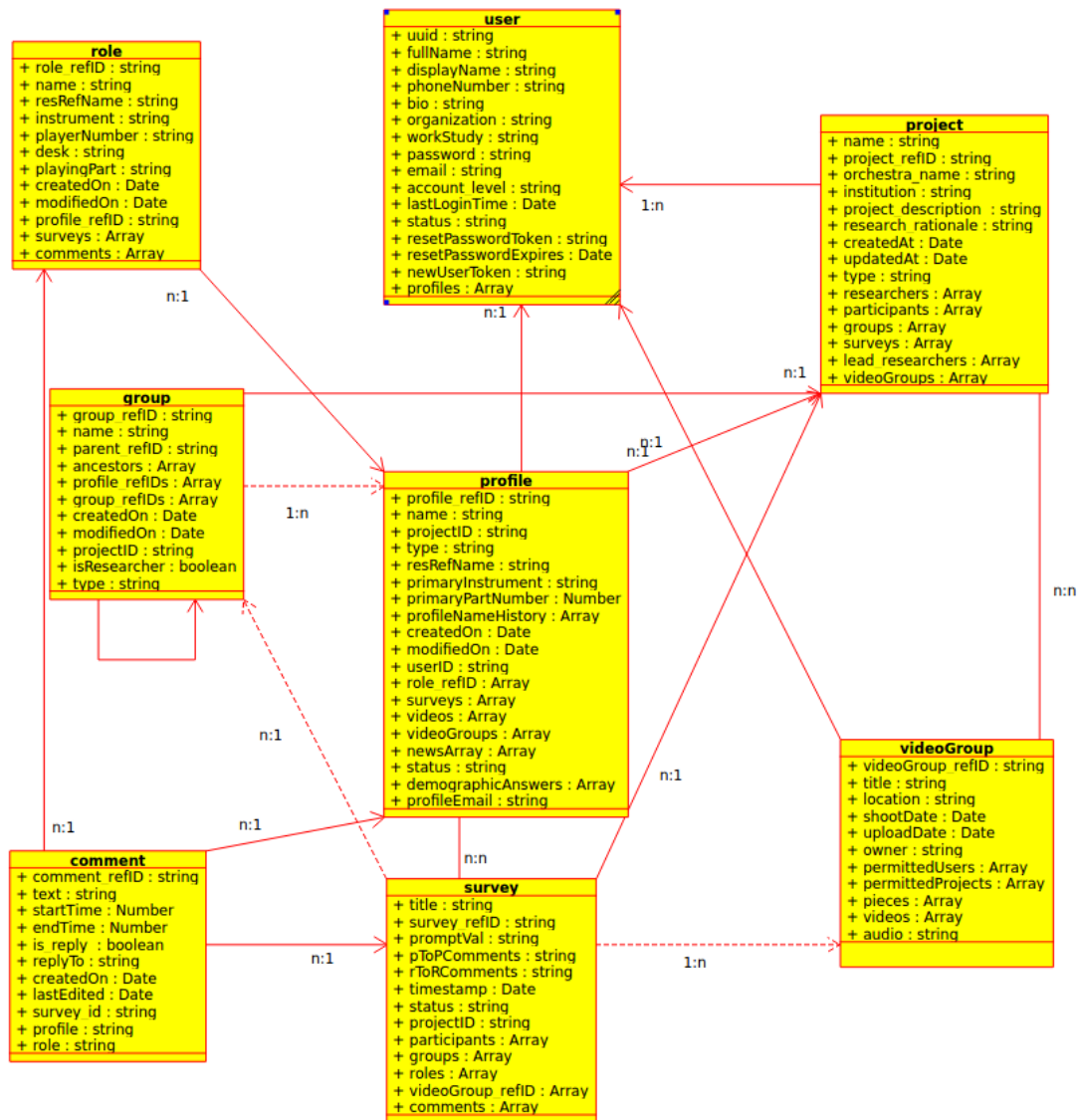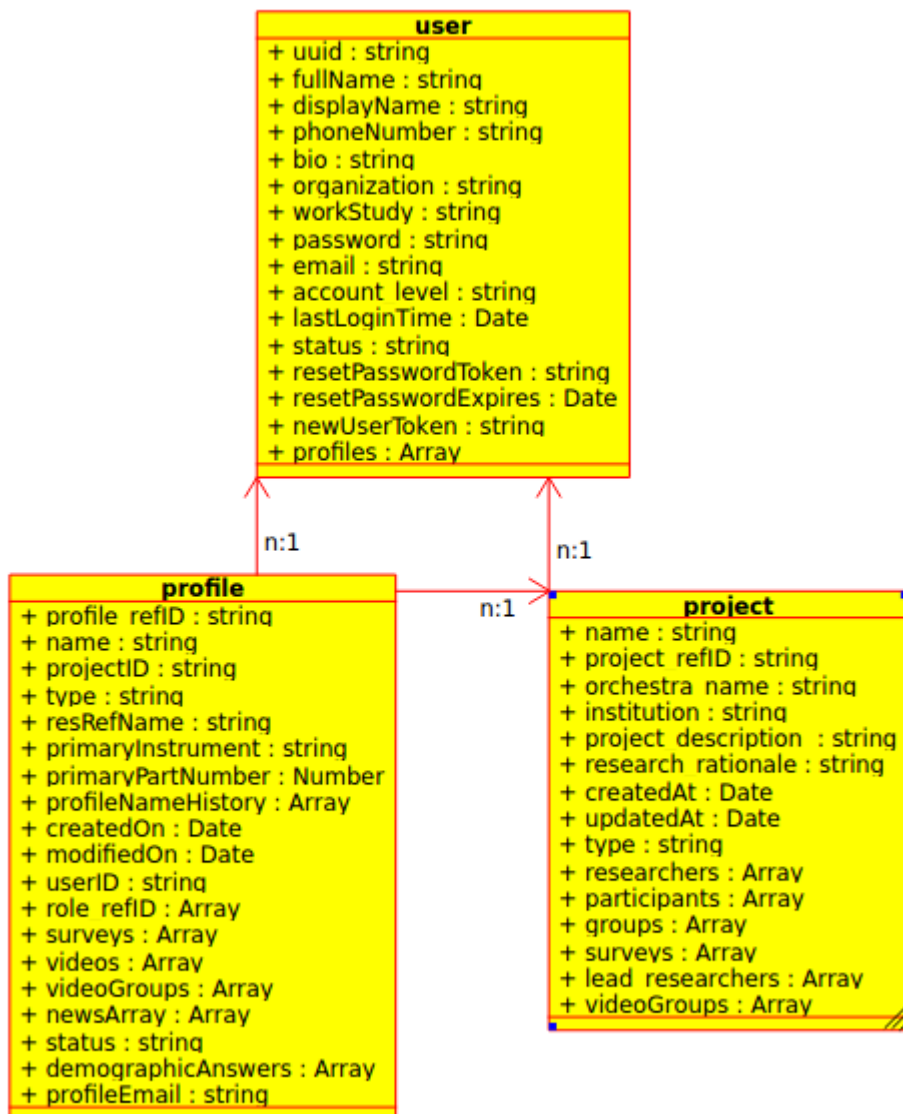# Data Model

