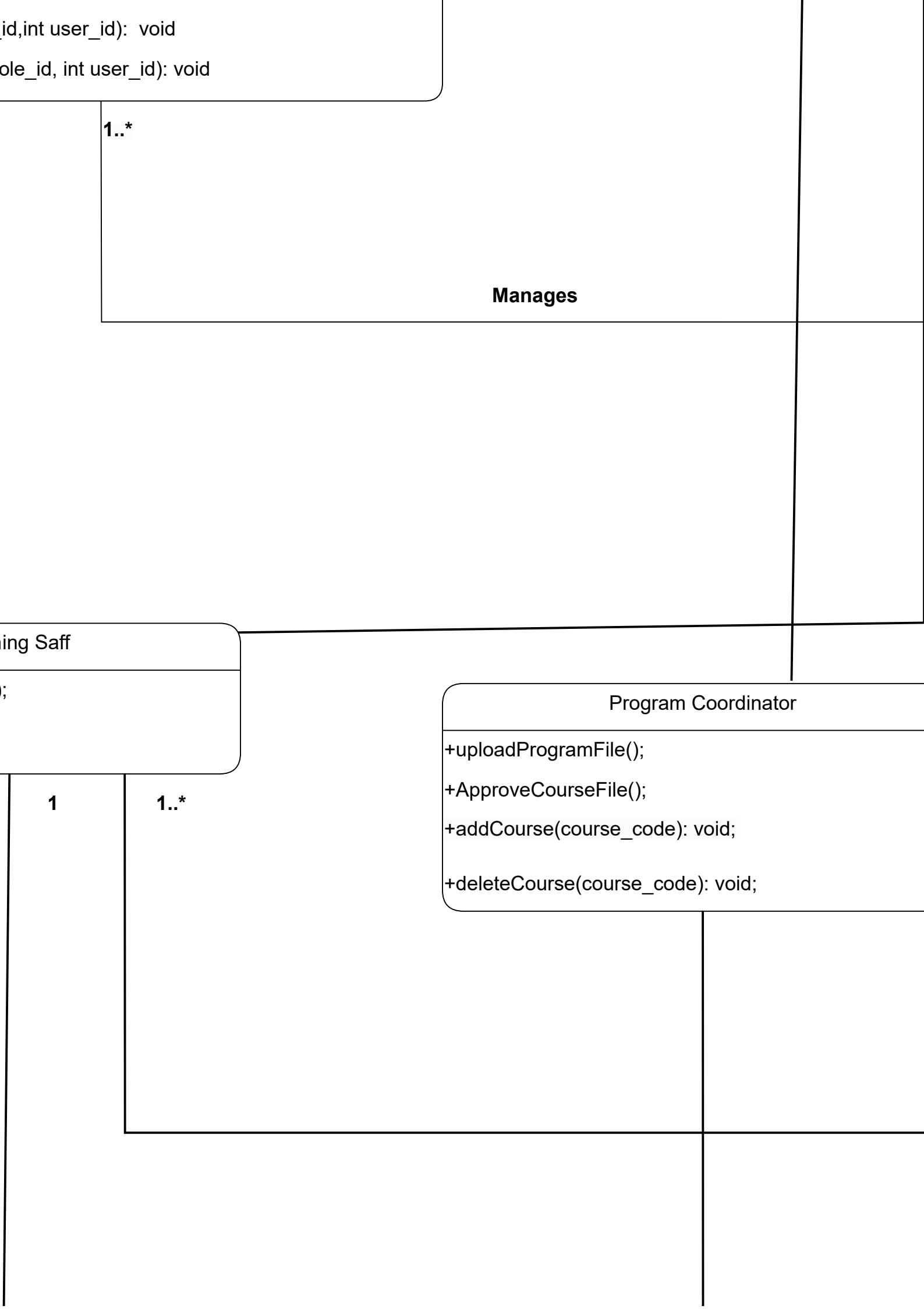

tor
array permissions):
..*
Indicator
-id: int
-content: string
-files: array
-Number: float
Has
1..*
+addIndicator();
+removeIndicator();
+assignFileToIndicator();
anages
1..*

