

Data Structure: Movie

Consider the following definition for a data structure called Movie:

A Movie is a **title**, **minutes**, **genre**, and **star-rating**

```
data Movie:
  | film( title      :: String,
          minutes    :: Number,
          genre      :: String,
          star-rating :: Number )
end
```

To make instances of this structure, I would write:

Casablanca = film("Casablanca", 102, "Drama", 5)

TheShining = film("The Shining", 146, "Horror", 4)

Choose one of your above instances, and note which dot-accessors you would use to access each of its fields:

Casablanca.title

Casablanca.minutes

Casablanca.genre

Casablanca.star-rating

Which of the following are functions that *could* be written based on the data definition for **Movie**? Check all that apply



```
# is-longer : Movie, Movie -> Boolean
# Consumes a two Movies, produces true if the
# first film is longer than the second
```



```
# has-role : Movie, String -> Boolean
# consumes a Movie and the name of an actor. Produces
# true if that actor has a role in the given film
```



```
# too-scary : Movie -> Boolean
# consumes a Movie and produces true if the film is a
# horror movie
```



```
# editor : Movie, Number -> Movie
# Consumes a Movie and number of minutes, produces
# a Movie which is the same as the given film, but with
# the given number of minutes cut out
```



```
# top-billed : Movie -> String
# Consumes a Movie and produces the top-billed
# actor in that film
```