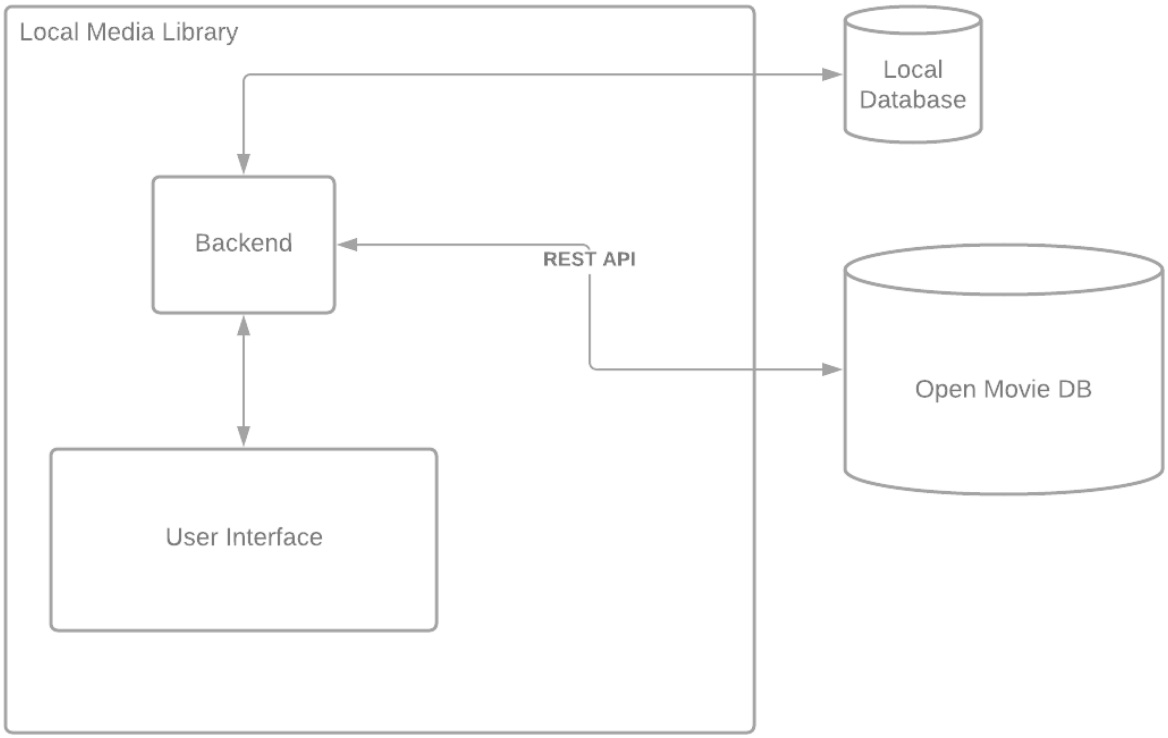
Local Video Library

https://github.com/comp195/spring-2021-final-project-we-use-arch-btw

Alex Reynen: a_reynen@u.pacific.edu
Austin Whyte: a_whyte@u.pacific.edu

Last Edited: 2021-04-30

System Architecture



Backend: Written in python, this component will receive events from the **User Interface** and interact with the **Local Database** to retrieve and store information about the user's media library
User Interface: The main interface that users will use to interact with the program. Using GTK, the user interface will receive information from the **Backend** and display the corresponding information to the user
Local Database: Database holding information obtained from the **Open Movie DB** and information about the user's local library. Using a SQLite database.
Open Movie DB: Online database holding movie information we will use to fill with information for local media files in our **Local Database**. The **Backend** will communicate via a REST API to retrieve information.

Hardware, Software, and System Requirements

Hardware Requirements:
CPU: Any modern CPU
GPU: Any modern GPU
Internet: Broadband Internet Connection recommended for metadata retrieval
RAM: 2GB
Disk Space: Varies based on the size of your media library.

