

Movie Database

Nicholas Van Beek

Andrew Strelke

Craig Grant

Description:

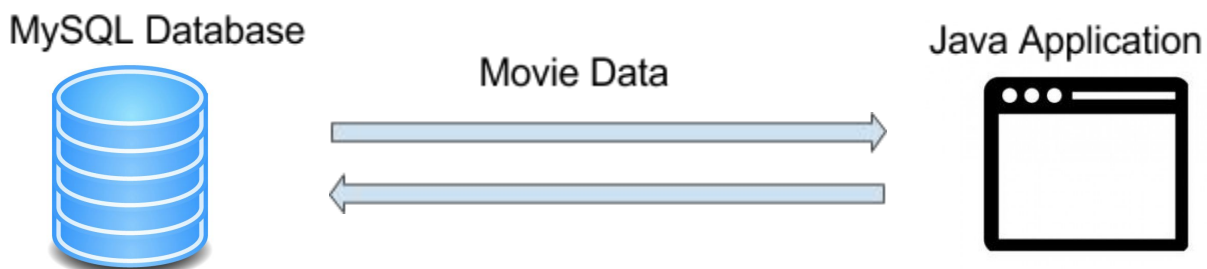
This project provides a database and GUI for storing and retrieving information about Movies. The database is capable of storing many attributes about a movie such as its Title, Duration, Genre, Director, Actors, reviews etc. Since actors and directors can be relevant to many different movies, their information is stored in separate tables and attached to each movie where necessary to avoid storing duplicate information and make it quicker to add actor/director information to a movie. There is also a table of reviews related to each movie and the GUI user can create/view reviews on the movie.

Architecture:

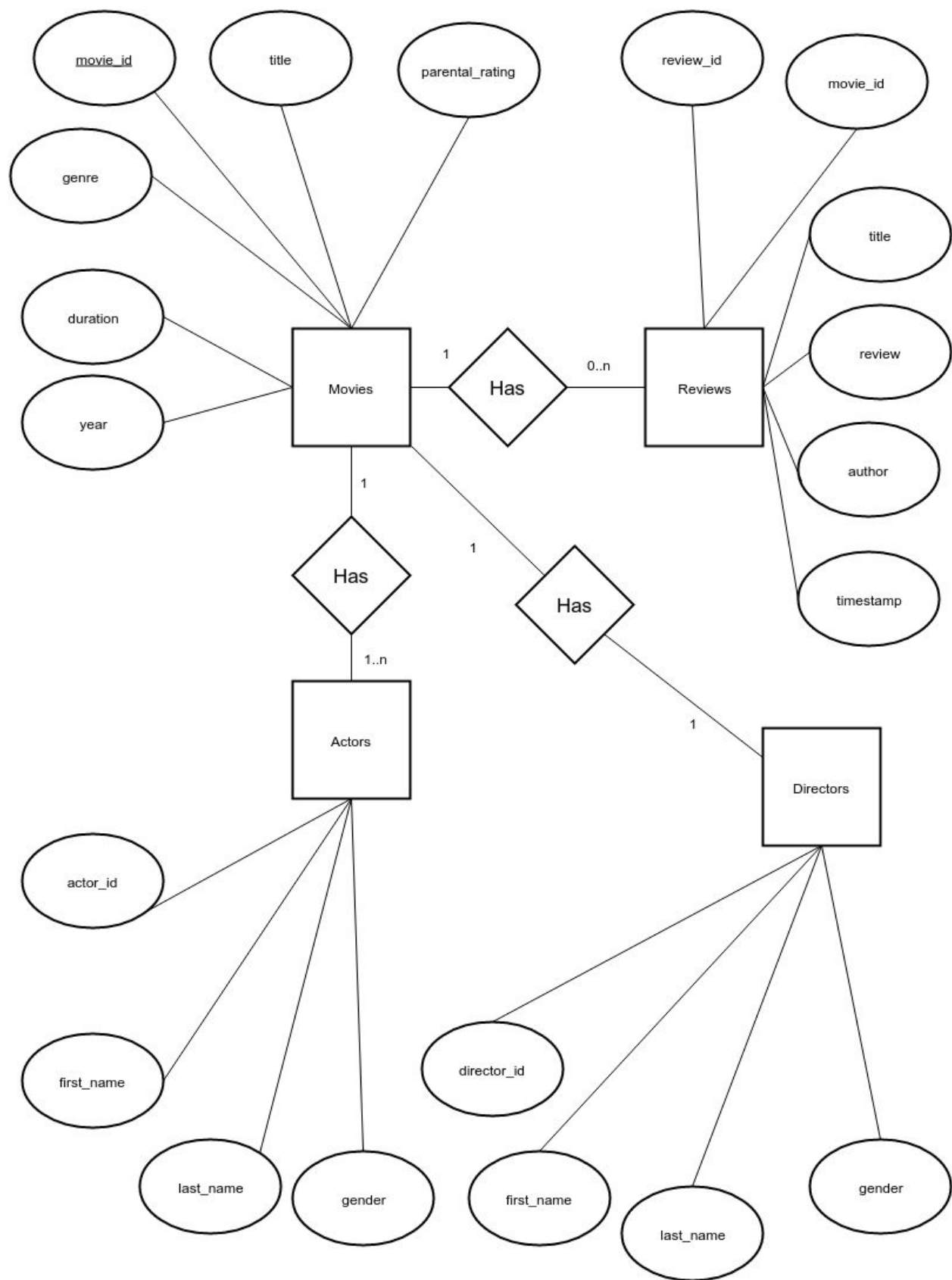
The Movies application has only two parts, the database and Java application. MySQL is the Database Management System used for the Movie database. All of the data is stored in a single database “movies”. In the “movies” database there are a series of tables such as “movies”, “actors” and “directors” where information related to the movies is stored.

