Unscene

Team 4 - CS 321-02

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Zander Look, Ben Morgan

Contents

Section 1 - Team Number & Members

CS 321 Team 4

1. Salwa Jeries
2. Ben Morgan
3. Zander Look
4. James Kennedy

Section 2 - Project Description

Unscene's purpose is to help users track sequential media (TV shows, Movies) that they are interested in. The user will be able to track their progress in the media so that they do not lose track of where they are. It also acts as a watchlist for any pieces of media that they would like to watch in the future so that they have a record of it, and can track their progress as they go along.

Section 3 - Analysis

3.1. Use Cases

Use Case 1:
- User navigates to the discover page.
- User selects either movies or tv shows to view.
- All relevant media objects are displayed in a list wherein the user can view individual items in more detail. (details include: Title, description, genre)
- User can mark items as interested (adds the item to the watchlist) or watched.

Use Case 2:
- User navigates to the Watchlist page
- User selects either movies or tv shows to view
- All media objects that have been added to the watchlist are displayed in a list wherein the user can view individual items in more detail.
- User can mark items as watched, or unmark items as interested, removing them from the watchlist.

Use Case 3:
- Upon application start, User is brought to the home page
- Here the user can view their progress for their watchlists.

Use Case 4:
- User navigates to the settings tab.
- If the user wishes to change their username, they input their desired name into the given text field
- If the user wishes to change their theme, they may select the Light or Dark theme using the radio buttons.
- User presses submit to commit these changes.
- After a user requests to change the display mode, the application requires a restart to apply the display theme changes.

3.2. Essential and Enhancement Items

- Essential
  - Ability to store TV Show and Movie data, and display this data to the user.
  - Keep track of which movies and tv shows user is interested
  - Keep track of the shows they are interested it, which ones they have watched/have not watched

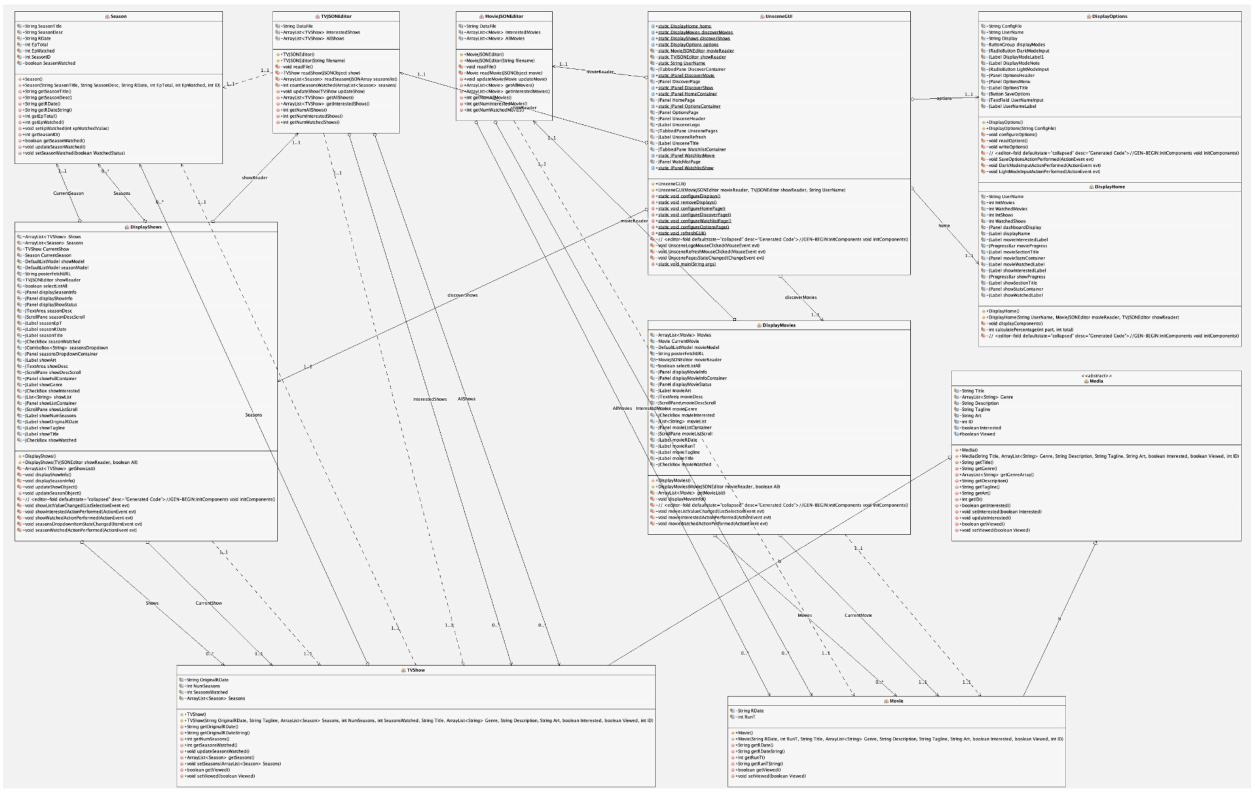
- Enhancement:
  - Depth of data (release date, description, Seasons)
  - Home Dashboard creates a visual representation of the user's progress through their watchlist.
  - Provide an aesthetically pleasing UI.