Software Requirements:
Python: 3.9 or newer
Linux: Kernel 4.4 or newer
Display Server: Xorg
Toolkit: GTK

External Interfaces

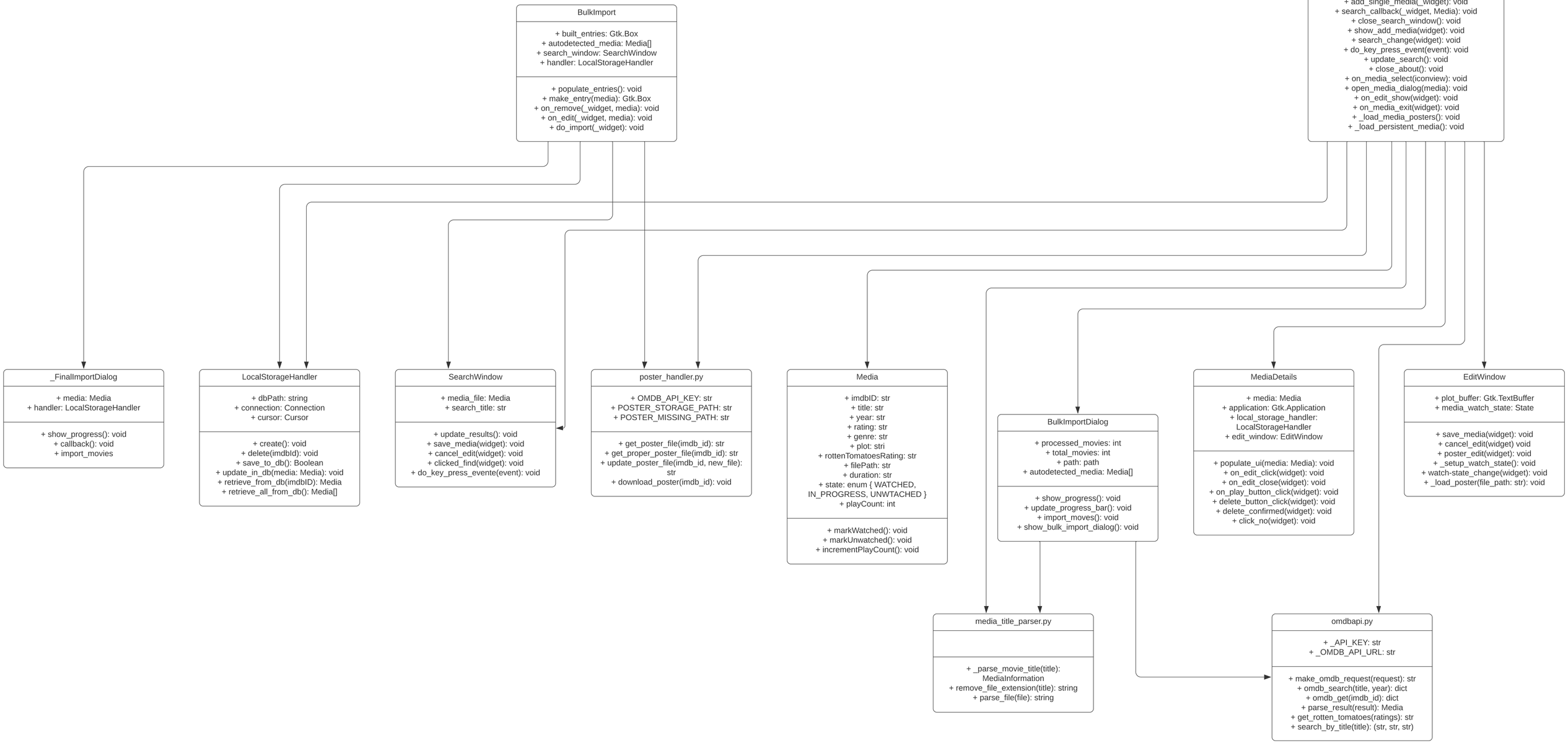
Open Movie Database API: Documentation for the Open Movie Database API (OMDb) is available at https://www.omdbapi.com/