Java + JDBC is used to query the database and build the GUI. We wrote a Database.java class as well as a bunch of object classes such as Movie.java and Actor.java which turn the relational data (data queried from the database) into objects that the front end can then iterate through and display in lists. The GUI was built in Java Swing making it cross platform and easy use with JDBC.

We chose this architecture to make installation, setup and portability as simple as possible.

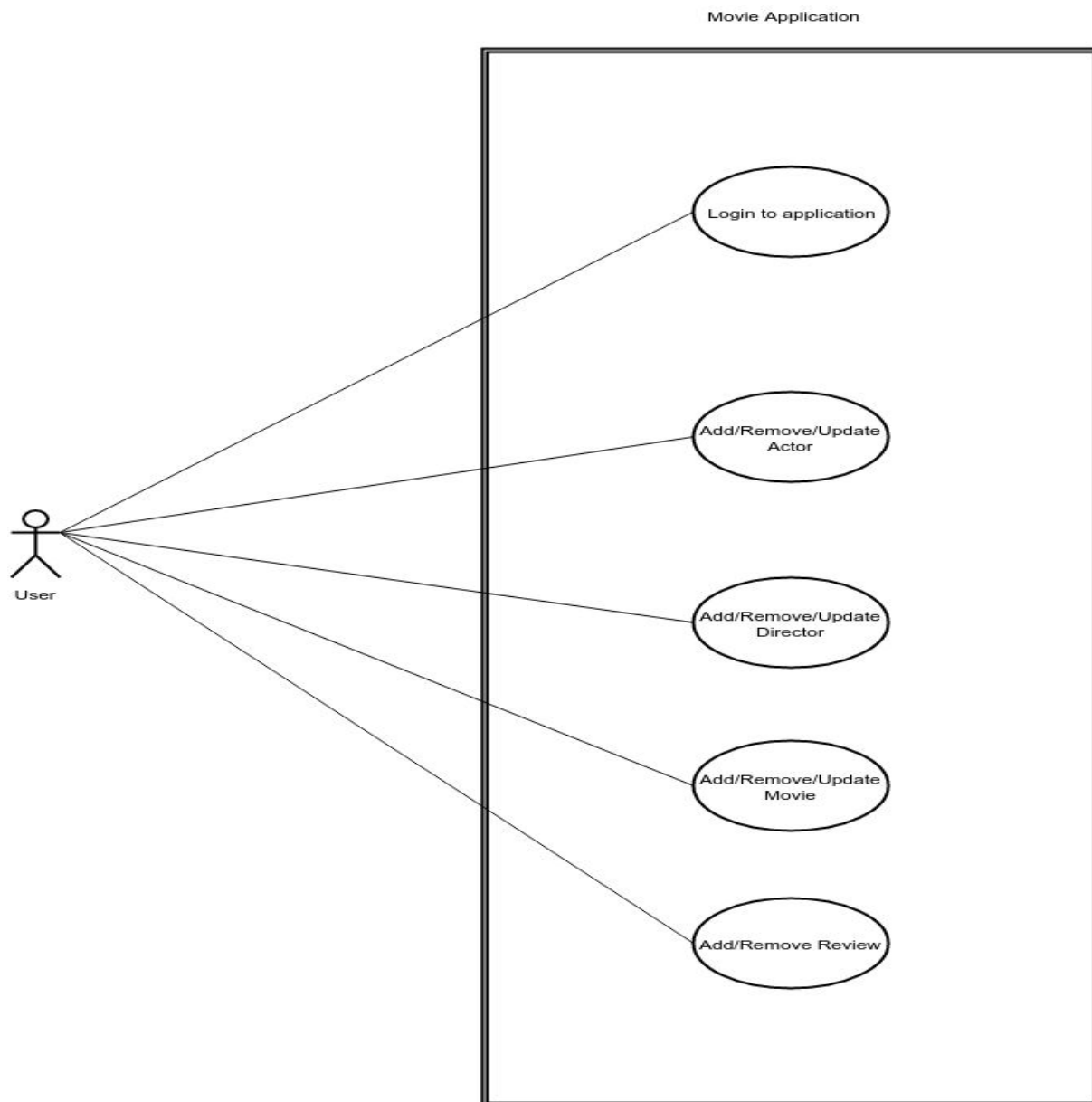


E/R Diagram:



Use Case Diagram:

The application is intended to be a general use application for storing information about movies. The application is only intended for one actor/user to be able to store relevant movie information and alter it for the purpose of storage. Because of this, the use case diagram is really simple since only one actor uses the software/database.



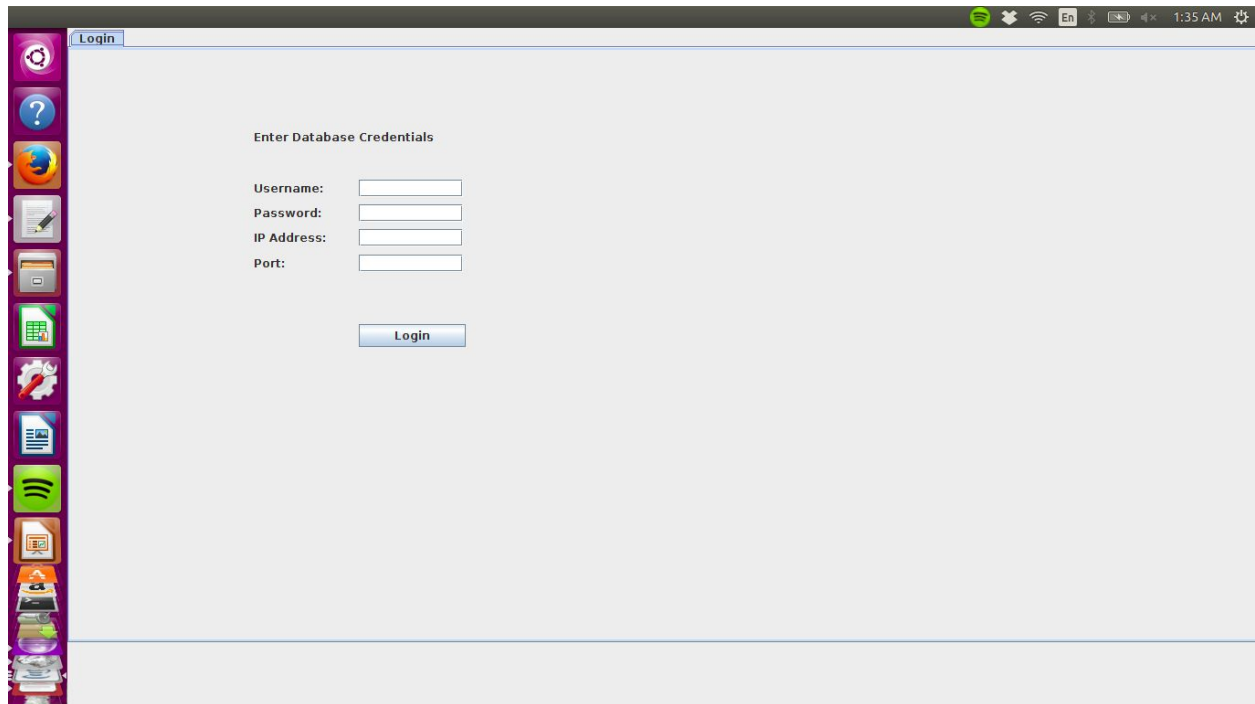
Installation Instructions:

