# SOFE 3650U: Software Design & Architecture

## Project Progress Report

## Group 10
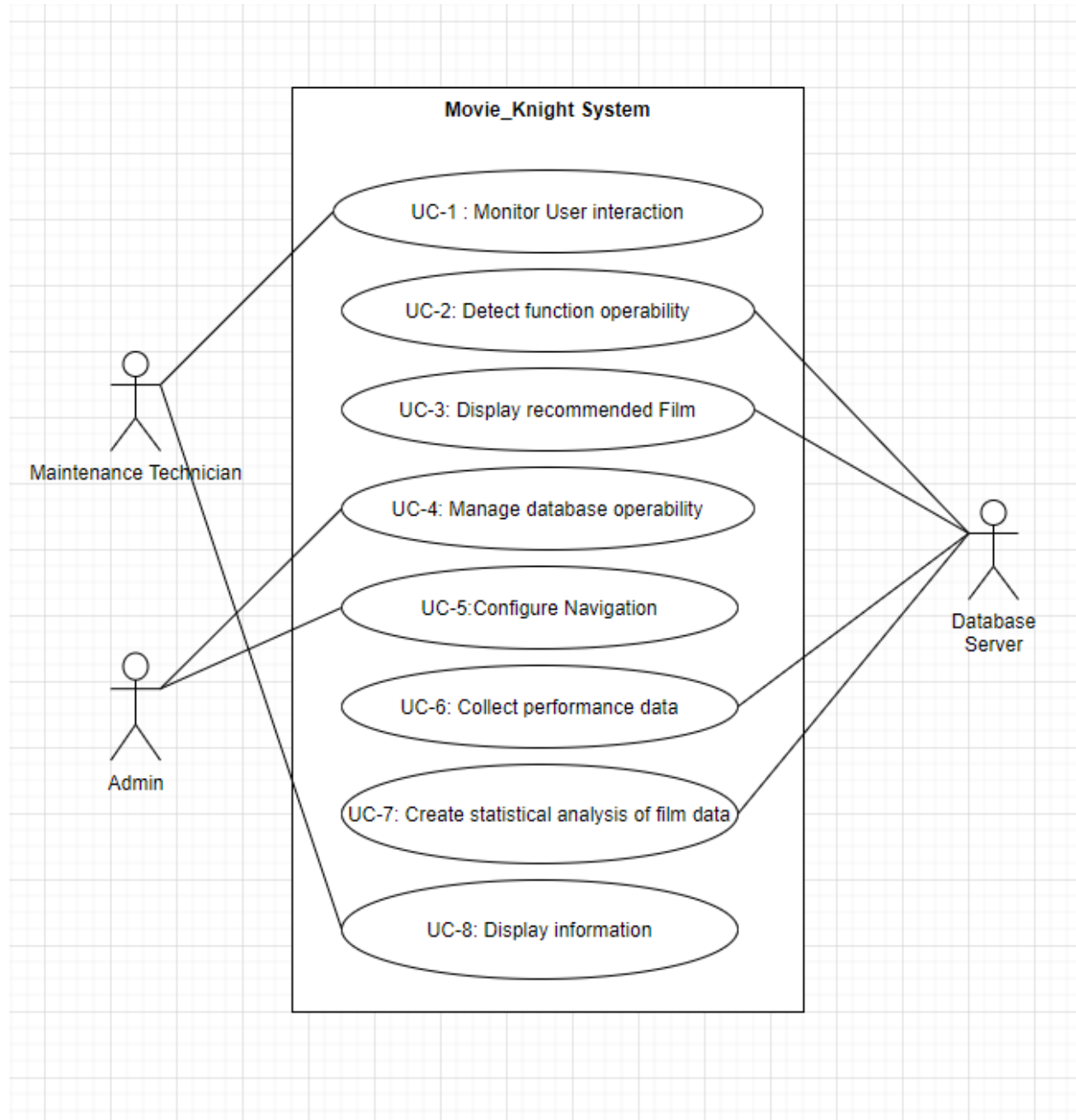
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## Project Title: Movie Knight

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# Use Case Model



Use case diagram — Movie_Knight System

**Actors:** Maintenance Technician, Admin, Database Server

**Use Cases:**
- UC-1 : Monitor User interaction
- UC-2: Detect function operability
- UC-3: Display recommended Film
- UC-4: Manage database operability
- UC-5: Configure Navigation
- UC-6: Collect performance data
- UC-7: Create statistical analysis of film data
- UC-8: Display information

# Use Cases

| Use Case | Description |
| --- | --- |
| UC-1: Monitor User Interaction | The system monitors the end user's interactions in the Movie_Knight website. When the end user hovers in the vicinity of an interactable service provided by the systems it will provide a visual cue. The users can expand and collapse film directories and any related information. |
| UC-2: Detect function operability | The server manages faults in the operability of functions in the Movie_Knight system. The server detects whether a function responds the way it is intended for example, a collapse function within the system intends to show less information whether the function operates the server is expected to log this information |
| UC-3: Display recommended Film | Stored data within the Movie_Knight database to recommend to the end user a film based on movies the user has interest in, has given a rating or simple requests related to films. |
| UC-4: Manage database operability | The administrator manages operability in the Movie_Knight server to, whether it be to remove or add functions to the server from, the database system. |
| UC-5 Configure Navigation | The administrator alters the configuration parameters assigned to the navigation within the system. |
| UC-6: Collect performance data | System performance data is collected from the system. |
| UC-7: Create statistical analysis of film data | Creates a chart analysis of statistics provided by the database such as number of movies, number of movies per genre in the user's library. |

| UC-8: Display information | The system displays stored information acquired from the database to the end user. Various parameters are displayed based on the interaction received. |

# Quality Attributes

| ID | Quality Attribute | Scenario | Associated Use Case |
|---|---|---|---|
| QA-1 | Availability | The system database fails to display the information associated with the film. System will display an error message to the user. | UC-8 |
| QA-2 | Modifiability | A function is added to the database system. The new function is successfully added and works as intended. | UC-2 |
| QA-3 | Performance | The database system collects performance data while the user is operating the program. The performance data is collected and logged to monitor system fluidity. | UC-6 |
| QA-4 | Security | A user decides to alter his/her account information. The altered account information is stored within the system and updated for the user's future system operation | All |
| QA-5 | Testability | Recommendations fail to display to the user as a result of insubstantial user input. Recommendations will display after the user is prompted for their input. | UC-3 |
| QA-6 | Usability | The system's functions do not operate as intended. An error is sent to the maintenance technician. | UC-4 |

# System Constraints

| ID | Constraint |
|---|---|
| CON-1 | A catalogue of films must already be downloaded to utilize the functions within the system |
| CON-2 | A pre existing database must be used to fetch the info for the movies |
| CON-3 | A stable internet connection must be available |
| CON-4 | Performance information must be collected and logged for a minimum of 30 days |