Following diagram is a whole picture of the data model of the Merid-V2 application. By fully understanding the data model, the team is able to make sure which models should be changed according to the new requirement of the client and how to keep consistency between different models.

In each model, the fields of the model have also been provided for a detailed view of the data model. The numeric relationship between different models has also been displayed.

role
+ role_refID : string
+ name : string
+ resRefName : string
+ instrument : string
+ playerNumber : string
+ desk : string
+ playingPart : string
+ createdOn : Date
+ modifiedOn : Date
+ profile_refID : string
+ surveys : Array
+ comments : Array

user
+ uuid : string
+ fullName : string
+ displayName : string
+ phoneNumber : string
+ bio : string
+ organization : string
+ workStudy : string
+ password : string
+ email : string
+ account_level : string
+ lastLoginTime : Date
+ status : string
+ resetPasswordToken : string
+ resetPasswordExpires : Date
+ newUserToken : string
+ profiles : Array

project
+ name : string
+ project_refID : string
+ orchestra_name : string
+ institution : string
+ project_description : string
+ research_rationale : string
+ createdAt : Date
+ updatedAt : Date
+ type : string
+ researchers : Array
+ participants : Array
+ groups : Array
+ surveys : Array
+ lead_researchers : Array
+ videoGroups : Array

group
+ group_refID : string
+ name : string
+ parent_refID : string
+ ancestors : Array
+ profile_refIDs : Array
+ group_refIDs : Array
+ createdOn : Date
+ modifiedOn : Date
+ projectID : string
+ isResearcher : boolean
+ type : string