- 1) Import the movies.sql file into a MySQL database called "movies"

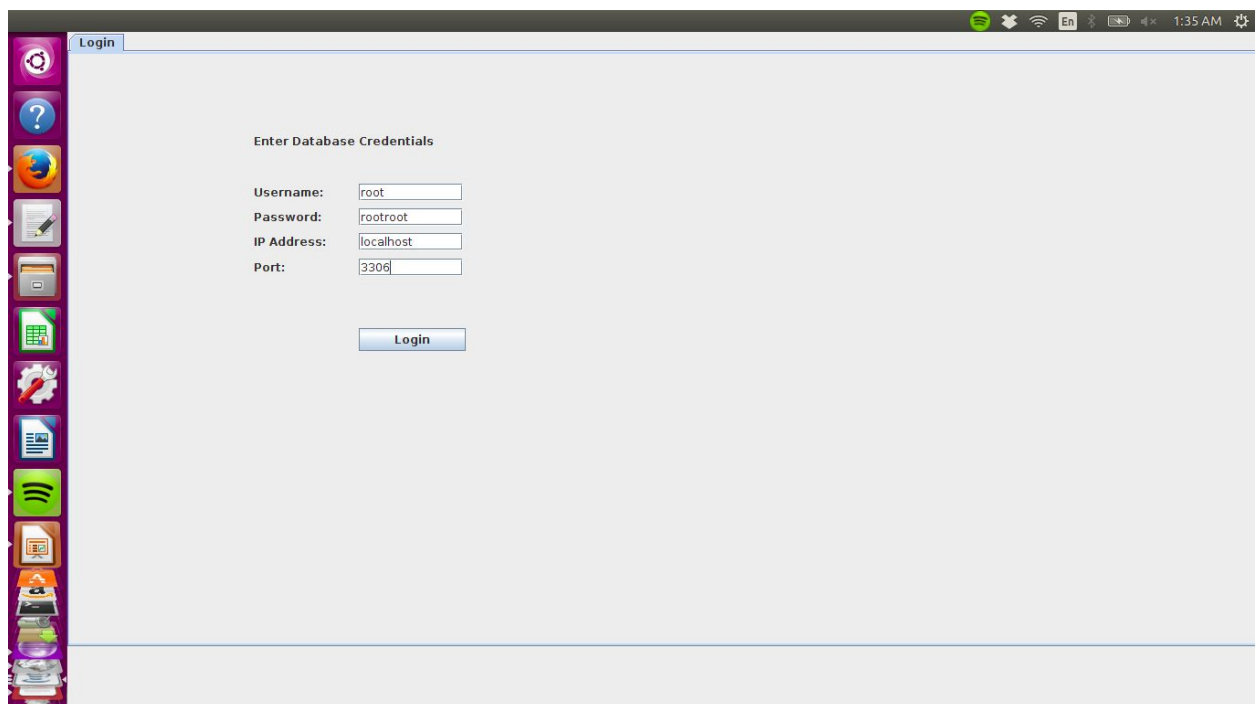
- 2) Run the Movies.jar file to run the application with. You can use “java -jar Movies.jar” in the terminal/command prompt.

Using the Program:

First login using the ip address, port and username/password of the database.

