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COMP 303: Software Design

A3 Design Description

For this assignment, I made sure to use many of the new design patterns I have learned in class.

First, I made **Library** a **Singleton** to ensure that there was only one instance of the **Library**. Since the **Library** constructor is *private*, the Client can create **Library** through the *getInstance()* method.

Second, I followed the **Flyweight** design pattern for **Song**, **Episode**, and **Podcast** to ensure the Client could not create duplicate objects. Each class had its according cache to store the current list of created objects. Overriding the equals method came in hand when checking if the objects already existed.