Software Design

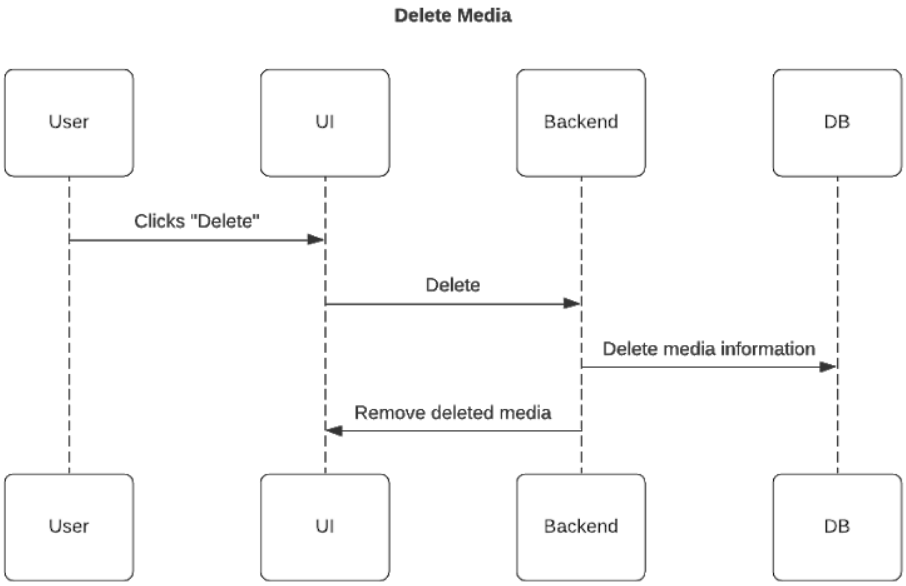
UML Diagram
See the next page

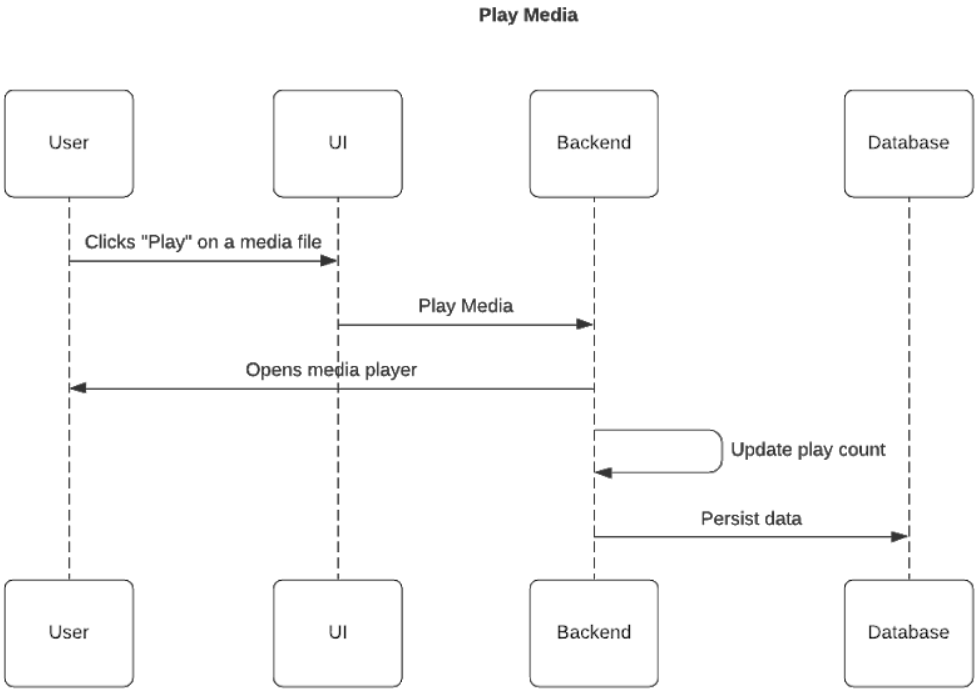
Local Media Library

Austin Whyte | April 30, 2021

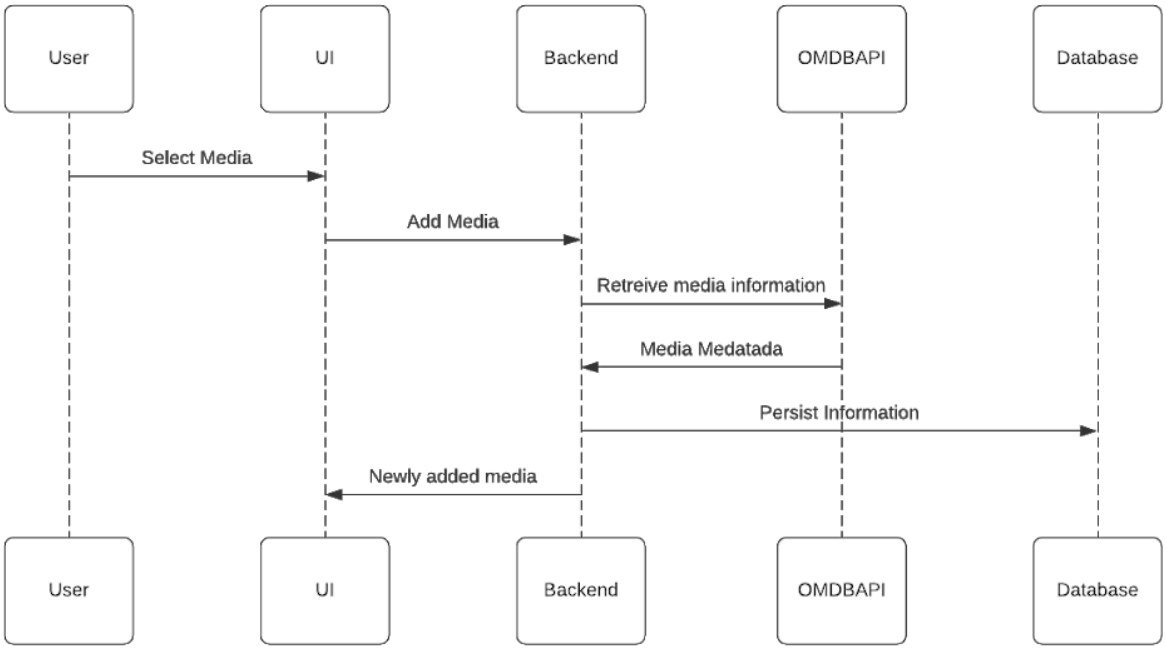


Interaction Diagrams