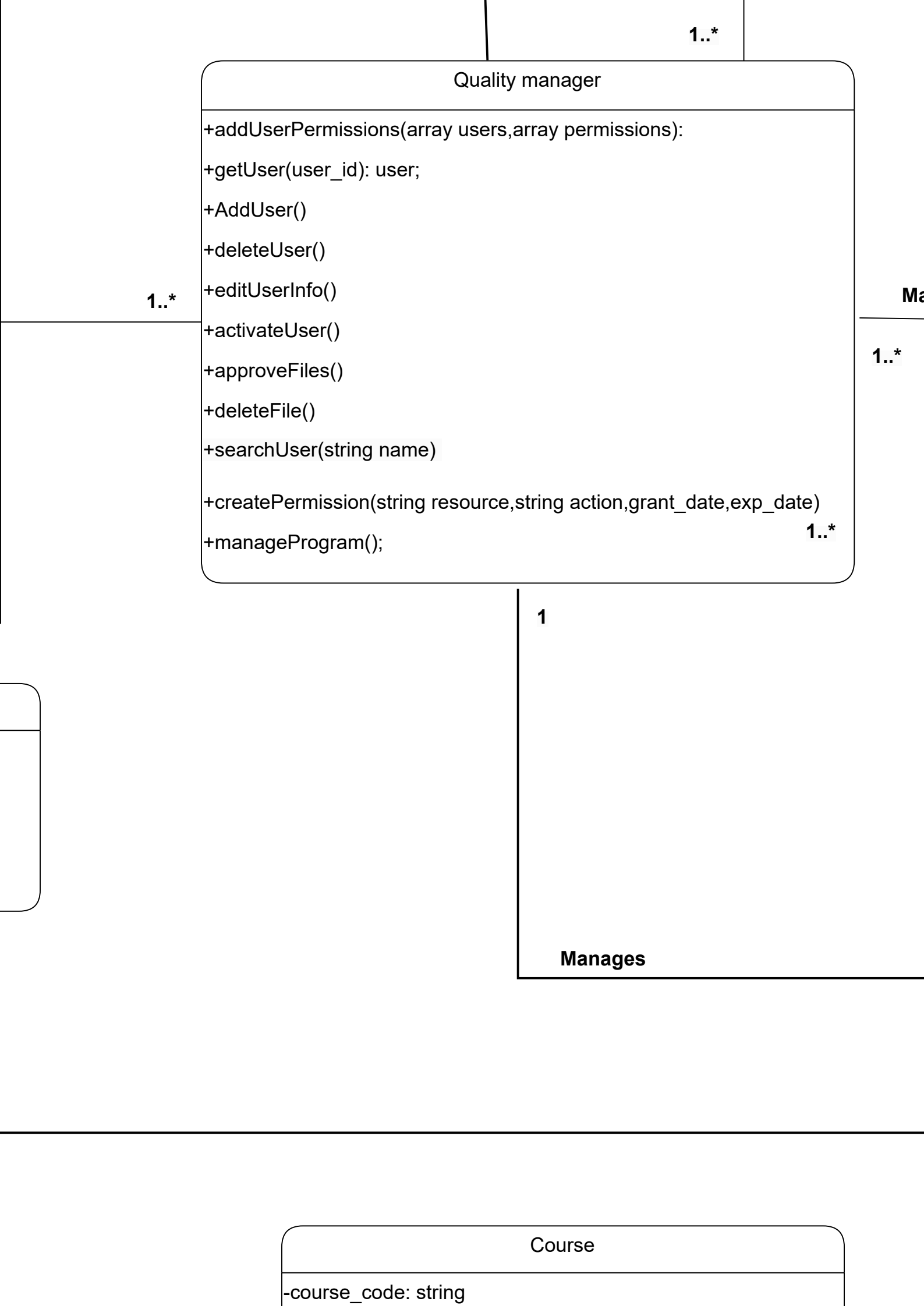
+assignRoleToUser(int role_

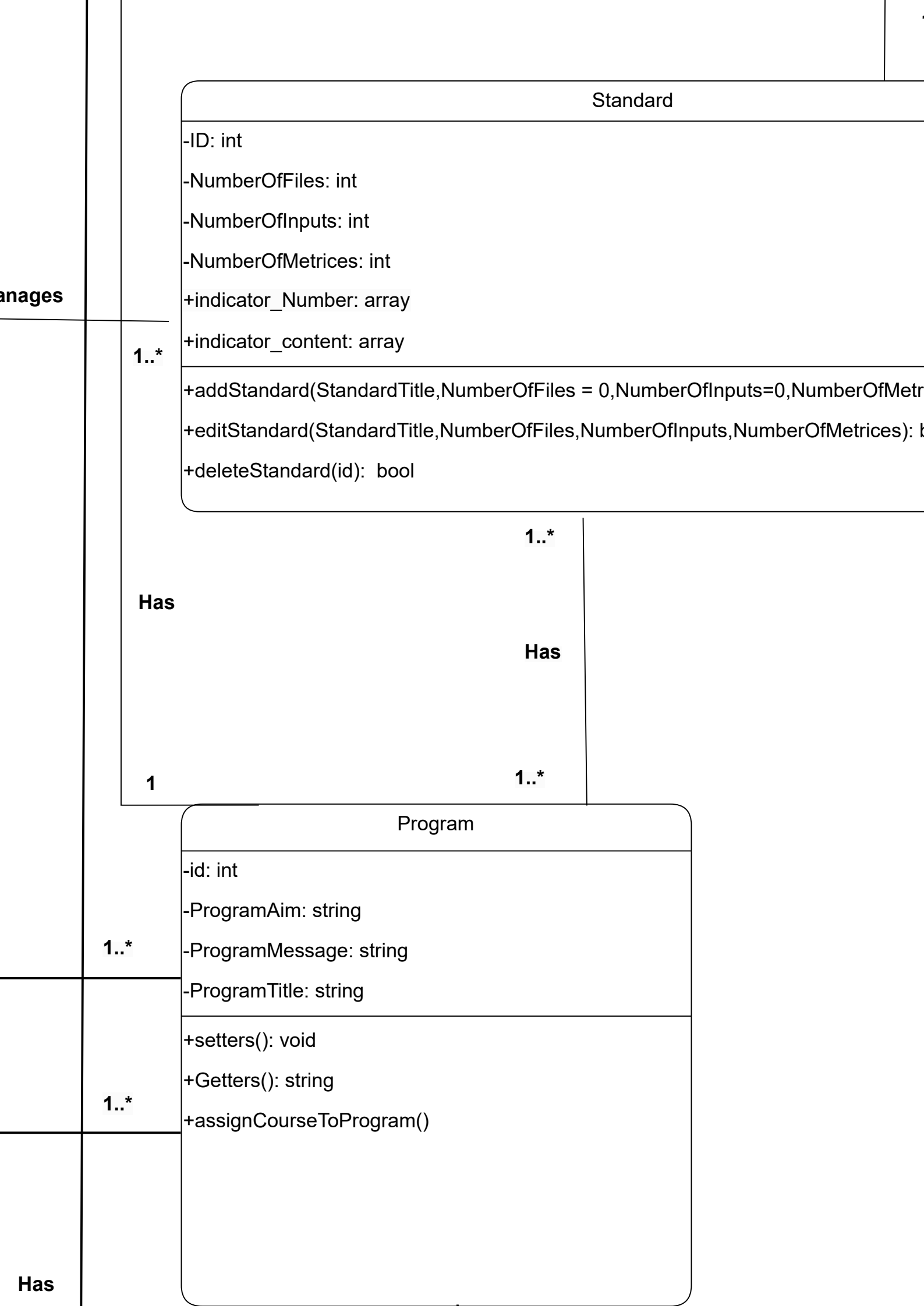
+removeRoleFromUser(int r

Teach

+uploadCourseFile(type)


id,int user_id): void
ole_id, int user_id): void
1..*
Manages
ing Saff
;
1
1..*
Program Coordinator
+uploadProgramFile();
+ApproveCourseFile();
+addCourse(course_code): void;
+deleteCourse(course_code): void;


1..*
Quality manager
+addUserPermissions(array users,array permissions):
+getUser(user_id): user;
+AddUser()
+deleteUser()
+editUserInfo()
+activateUser()
+approveFiles()
+deleteFile()
+searchUser(string name)
+createPermission(string resource,string action,grant_date,exp_date)
+manageProgram();
1..*
1..*
1..*
1
Manages
Course
-course_code: string


Standard
-ID: int
-NumberOfFiles: int
-NumberOfInputs: int
-NumberOfMetrices: int
+indicator_Number: array
+indicator_content: array
+addStandard(StandardTitle,NumberOfFiles = 0,NumberOfInputs=0,NumberOfMetr
+editStandard(StandardTitle,NumberOfFiles,NumberOfInputs,NumberOfMetrices): b
+deleteStandard(id): bool
anages
1..*
1..*
Has
Has
1
1..*
Program
-id: int
-ProgramAim: string
-ProgramMessage: string
-ProgramTitle: string
1..*
+setters(): void
+Getters(): string
+assignCourseToProgram()
1..*
Has

