



## SKY TECHNOLOGY unattended programming test:

### Parental Control Service

#### Scenario

Sky is developing a next generation Video on Demand platform. You are part of a software engineering team, developing services for the platform and working on the story below.

#### ***Prevent access to movies based on parental control level:***

*As a customer I don't want my account to be able to access movies that have a higher parental control level than my current preference setting.*

Your team has partnered with the Movie Meta Data team that provides a service that can return parental control information for a given movie.

#### Instructions

You are required to provide an implementation of a *ParentalControlService*. You may use Java version 6 or above.

The service should accept as input the customer's parental control level preference and a *movie id*. If the customer is able to watch the movie the *ParentalControlService* should indicate this to the calling client.

Please implement the *ParentalControlService* API.

The recommended time to complete this exercise should be between forty-five minutes and one-hour



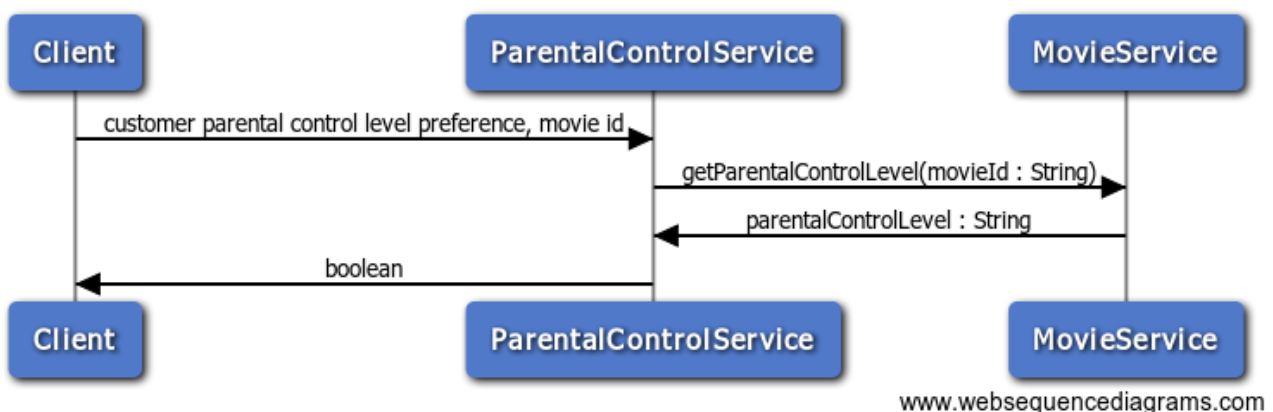
## Parental Control Levels

U, PG, 12, 15, 18

## Movie Service

The Movie Meta Data team is currently developing the *MovieService* *getParentalControlLevel* call that accepts the *movie id* as an input and returns the parental control level for that movie as a string.

This is a simple diagram of the interaction between the services:



## MovieService Interface

```
public interface MovieService {
    String getParentalControlLevel(String movieId)
        throws TitleNotFoundException,
            TechnicalFailureException;
}
```

## Acceptance Criteria

The following table describes the expected *ParentalControlService* result based on a given *MovieService getParentalControlLevel* response.

MovieService <i>getParentalControlLevel</i> response	Description	ParentalControlService result
Parental Control level	A string e.g. "PG"	If the parental control level of the movie is equal to or less than the customer's preference indicate to the caller that the customer can watch the movie
TitleNotFound exception	The movie service could not find the given movie	Indicate the error to the calling client.
Technical failure exception	System error	Indicate that the customer cannot watch this movie

We need to ensure that we always failsafe.

## What we look at

We are interested in code readability and structure and your use of best practice.

Please supply us with your source code in a single archive. The project should be self-contained.

The name of the root folder in the archive should contain your full name.