Section 4 - Design

4.1. Basic Architecture

The software is composed of three main components: The front-end user interface, the Media objects processing, and back-end read/write operations to the JSON files. First, the configuration data is pulled from the "settings.json" file and the look-and-feel of the software is initialized. The data from the JSON files is read by the MovieJSONEditor and TVJSONEditor classes, which initializes the ArrayLists of Movie and TVShow objects. They are then distributed into separate lists: AllMovies/Shows, and InterestedMovies/Shows. Once the data has been pulled from the back-end, it is passed to the UnsceneGUI class which acts as the main frame for the project. Data is populated into the respective JPanel elements that display information relevant to the Media subclass (TVShow or Movie). This is further explored in section 4.2.

4.2. Domain Model

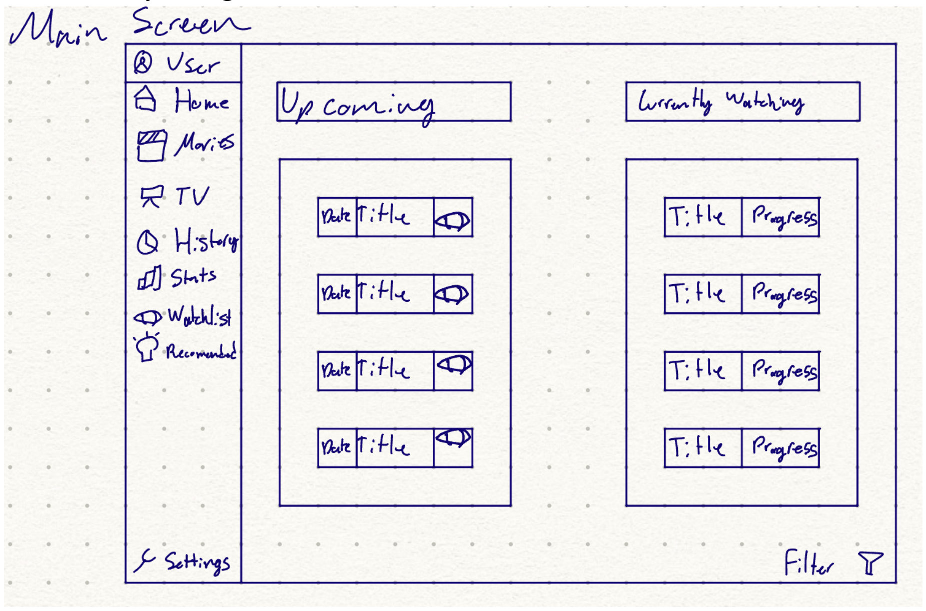


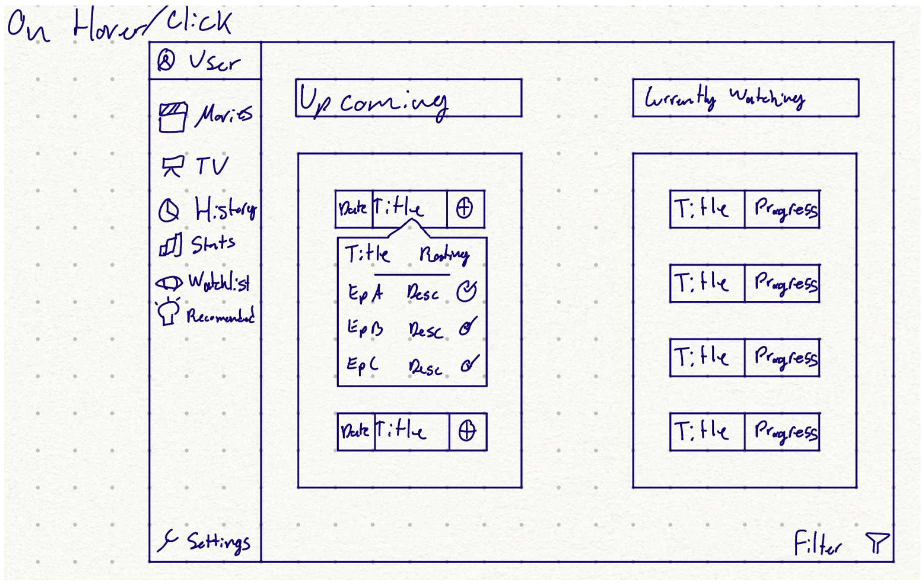
Link to be able to zoom in to image (https://i.imgur.com/bCgLmzm.png)