profile
+ profile_refID : string
+ name : string
+ projectID : string
+ type : string
+ resRefName : string
+ primaryInstrument : string
+ primaryPartNumber : Number
+ profileNameHistory : Array
+ createdOn : Date
+ modifiedOn : Date
+ userID : string
+ role_refID : Array
+ surveys : Array
+ videos : Array
+ videoGroups : Array
+ newsArray : Array
+ status : string
+ demographicAnswers : Array
+ profileEmail : string

videoGroup
+ videoGroup_refID : string
+ title : string
+ location : string
+ shootDate : Date
+ uploadDate : Date
+ owner : string
+ permittedUsers : Array
+ permittedProjects : Array
+ pieces : Array
+ videos : Array
+ audio : string

comment
+ comment_refID : string
+ text : string
+ startTime : Number
+ endTime : Number
+ is_reply : boolean
+ replyTo : string
+ createdOn : Date
+ lastEdited : Date
+ survey_id : string
+ profile : string
+ role : string

survey
+ title : string
+ survey_refID : string
+ promptVal : string
+ pToPComments : string
+ rToRComments : string
+ timestamp : Date
+ status : string
+ projectID : string
+ participants : Array
+ groups : Array
+ roles : Array
+ videoGroup_refID : Array
+ comments : Array

1:n   n:1   n:1   0:1   n:1   n:n   n:n   n:1   1:n

The following are examples of specific relationships between a few different types of data in detail.

Example 1: user-profile-project

user
+ uuid : string
+ fullName : string
+ displayName : string
+ phoneNumber : string
+ bio : string
+ organization : string
+ workStudy : string
+ password : string
+ email : string
+ account level : string
+ lastLoginTime : Date
+ status : string
+ resetPasswordToken : string
+ resetPasswordExpires : Date
+ newUserToken : string
+ profiles : Array

n:1   n:1

profile
+ profile refID : string
+ name : string
+ projectID : string
+ type : string
+ resRefName : string
+ primaryInstrument : string
+ primaryPartNumber : Number
+ profileNameHistory : Array
+ createdOn : Date
+ modifiedOn : Date
+ userID : string
+ role refID : Array
+ surveys : Array
+ videos : Array
+ videoGroups : Array
+ newsArray : Array
+ status : string
+ demographicAnswers : Array
+ profileEmail : string

n:1

project
+ name : string
+ project refID : string
+ orchestra name : string
+ institution : string
+ project description : string
+ research rationale : string
+ createdAt : Date
+ updatedAt : Date
+ type : string
+ researchers : Array
+ participants : Array
+ groups : Array
+ surveys : Array
+ lead researchers : Array
+ videoGroups : Array

This model shows:

- A user can create many projects, but a project can only be created by one user.
- A researcher who creates a project can share it with other researchers and can also add lead_researchers to this project.
- A user can create many profiles, but a profile can only be created by one user. A profile is related to only one project, which means a researcher has to request again if they want to have the same person participate on another project.
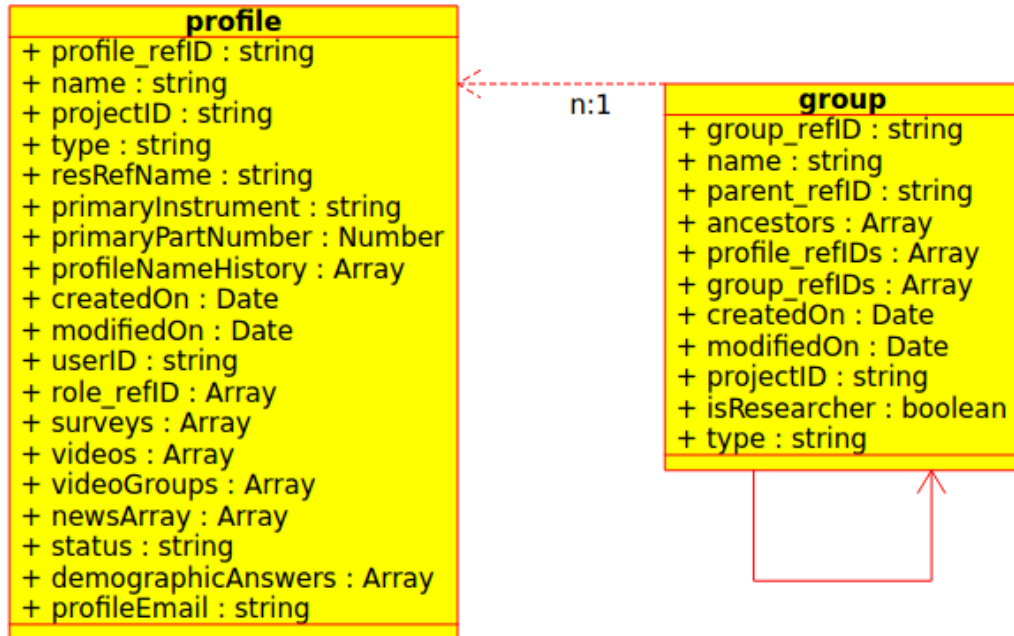- A participant can be added to many surveys belonging to one project.

