

Scenario

A startup company has decided to create a business model around monetizing vintage media.

They have converted classic 8-track cassettes, tapes, and vinyl into a digital form. Additionally, DVD, VHS, and Beta media has been converted into stream worthy content. They want a media catalog that supports the following operations. The media catalog should report the total number of recordings therein. It should also allow for new recordings to be added to the catalog. The capability to remove recordings must be provided as well. For financial projections, the catalog should have a way to compute the overall streaming revenue for the curated digital content.

The total number of recordings in the catalog should be defined upfront to control catalog size and to keep it manageable.

All recordings have a release date and an original purchase price when the rights were purchased from the publisher. The audio recording is special type of recording that tracks the total number of times it can be streamed. A video recording is also a recording that tracks its running time in minutes. All recordings need to be able to calculate their streaming cost. The audio recording's streaming cost is determined by multiplying the number of times it can be streamed by its original purchase price. The video recording calculates its streaming cost by multiplying its running time by 10 cents. If the video was released within the past 3 months a premium of \$7.00 is added to the streaming cost.