

Your task is to design a system that keeps track of meeting recordings. Please develop a solution in Python using a framework like Flask or CherryPy **OR** GoLang using net/http. You should include some unit tests (sample input and output) along with your code that demonstrate that you've been able to test your code. Please **do not** create a webapp to interact with your backend. We only need the APIs.

Please let us know any assumptions that you made or any limitations that you think we should know about. Use your best judgment if anything is not clear.

Include steps on how we can run and test your project.

The goal here is to demonstrate your ability to design and implement a simple REST-based web service. Please try to keep your code concise and don't overcomplicate things. Use the correct libraries to help you implement your code.

A service like Fuze allows participants to record their meetings. A meeting is identified by a numeric identifier. A recording is identified by a URL that points to the location of the recording in S3. A meeting is owned by a host. A host is identified by a numeric identifier and is also associated with an email address.

A recording can be private or public. If it is private it is only viewable by the host. If it is public then it is:

- (1) It is viewable by a list of viewers. The viewers are identified by email addresses.
- (2) The recording has an associated password which must be provided to get access to the meeting.

Here's what we'd like you to do:

1. Design a data model to deal with the above relationships. Implement this data model using sqlalchemy or gorm and sqlite3.
2. Build a set of APIs that you believe:
  - Allow the meetings service do everything that it needs to do with recordings. As a hint the service needs to at least create, delete and share recordings.
  - Allow a client application to determine whether a user has access to a recording

Please submit your code, unit tests and a brief explanation of why you chose the APIs that you did.