Example 2: project-survey
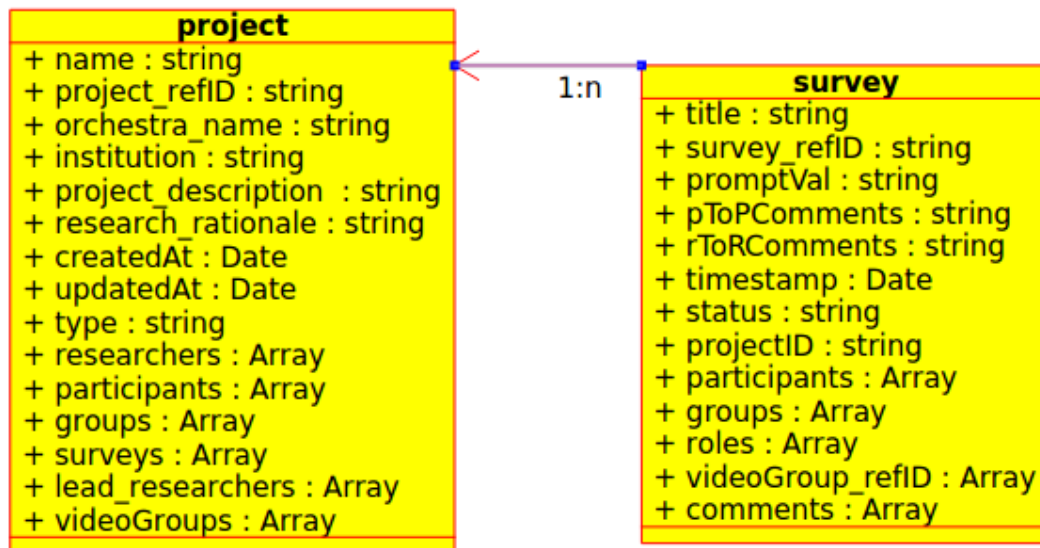
This model shows:
- A survey created under a certain project can only be used in that project.
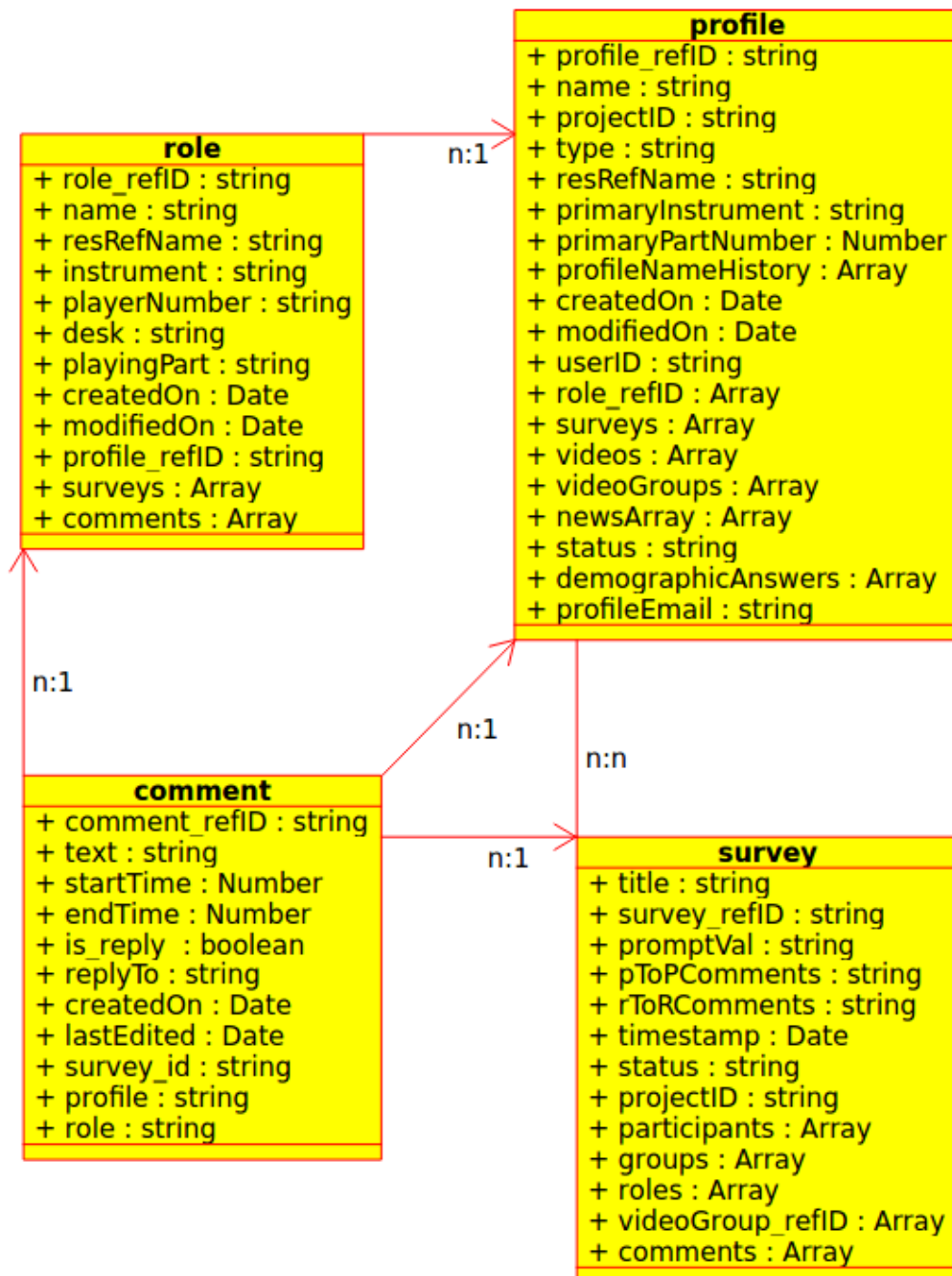- A project can contain many surveys.