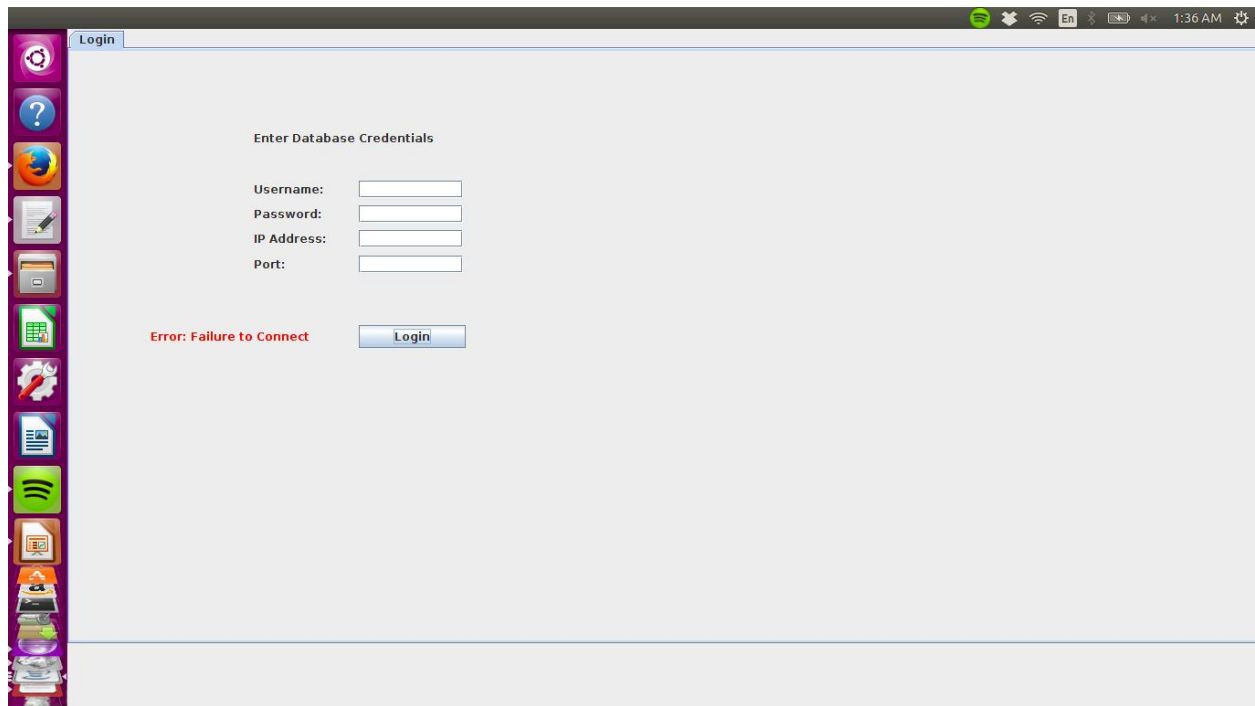


The screenshot shows a window titled "Login" with a light gray background. On the left side, there is a vertical dock with various application icons. The main area of the window contains the text "Enter Database Credentials" in a small, bold font. Below this text, there are four labeled input fields: "Username:", "Password:", "IP Address:", and "Port:". Each label is followed by an empty text box. At the bottom of these fields, there is a blue "Login" button.



The screenshot shows the same "Login" window as above, but with the input fields filled. The "Username:" field contains the text "root", the "Password:" field contains "rootroot", the "IP Address:" field contains "localhost", and the "Port:" field contains "3306". The blue "Login" button remains at the bottom.

If the user's database credentials are incorrect, a warning message will display informing the user that the connection failed.



Once the user has logged in, they are brought to the movie tab where they are able to search for a pre-existing movie and view details will be displayed by category

Movies Actors Directors

Search

Transformers (2009)
Avatar (2012)
Terminator (1984)
Teenage Mutant Ninja Turtle (2013)
Spider-Man (2002)
Free Willy (1988)
Hercules (1984)

Title:

Rating:

Year:

Duration:

Genre:

Director:

Actors:

Check Reviews

Edit Actor

Clear Insert

You also have the ability to add a movie into the database by inserting information into its respected text fields.

Movies Actors Directors

Search

Transformers (2009)
Avatar (2012)
Terminator (1984)
Teenage Mutant Ninja Turtle (2013)
Spider-Man (2002)
Free Willy (1988)
Hercules (1984)

Title:

Rating:

Year:

Duration:

Genre:

Director:

Actors:

Check Reviews

Edit Actor

Clear Insert

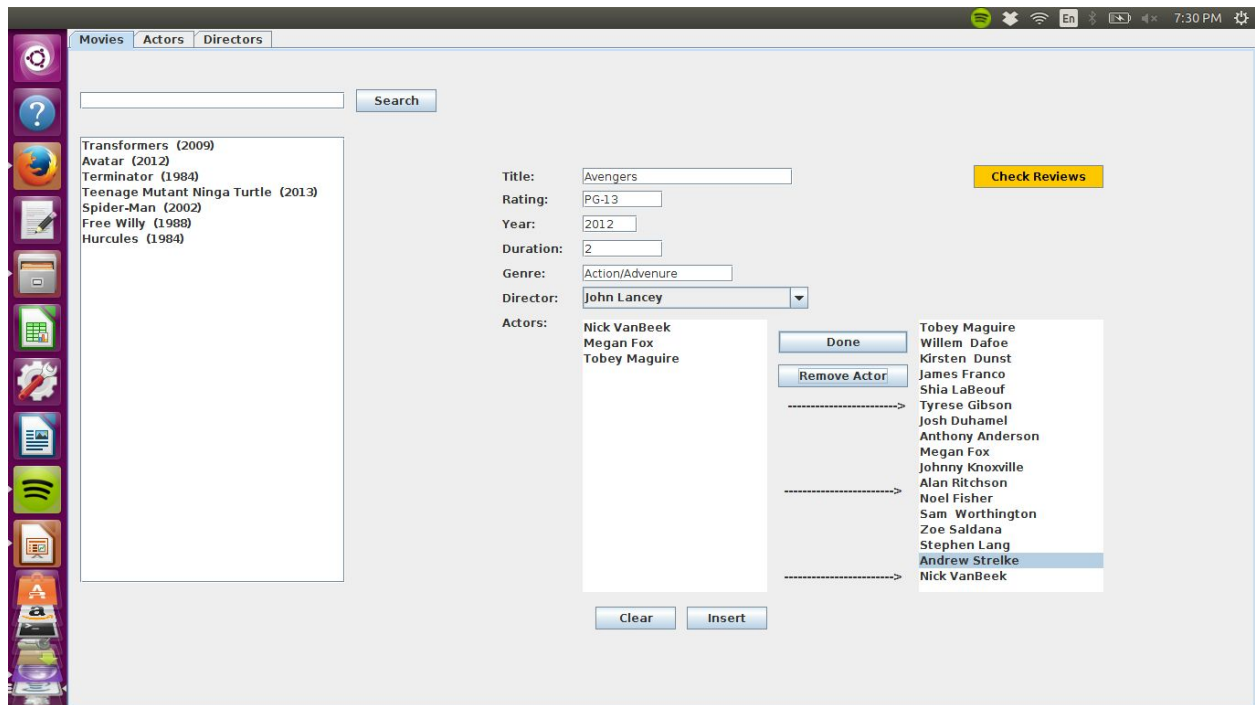
You can associate actors to a given movie by pressing “edit actor”

