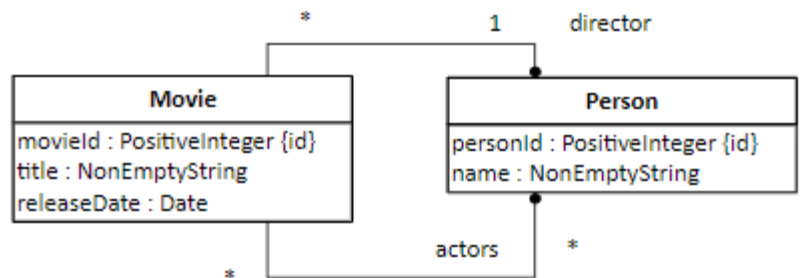


Design model:



OO class model:

Movie	Person
<pre>movieId[1]: PositiveInteger{id} title[1]: NonEmptyString releaseDate[1]: Date director[1]: Person actors[*]: Person</pre>	<pre>personId[1]: PositiveInteger{id} name[1]: NonEmptyString</pre>

JavaScript class model:

Movie
<pre>&lt;&lt;set/get&gt;&gt; movieId[1]: Number(int){id} &lt;&lt;set/get&gt;&gt; title[1]: String &lt;&lt;set/get&gt;&gt; releaseDate[1]: Date &lt;&lt;set/get&gt;&gt; director[1]: Person &lt;&lt;set/get&gt;&gt; actors[0..*]: Person</pre>
<pre><u>checkMovieId(in movieId: Integer): ConstraintViolation</u> <u>checkMovieIdAsId(in movieId: Integer): ConstraintViolation</u> <u>checkTitle(in title: String):ConstraintViolation</u> <u>checkReleaseDate(in releaseDate: Date): ConstraintViolation</u> addActor(in actor: Person) removeActor(in actor: Person)</pre>

Person
<pre>&lt;&lt;set/get&gt;&gt; personId[1]: Number(int){id} &lt;&lt;set/get&gt;&gt; name[1]: String</pre>
<pre><u>checkPersonId(in personId: Integer): ConstraintViolation</u> <u>checkPersonIdAsId(in personId: Integer): ConstraintViolation</u> <u>checkPersonIdAsIdRef(in personId: Integer): ConstraintViolation</u> <u>checkName(in name: String):ConstraintViolation</u></pre>