UML Sequence Diagram

The use case below is when a user uses our interface to check out our movies. Users can choose to list all showing movies and select a movie to view its details, or search using our search tool based on the title. The program has the following flow:

- When user selects the movie module, the movie system is deserialised.
- The movie list is sorted based on title, and serialised back to the file.
- Iterating through the array, movies which are 'Now Showing or 'Preview' are added to a result array.
- The content of the result array is displayed to the user as a list of showing movies.
- Users have two choices, to select a movie from the list or to search using the title.
- If user chooses to select a movie from the list, the following happens.
    - The movie database is first checked. If there is no movie is in the database, user is asked to return back to previous menu.
    - If there are movies, the movies are displayed and user is asked to select a movie number.
    - The movie database array list is queried using the get operator and using the given index.
    - Details such as title, synopsis, director, cast, showing status, average rating, category, showtimes and reviews are displayed.
    - To obtain the average rating and reviews, the attribute 'reviews' of each movie, which is an array list of the object Review, is called.
- If user chooses to search a movie based on title, the following happens.
    - User is asked to give a string for search. It is then checked against every movie in the database if it is a substring of the title. If it is, it is added to a results array and listed to the user.
    - User is then asked to select a movie from the results array.
    - After selection, details of the movie is shown similar to the select movie function above.

The UML sequence diagram on the next page illustrates the above use case. For methods which are performed more than once, they detailed sequence will only be shown once. For user input, the scanner class was assumed and not presented in the following sequence diagram.

CZ2002 UML Sequence Diagram

SIX Group 2