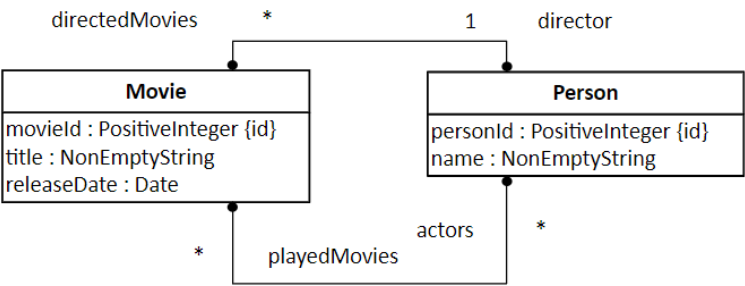## Design model:

OO class model:

Movie
movieId[1]: PositiveInteger{id} title[1]: NonEmptyString releaseDate[1]: Date director[1]: Person actors[*]: Person

Person
personId[1]: PositiveInteger{id} name[1]: NonEmptyString /directedMovies: Movie {inverse of Person} /playedMovies: Movie {inverse of Person}

JavaScript class model:

Movie
<<set/get>> movieId[1]: Number(int){id} <<set/get>> title[1]: String <<set/get>> releaseDate[1]: Date <<set/get>> director[1]: Person <<set/get>> actors[0..*]: Person
checkMovieId(in movieId: Integer): ConstraintViolation checkMovieIdAsId(in movieId: Integer): ConstraintViolation checkMovieIdAsIdAsRef(in movieId: Integer): ConstraintViolation checkTitle(in title: String):ConstraintViolation checkReleaseDate(in releaseDate: Date): ConstraintViolation checkDirector(in d: Person): ConstraintViolation checkActors(in a: Person): ConstraintViolation addActor(in actor: Person) removeActor(in actor: Person)

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