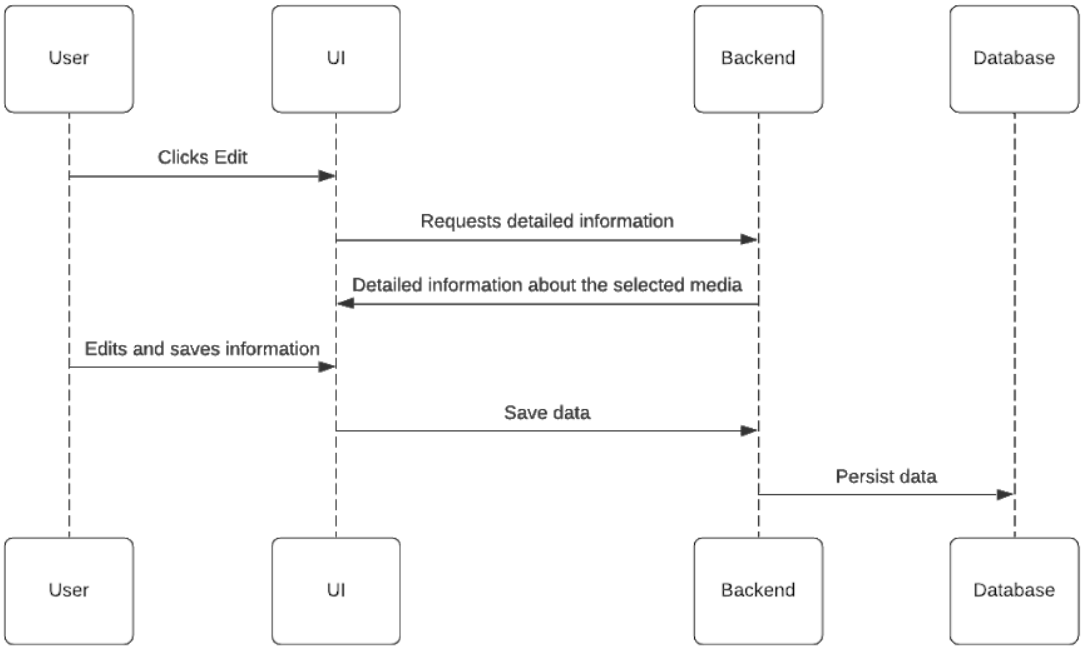




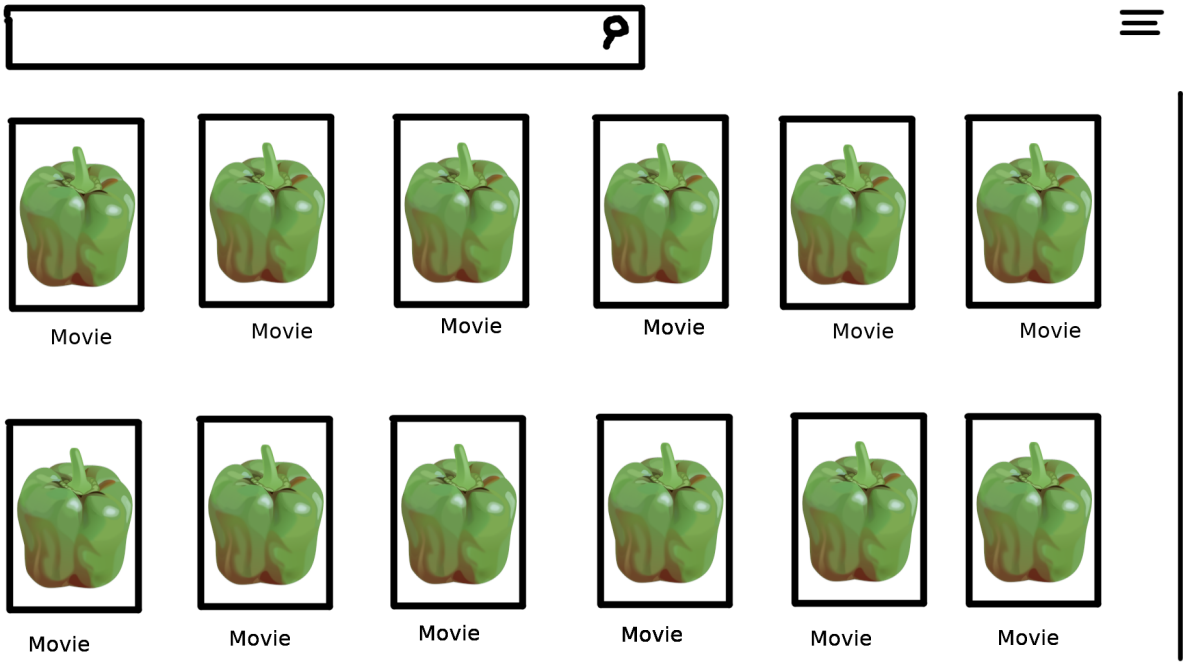
Add Media



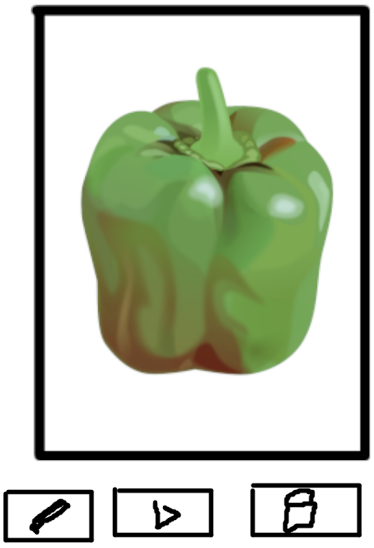
Edit Media



User Interface Design



Home Screen. Hamburger menu holds options to sort, add new entries, and