Example 3: profile-group


```
              profile
+ profile_refID : string
+ name : string                                              group
+ projectID : string                  n:1          + group_refID : string
+ type : string                                    + name : string
+ resRefName : string                              + parent_refID : string
+ primaryInstrument : string                       + ancestors : Array
+ primaryPartNumber : Number                       + profile_refIDs : Array
+ profileNameHistory : Array                       + group_refIDs : Array
+ createdOn : Date                                 + createdOn : Date
+ modifiedOn : Date                                + modifiedOn : Date
+ userID : string                                  + projectID : string
+ role_refID : Array                               + isResearcher : boolean
+ surveys : Array                                  + type : string
+ videos : Array
+ videoGroups : Array
+ newsArray : Array
+ status : string
+ demographicAnswers : Array
+ profileEmail : string
```

This model shows:

- A group can have an array of profiles as participants; it can also include other groups to form a bigger group.

Example 4: profile-role-comment-survey

profile
+ profile_refID : string
+ name : string
+ projectID : string
+ type : string
+ resRefName : string
+ primaryInstrument : string
+ primaryPartNumber : Number
+ profileNameHistory : Array
+ createdOn : Date
+ modifiedOn : Date
+ userID : string
+ role_refID : Array
+ surveys : Array
+ videos : Array
+ videoGroups : Array
+ newsArray : Array
+ status : string
+ demographicAnswers : Array
+ profileEmail : string

role
+ role_refID : string
+ name : string
+ resRefName : string
+ instrument : string
+ playerNumber : string
+ desk : string
+ playingPart : string
+ createdOn : Date
+ modifiedOn : Date
+ profile_refID : string
+ surveys : Array
+ comments : Array

n:1

n:1

n:1

n:1

n:n

comment
+ comment_refID : string
+ text : string
+ startTime : Number
+ endTime : Number
+ is_reply : boolean
+ replyTo : string
+ createdOn : Date
+ lastEdited : Date
+ survey_id : string
+ profile : string
+ role : string

survey
+ title : string
+ survey_refID : string
+ promptVal : string
+ pToPComments : string
+ rToRComments : string
+ timestamp : Date
+ status : string
+ projectID : string
+ participants : Array
+ groups : Array
+ roles : Array
+ videoGroup_refID : Array
+ comments : Array

This model shows:

- A role in the orchestra can only belong to one profile.