The screenshot shows a web application interface for managing movies. On the left, there's a sidebar with icons for various functions. The main area has tabs for 'Movies', 'Actors', and 'Directors'. A search bar is at the top. Below it, a list of movies is shown: Transformers (2009), Avatar (2012), Terminator (1984), Teenage Mutant Ninja Turtle (2013), Spider-Man (2002), Free Willy (1988), and Hercules (1984). The 'Avengers' movie details are displayed on the right, including Title, Rating (PG-13), Year (2012), Duration (2), Genre (Action/Adventure), and Director (John Lancey). A 'Check Reviews' button is also present. Below the movie details, there's a section for 'Actors' with a 'Done' button and a list of actors to be added: Tobey Maguire, Willem Dafoe, Kirsten Dunst, James Franco, Shia LaBeouf, Tyrese Gibson, Josh Duhamel, Anthony Anderson, Megan Fox, Johnny Knoxville, Alan Ritchson, Noel Fisher, Sam Worthington, Zoe Saldana, Stephen Lang, Andrew Strelke, and Nick VanBeek. The 'Add Actor' button is visible.

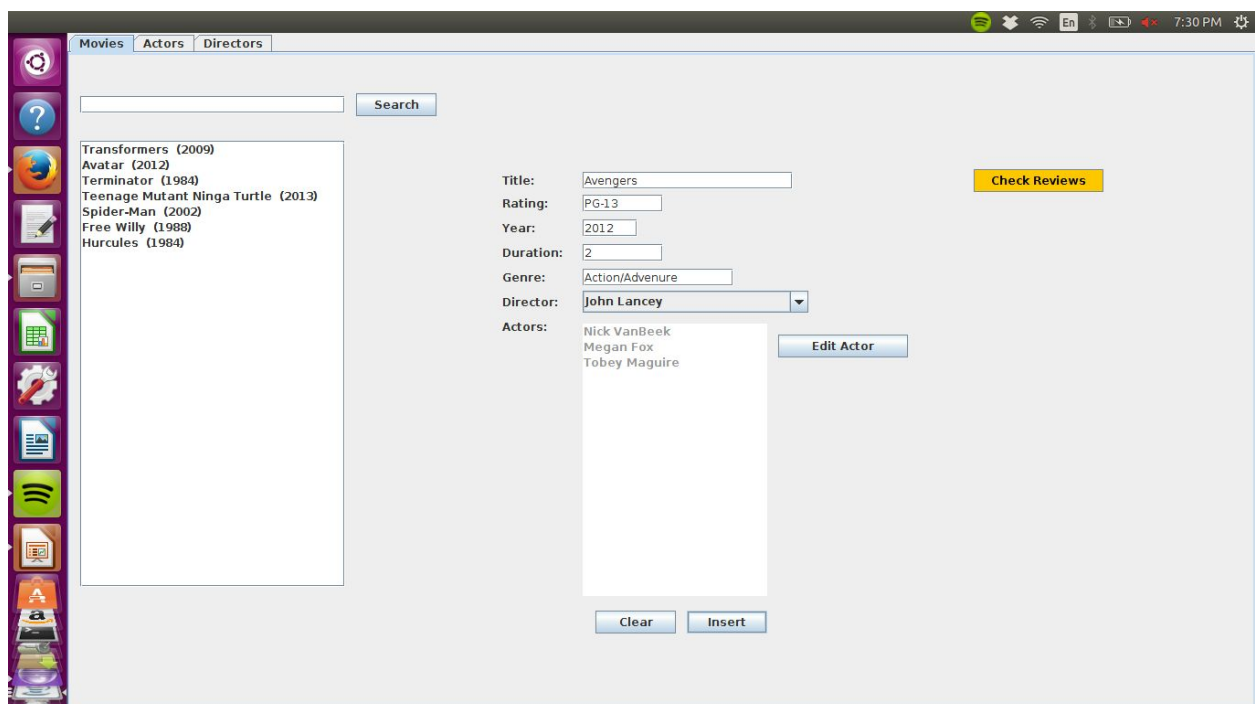
Then click each actor individually, and then add them to the description by clicking “Add Actor.”

This screenshot shows the same application interface as the previous one, but with the 'Actors' section updated. The 'Actors' list now includes Andrew Strelke and Nick VanBeek. The 'Add Actor' button is still visible, and the list of actors to be added remains the same. The 'Done' button is also present. The 'Check Reviews' button is still visible. The 'Add Actor' button is visible.

You can also remove actors by clicking on them in the description and clicking remove actor



You can now “insert” this movie to the movie list



Make sure to clear the page before adding a new movie

The screenshot shows a web application with a sidebar containing various icons. The main area has tabs for 'Movies', 'Actors', and 'Directors'. A search bar is at the top. On the left, a list of movies is shown, with 'Avengers (2012)' selected. The right side contains a form for adding a movie. The form fields are: Title (Avengers), Rating (PG), Year (2012), Duration (2), Genre (Action/Adventure), Director (John Lancey), and Actors (Nick VanBeek, Megan Fox, Tobey Maguire). A red hint message says 'Hint: Clear page before adding a new movie'. Buttons include 'Check Reviews', 'Edit Actor', 'Clear', 'Delete', and 'Update'.

Transformers (2009)
Avatar (2012)
Terminator (1984)
Teenage Mutant Ninja Turtle (2013)
Spider-Man (2002)
Free Willy (1988)
Hercules (1984)
Avengers (2012)

Search

Title: Avengers
Rating: PG
Year: 2012
Duration: 2
Genre: Action/Adventure
Director: John Lancey
Actors: Nick VanBeek
Megan Fox
Tobey Maguire

Check Reviews

Edit Actor

Hint: Clear page before adding a new movie

Clear Delete Update

The screenshot shows the same web application, but the list of movies now includes 'Avatar (2012)' and 'Avengers (2012)'. The form fields are empty. The 'Done' button is now visible next to the actors list. The red hint message remains.