1

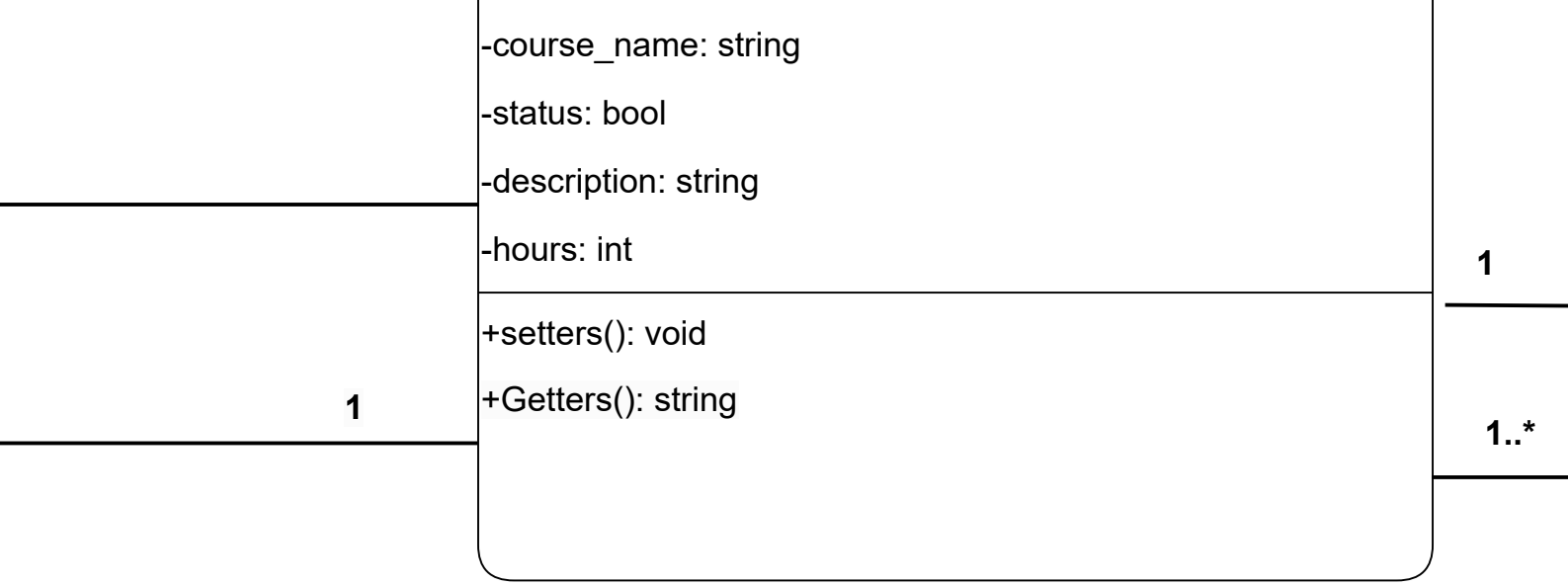
ices=0): bool

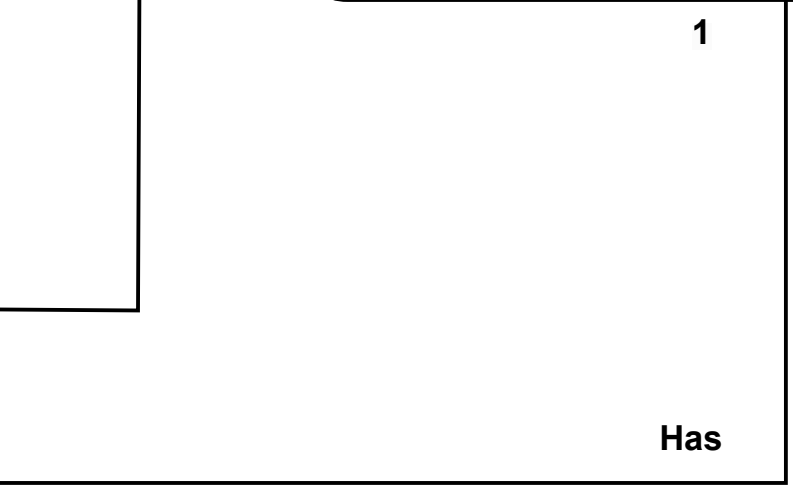
bool

1 Has

Manages

teach


-course_name: string
-status: bool
-description: string
-hours: int
+setters(): void
+Getters(): string
1
1
1..*


1
Has