settings. Shown movies are already in the local database, with information from the OMDb. The posters (shown as peppers) are pulled from OMDb and stored locally on the user's computer.



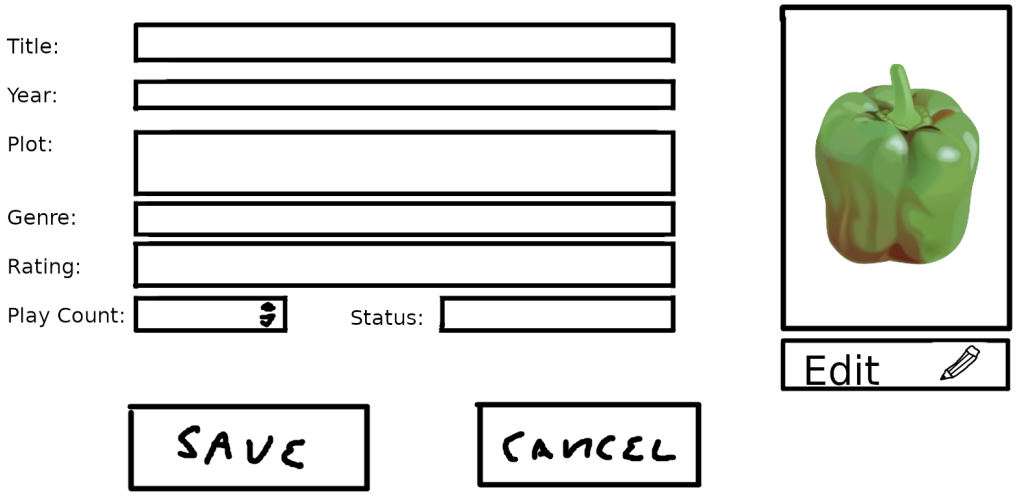
Movie (20XX)