- A participant can play different roles in the orchestra.

- A comment can only be made by one participant with a certain role.

● A survey can have many participants and their comments.

Example 5: survey-video group-user
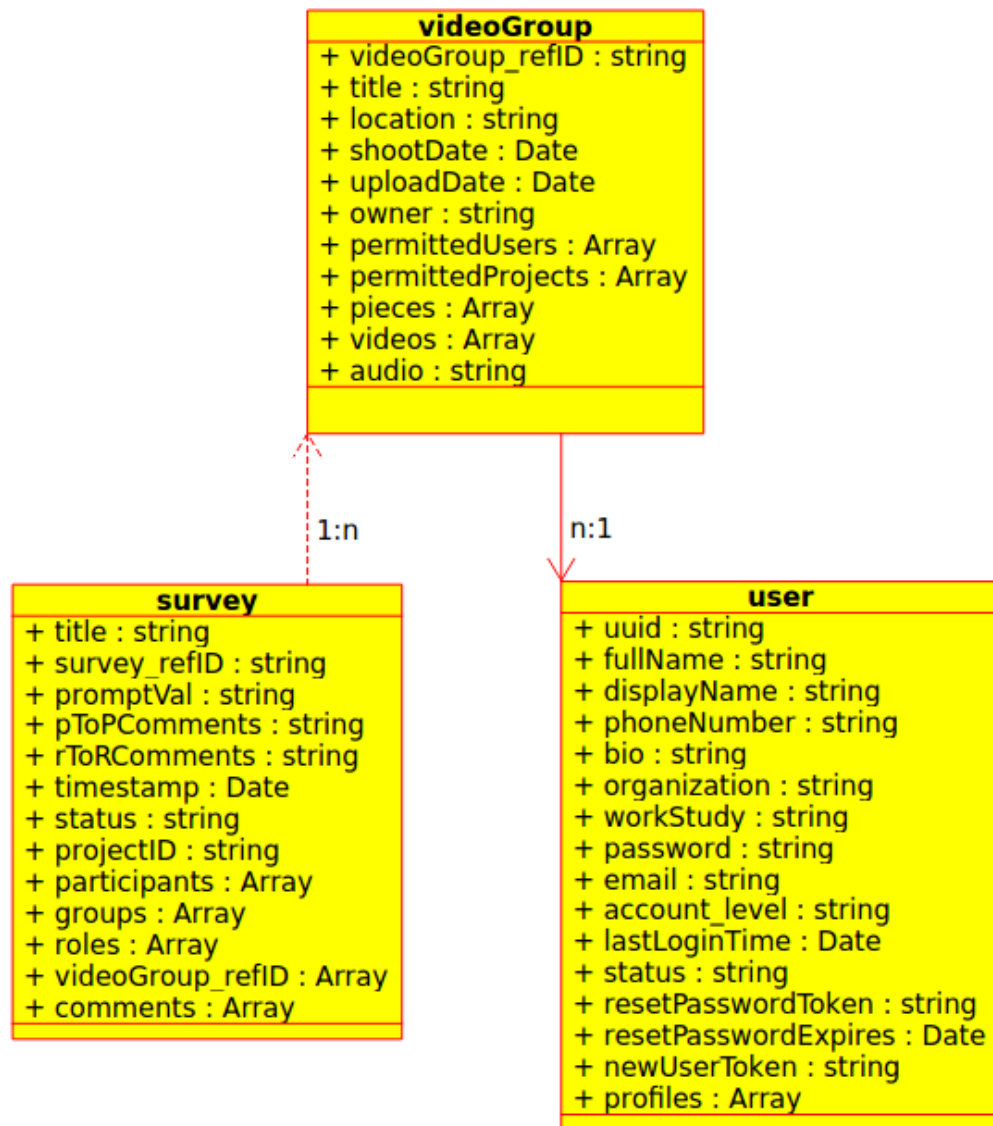
This model shows:

● A video group can only be created by one owner, which is usually the researcher. But a researcher can create more than one video group.

● A survey can contain different video groups.