2012

Search

Avatar (2012)
Avengers (2012)

Title:
Rating:
Year:
Duration:
Genre:
Director:
Actors: Nick VanBeek
Megan Fox
Tobey Maguire

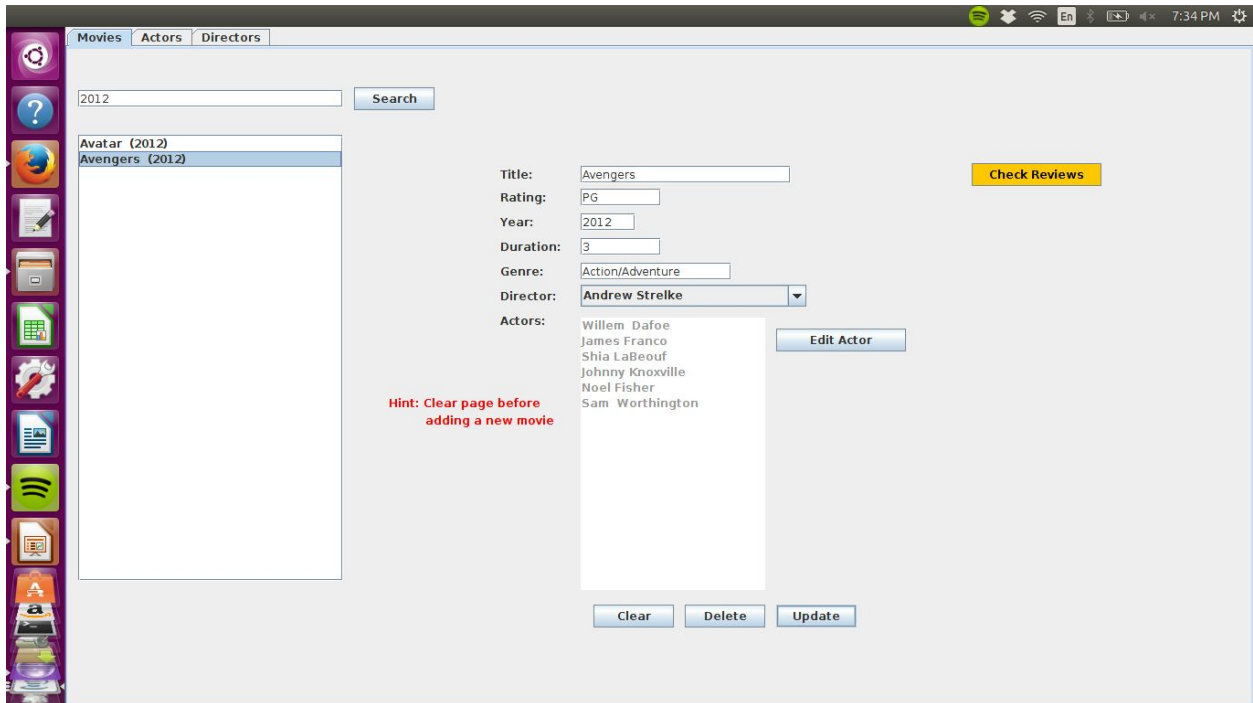
Check Reviews

Done

Hint: Clear page before adding a new movie

Clear Delete Update

Delete a movie from the list by clicking on it and choosing delete



2012 Search

Avatar (2012)
Avengers (2012)

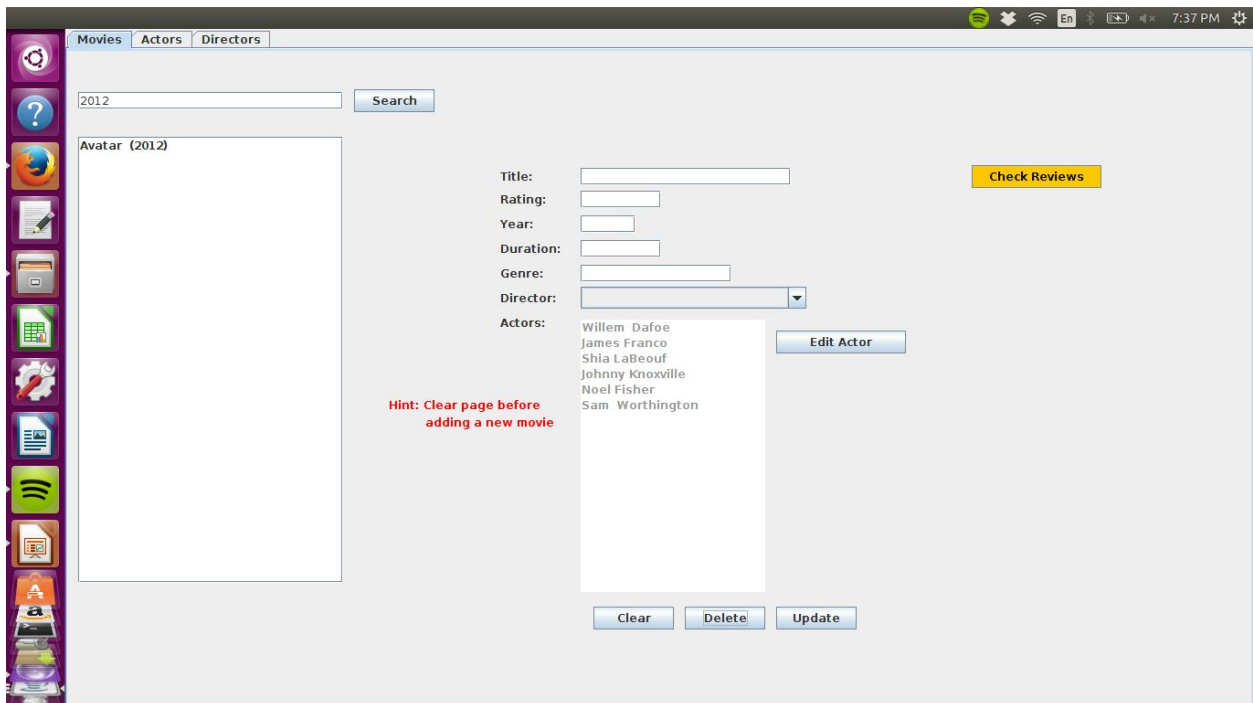
Hint: Clear page before adding a new movie