4.3. Design Elements for Technical Items

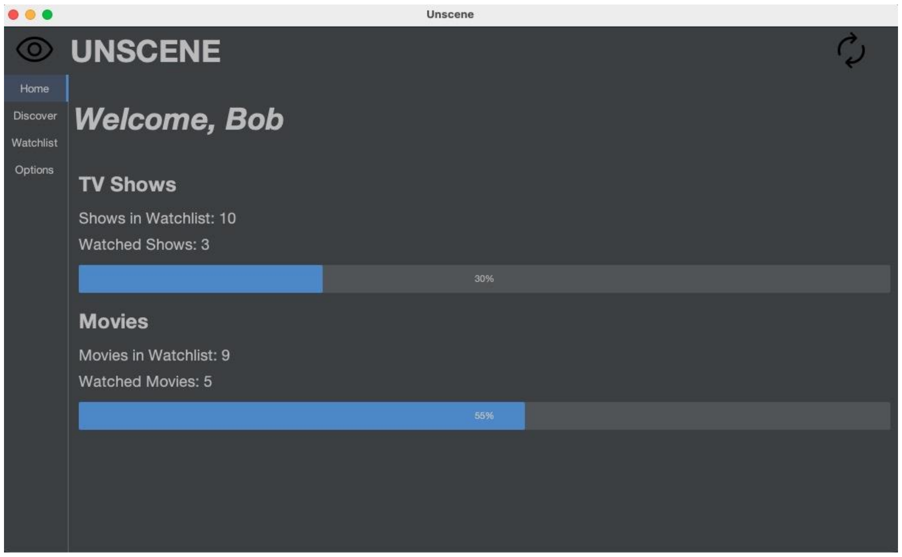
4.3a. Graphical User Interface

- Early Design ideas





- Final Design and User Interface



Welcome, Bob

TV Shows

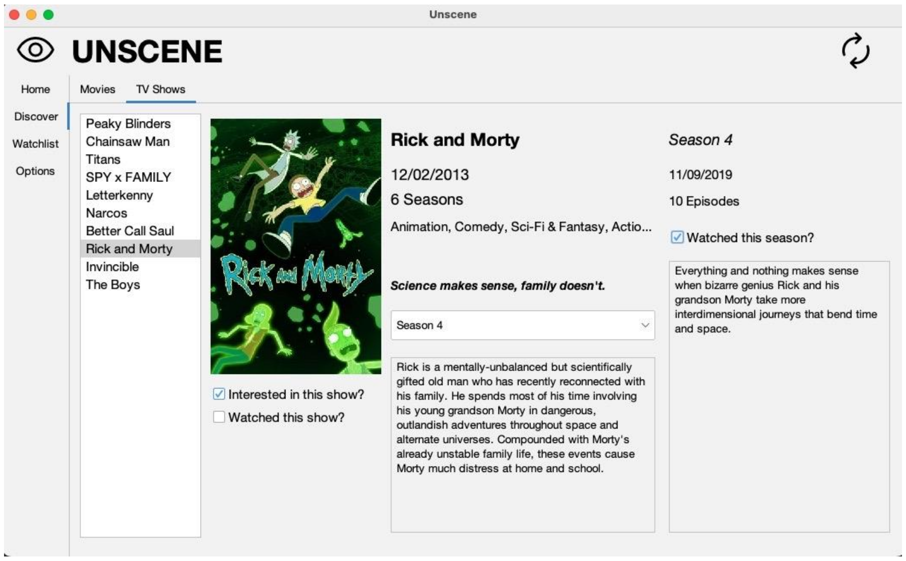
Shows in Watchlist: 10

Watched Shows: 3

Movies

Movies in Watchlist: 9

Watched Movies: 5



Peaky Blinders
Chainsaw Man
Titans
SPY x FAMILY
Letterkenny
Narcos
Better Call Saul
Rick and Morty
Invincible
The Boys

Rick and Morty

12/02/2013

6 Seasons

Animation, Comedy, Sci-Fi & Fantasy, Actio...

Science makes sense, family doesn't.

Season 4

Rick is a mentally-unbalanced but scientifically gifted old man who has recently reconnected with his family. He spends most of his time involving his young grandson Morty in