Class **Movie** is defined to encapsulate information about each movie, including its name, release year, and a vector of actors. This choice is rational because it allows for better organization and abstraction of movie data. Using a class makes it easier to maintain and manipulate related data and functions. The main data structure used to store a collection of Movie objects is a vector: “**vector<Movie> movies”**. Vectors were chosen because they offer dynamic resizing, efficient random access, and easy traversal. In this case, as the program reads movies from the input file, it dynamically grows to accommodate new Movie objects, ensuring flexibility and efficiency. In summary, the choice of data structures in the code aligns with the requirements of the task. Using a class **Movie** to represent movie data and vectors for dynamic storage of movies and actors allows for efficient data management and manipulation.

A screen shot of a computer

Description automatically generated