Title: Avengers
Rating: PG
Year: 2012
Duration: 3
Genre: Action/Adventure
Director: Andrew Strelke
Actors: Willem Dafoe, James Franco, Shia LaBeouf, Johnny Knoxville, Noel Fisher, Sam Worthington

Check Reviews

Edit Actor

Clear Delete Update



2012 Search

Avatar (2012)

Hint: Clear page before adding a new movie

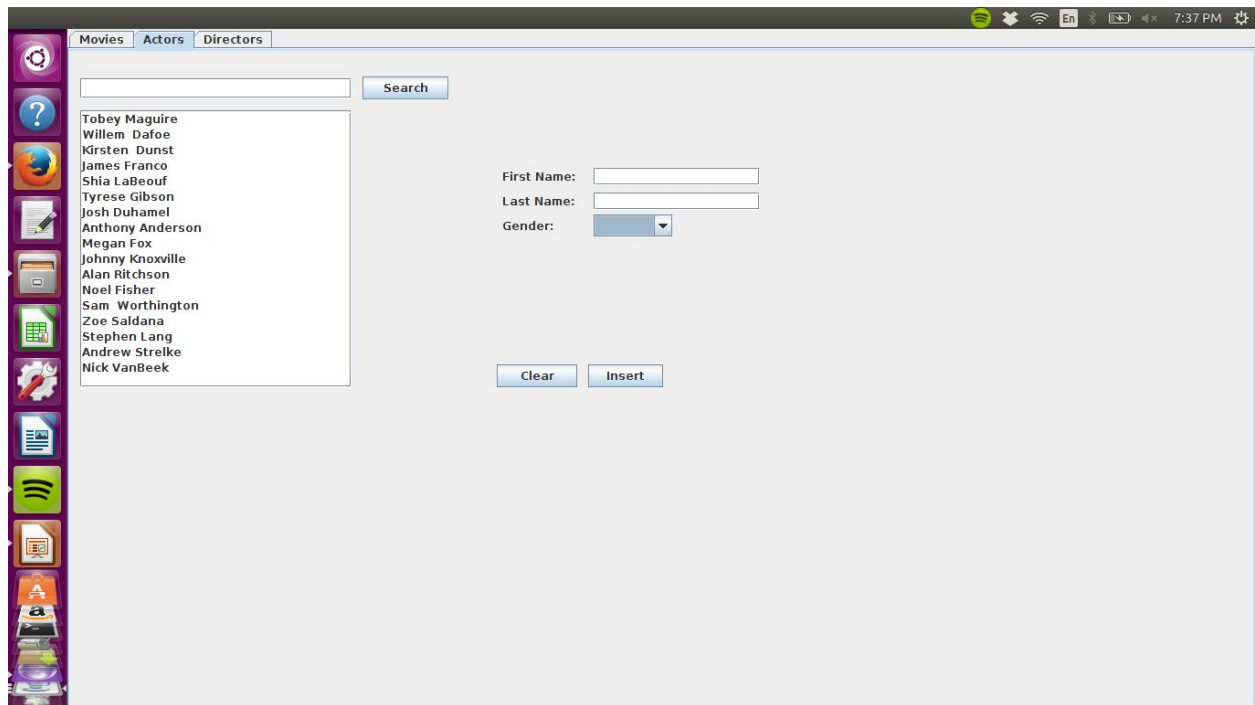
Title:
Rating:
Year:
Duration:
Genre:
Director:
Actors: Willem Dafoe, James Franco, Shia LaBeouf, Johnny Knoxville, Noel Fisher, Sam Worthington