Plot Summary:
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

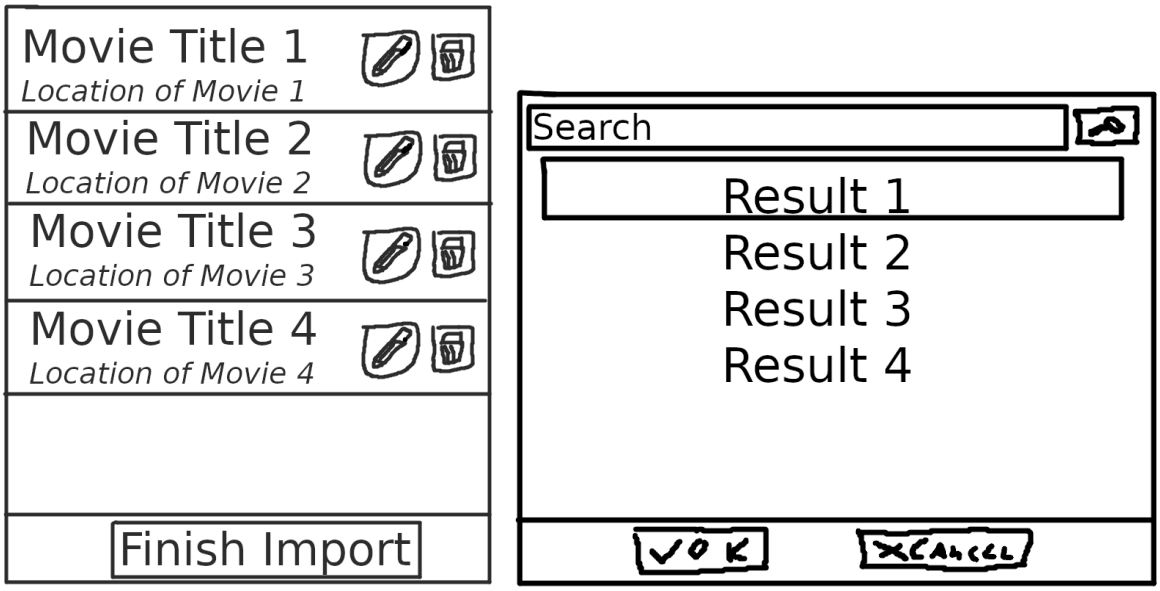
Rated: NC-17
Genre: Comedy
Rotton Tomatoes: 100%
Play Count: 5

Watched

Media Screen. Screen when viewing one media entry. Shows all the data collected and allows for the user to edit metadata (pencil icon left) or play (play icon middle) or delete (trashcan icon right) from this screen.



Edit Screen. Screen that allows the user to edit metadata (in the database) of a show and change the movie poster as well.



Search Screens. 2 Windows that help the user search for the proper movie based on their file name. When bulk importing, the left menu appears first with every found media entry in the folders. When importing a single media, only the right shows. For the left media, clicking the

pencil will show the right window with the guessed movie title where the user can refine their pick. The trash can will remove the movie from the bulk import.

Glossary of Terms

OMDb API: OMDb is the Online Movie Database (https://www.omdbapi.com/) that holds metadata on various Movies. We will use its API to collect this information and store it in our own local database to then be accessed by our backend.

Hamburger Menu: The Hamburger Menu is a context menu generally located at the top of the screen. It is named as such due to the three horizontal lines resembling a hamburger. Oftentimes, this contains settings and features that would be in a “File” or “Edit” system menu.

SQLite Database: A database conforming to the SQLite specification.

Bulk Importing: A term we used to describe selecting a folder full of media as opposed to a single movie.