dangerous, outlandish adventures throughout space and alternate universes. Compounded with Morty's already unstable family life, these events cause Morty much distress at home and school.

☑ Interested in this show?

☐ Watched this show?

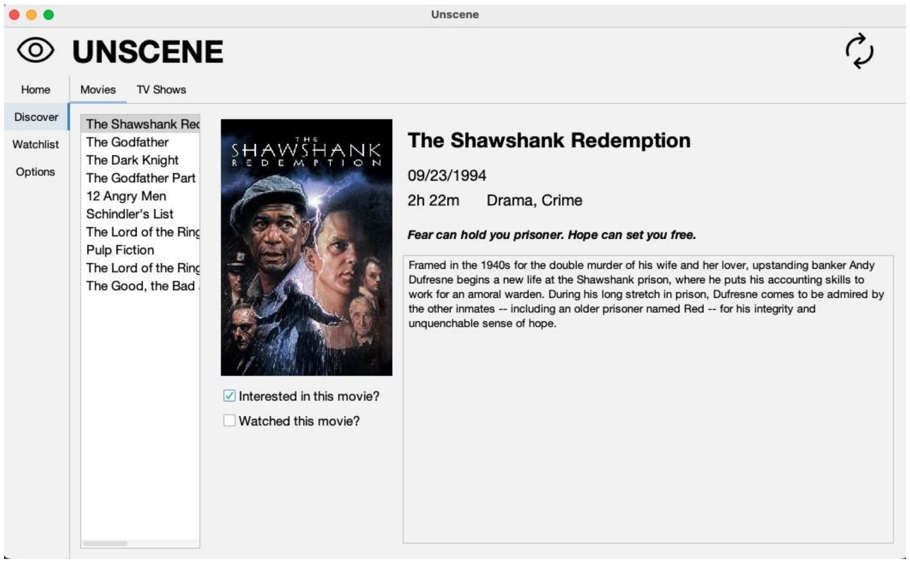
Season 4

11/09/2019

10 Episodes

☑ Watched this season?

Everything and nothing makes sense when bizarre genius Rick and his grandson Morty take more interdimensional journeys that bend time and space.



The Shawshank Rec
The Godfather
The Dark Knight
The Godfather Part
12 Angry Men
Schindler's List
The Lord of the Ring
Pulp Fiction
The Lord of the Ring
The Good, the Bad

The Shawshank Redemption

09/23/1994

2h 22m Drama, Crime

Fear can hold you prisoner. Hope can set you free.

