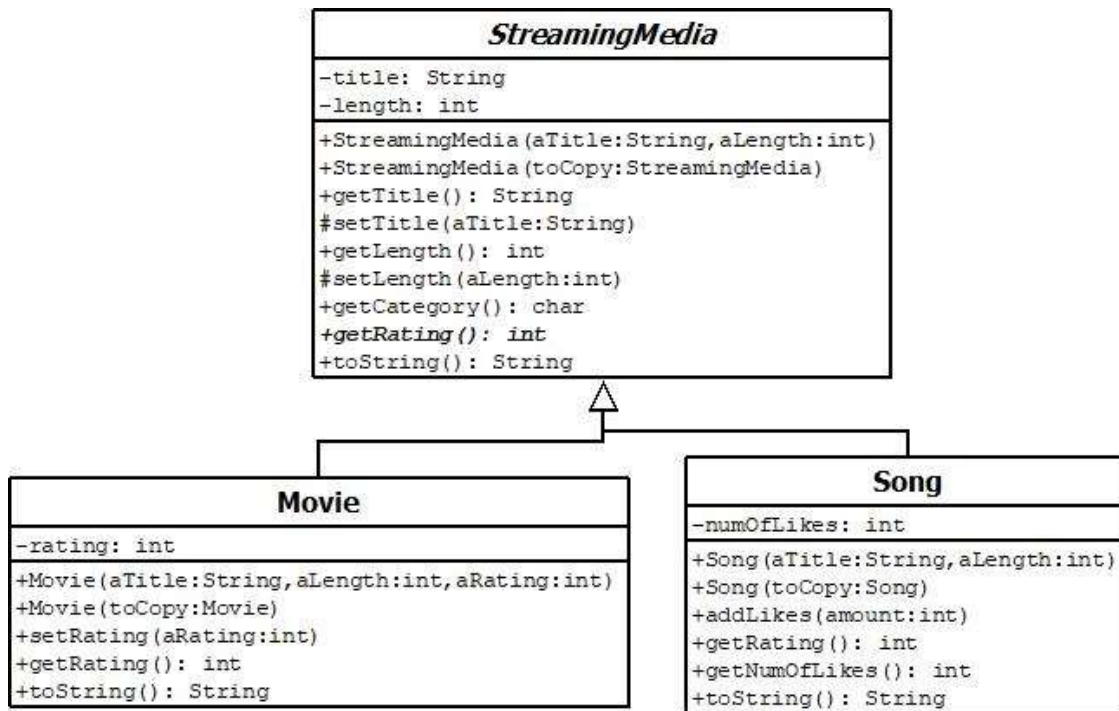


## CPSC 219 – Coding Challenge 4 – Practice 1



Note that # indicated protected access.

**Streaming Media class:** Must be an abstract class. The **title** should be stored in all upper case. The method **getCategory** calls **getRating** (which is abstract) to get rating. Category values based on rating value: 'A' if 9 or 10; 'B' if 7 or 8, 'C' if 5 or 6; 'D' if 3 or 4, and 'F' otherwise. The **length** should be initialized to 10 and must be positive (greater than zero). Ignore negative length numbers. Format returned by **toString**: 'Title: <title> Length: <length>'

**Movie class:** **rating** must be a value between 0 and 10 (inclusive). If the rating provided is outside of that range, the rating should remain unchanged. Format returned by **toString**: 'Title: <title> Length: <length> Rating: <rating>'.

**Song class:** **numOfLikes** should be initialized to zero and updated by **addLikes**. Likes cannot decrease. **Rating** is based on **numOfLikes**: 9 if **numOfLikes**  $\geq$  5000, 7 if **numOfLikes**  $\geq$  500, 5 if **numOfLikes**  $\geq$  50, 3 if **numOfLikes**  $\geq$  10, 1 otherwise. Format returned by **toString**: 'Title: <title> Length: <length> Likes: <numOfLikes>'.

**Notes:** Do not duplicate instance variables from parent class in child class. Instead invoke appropriate super constructor and methods in parent class.