Check Reviews

Edit Actor

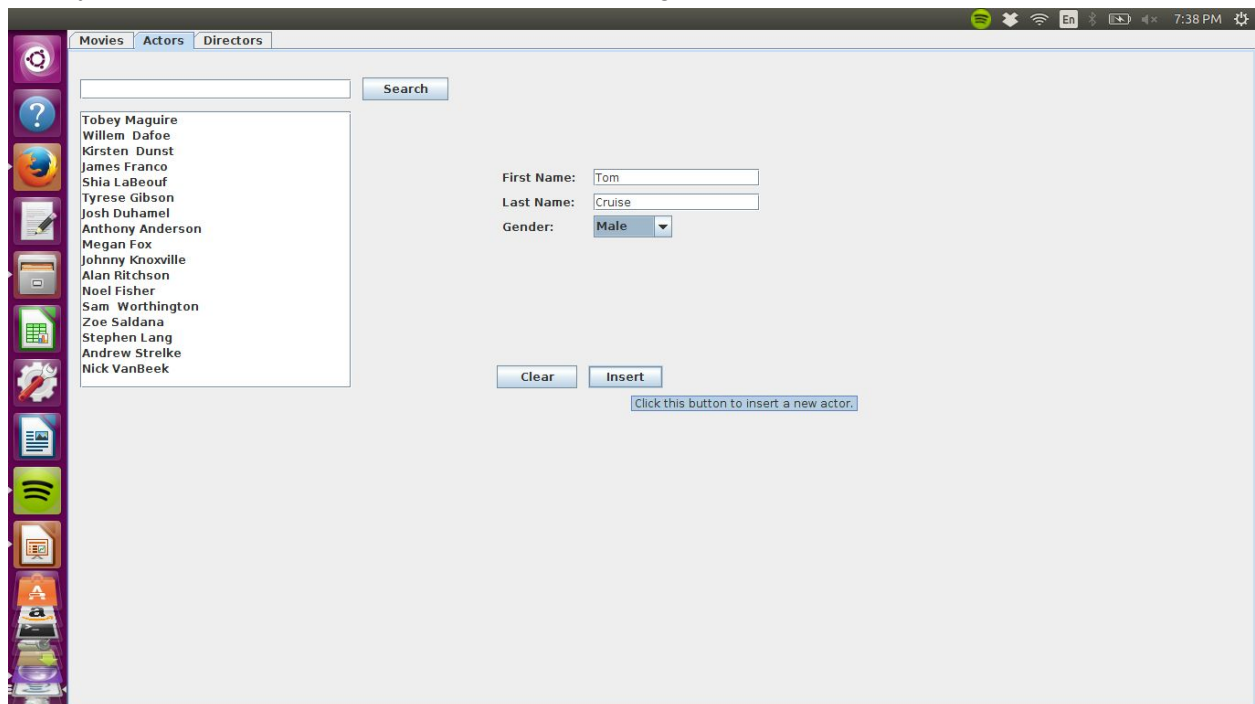
Clear Delete Update

Here we have the actor list



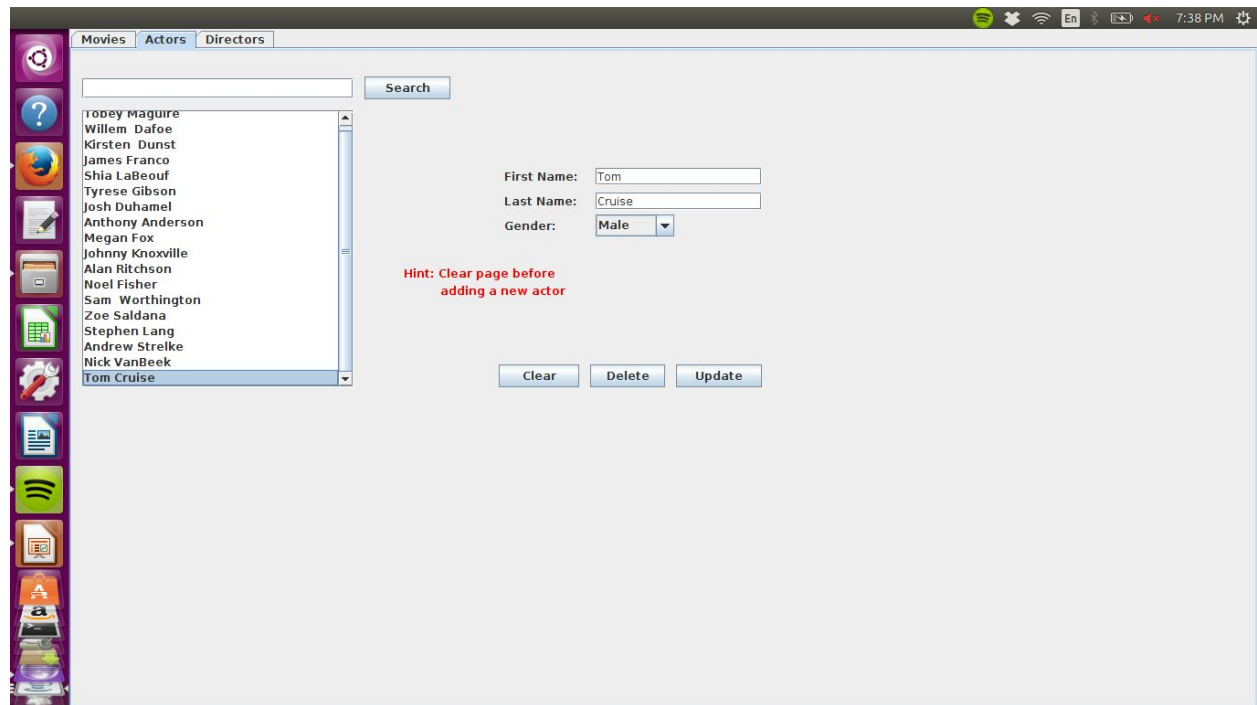
The screenshot shows a web application with a sidebar containing various icons. The main area has three tabs: 'Movies', 'Actors', and 'Directors'. The 'Actors' tab is selected. On the left, there is a list of actors: Tobey Maguire, Willem Dafoe, Kirsten Dunst, James Franco, Shia LaBeouf, Tyrese Gibson, Josh Duhamel, Anthony Anderson, Megan Fox, Johnny Knoxville, Alan Ritchson, Noel Fisher, Sam Worthington, Zoe Saldana, Stephen Lang, Andrew Strelke, and Nick VanBeek. On the right, there are form fields for 'First Name:', 'Last Name:', and 'Gender:'. The 'Gender' field is a dropdown menu. Below the form fields are 'Clear' and 'Insert' buttons. The system tray at the top right shows the time as 7:37 PM.

Simply fill in the first and last name, as well as the gender. Then click insert



This screenshot shows the same web application as the first one, but with the form fields filled out. The 'First Name' field contains 'Tom', the 'Last Name' field contains 'Cruise', and the 'Gender' dropdown is set to 'Male'. The 'Insert' button is highlighted with a tooltip that says 'Click this button to insert a new actor.' The system tray at the top right shows the time as 7:38 PM.

Your new actor will then appear in the list



Movies Actors Directors

Search

Tobey Maguire
Willem Dafoe
Kirsten Dunst
James Franco
Shia LaBeouf
Tyrese Gibson
Josh Duhamel
Anthony Anderson
Megan Fox
Johnny Knoxville
Alan Ritchson
Noel Fisher
Sam Worthington
Zoe Saldana
Stephen Lang
Andrew Strelke
Nick VanBeek
Tom Cruise

First Name: Tom
Last Name: Cruise
Gender: Male

Hint: Clear page before
adding a new actor

Clear Delete Update