Framed in the 1940s for the double murder of his wife and her lover, upstanding banker Andy Dufresne begins a new life at the Shawshank prison, where he puts his accounting skills to work for an amoral warden. During his long stretch in prison, Dufresne comes to be admired by the other inmates -- including an older prisoner named Red -- for his integrity and unquenchable sense of hope.

☑ Interested in this movie?

☐ Watched this movie?

4.3b. Text Formatting & Processing

Raw data for TV Shows and Movies was received in .json format. Many of the methods in the Movie object and TV show object display genres and dates as formatted strings that make the data presentable for the user.

4.3c. Graphics Sampled/Constructive with Manipulation or Animation

The team pulled posters for tv shows and movies, this was then formatted to a particular size so that they would display to the screen properly. The Progress bar is also a visual component that helps the user quickly understand how far along they are in their watchlist progress.

4.3d. Storage and Retrieval of Information

reading/writing from json. Though not fully implemented, the API from TheMovieDB was used for the Raw data that is stored in a .json file. A .json parser was used to read and write to and from that file.

Section 5 - Implementation

5.1. Overview

- One of the most significant implementations was the dashboard/home page, it provides a lot of information to the user that helps them understand whats going on right out the gate. The UnsceneGUI class contains the main user interface for the application. Within this class there are DisplayHome, DisplayMovies, DisplayOptions, and DisplayShows Jpanels. These are responsible for displaying specific data to the screen for their corresponding tabs. The UnsceneGUI class also contains MovieJSONEditor and TVJSONEditor classes that are responsible for reading and writing to the data files.

5.2. Public Elements (API)

- TheMovieDB was used to collect raw data for the project but was not directly implemented into the project. Many foundational elements are implemented in the code that can handle retrieving data from the API.

Section 6 - Exercise & Testing

6.1. Testing

- As the program was being constructed, the software was tested and run occasionally to ensure that implemented functionality was indeed functional. As the UI was modified and changed over time to better suit the software, tests were done to make sure that the methods that modify the files necessary were consistent and functional (as in, user inputs are saved after software is closed). More testing was done to make sure that Movie or TV Shows had their respective poster art displayed to the window when the respective movie was selected.
- One of the larger tests that was done was creating some example media objects and testing the getters and setters for these objects.
- Another series of tests was run to make sure that the .json files and related functions worked correctly (input/output and read/write functionality).

6.2. Walkthrough

- User navigates to Discover page
- User navigates to a movie or Tv Show and is provided the ability to interact with it. Options include: Mark as watched, Mark as Interested, View details
- User navigates to Watchlist tab
- User marks media that they have watched as “watched”

Section 7 - Evaluation

- According to Chapter 3 an effective evaluation checks for the 5 C's (Cohesion, Completeness, Convenience, Clarity, and Consistency).
  Cohesion: All methods and classes have specifically intended purposes, and each class executes said purpose
  Completeness: Each method is implemented, leaving no empty, undefined, or unused methods.
  Convenience: All intended tasks given to the user through the GUI are possible
  Clarity: All methods are clear and concise, having an expressed purpose through different comments and names.
  Consistency: All related features have consistently been implemented.
- The goals that our team set out to accomplish were separated into categories that were: Essential, and Enhancement. The essential goals were accomplished, providing us with a product that allows users to track shows or Movies that they want to watch. The ability to mark shows and Movies that have already been watched is also an essential goal that was achieved. Some stretch enhancement goals had to be left unimplemented however. Things like a recommendation system, search bar, notification system, and API integration are features that if provided time and funding, would be implemented into the final product.
- Some of our best work came from the User Interface. Using Netbeans' Look and Feel for the JFrames, we were able to create a very sleek and clean interface for the user to look at and work with.
- One method to improve the project would be to seamlessly link the movie classes to an API that would allow users to access a database with a much wider selection of films and television shows
- The product as it is now is functional, it could be further improved with the suggestions provided in our stretch goals (recommendation system, search bar, notification system, and API integration). It provides a good proof of concept that this project is something that is achievable.

Section 8 - Submission Notice

Signature:

[illegible]

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Date: November 29, 2022

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[illegible]

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