



Northeastern University
CS 4500 – Software Development

Rotten Tomatillos UI/UX Usability Report

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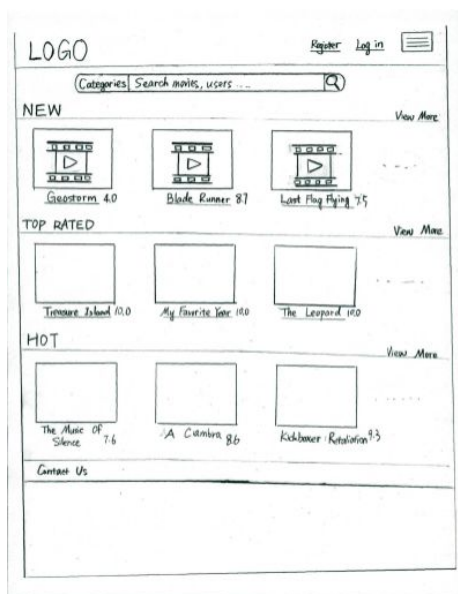
Introduction

We conducted a usability study for our interface for Rotten Tomatillos, a movie database and social network. We want our platform to be a place for users to easily find good movie recommendations, information, and ratings. We want users to be able to see what movies their friends enjoy or are interested in, and to be able to recommend movies to their friends. We also want users to be able to track movies they themselves are interested in and have easy access to places where they can buy and watch these movies. In order to achieve this, we need an accessible user interface that is user friendly and intuitive.

We asked 5 participants to complete 3 tasks on our paper user interface mockup to the best of their ability. First we introduced ourselves and read the consent form to the participants and explained the process to them. We asked them if they had any questions and were willing to participate in our study and had them sign the consent form. To complete the tasks, we had participants tap on elements of the mockup to simulate clicking. When certain elements were clicked, a group member would change the layout of the mockup to simulate a response from the UI. We took notes and timed participants while they attempted to complete the task, and we encouraged them to talk through their thought process and give feedback about their experience. These notes and metrics will be used to analyze the strengths and weaknesses of our UI design so that we can continue to improve it. We didn't give the participants any information on how the UI works, nor did we provide any hints about how to complete the tasks. After the three tasks, we conducted a short interview about their experience with the interface. We recorded these responses to further analyze our UI.

Paper Prototype

Our interface mockup was a series of hand-drawn paper prototypes:



The sketch depicts a web browser window with a dark title bar. The page layout includes a top navigation bar with a logo, a search bar, and a user profile section. The main content area is divided into several recommendation modules, each featuring a placeholder image and a title. The design is minimalist, using simple lines and text to represent the UI elements.

Logo

Hi, Alex! Log out

Search movies, users...

Alex
Manage Profile

Follow 240
Followers 180

Wanted-to-see Movies
Alex

Following 2

My Favorite Movies
This user has no favorite movie selections yet

My favorite playlists

Friends' Recommendations
Alex

Blake Runner
2014

System Recommendations

Beaten

LOGO

5:30 Hi, Alex! ☒ net ☐

Categories Search movies, users...

SEARCH RESULTS FOR: "runner"

☒ Movies ☒ Users ☐ Tags

Movies

<input type="checkbox"/>	Blade Runner (1982) Harrison Ford, Rutger Hauer, Sean Young 9.0
<input type="checkbox"/>	The Kite Runner (2007) Shawn Taylor, Atossa Leoni, Ahmad Khan Mahmoodzada not rated

more movies

Users

<input type="checkbox"/>	Runner 1
<input type="checkbox"/>	Runner 2

more users

Contact Us

LOGO

Hi Alex | Logout

Blade Runner

OverviewMovie Time & TicketsReviews

Released
1982

1 h 57 min

Action

Rate 7.2

+ Add to playlist

+ Add to Favorites

Recommend to friend

Trailer 1

Trailer 1

Trailer 2

Trailer 3

Trailer 4

CAST & CREW

Horizontal Sean Young
Rick Deckard Rachel

Movie Reviews

Add Your Review

☆☆☆☆☆ Rate

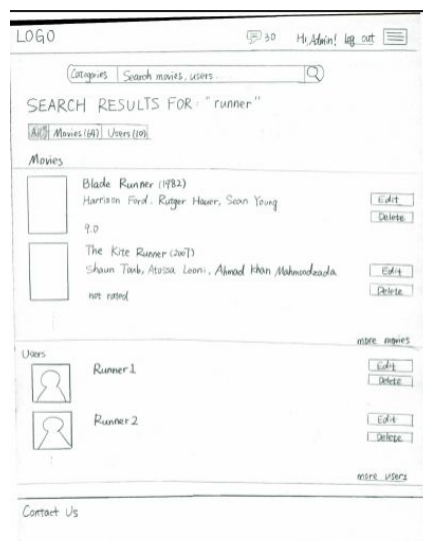
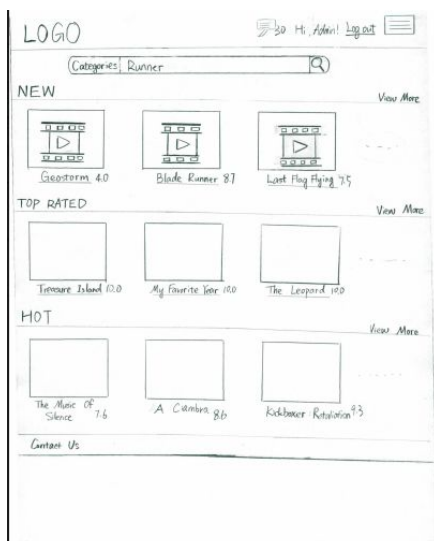
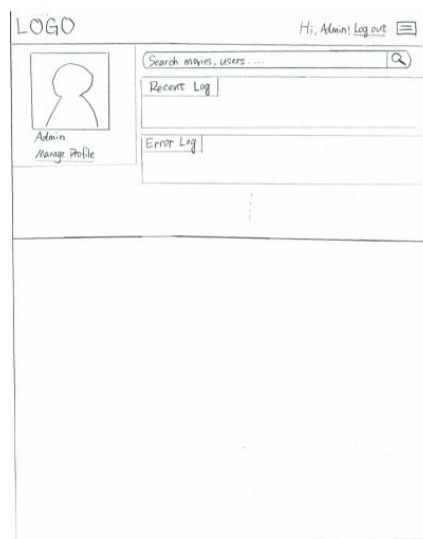
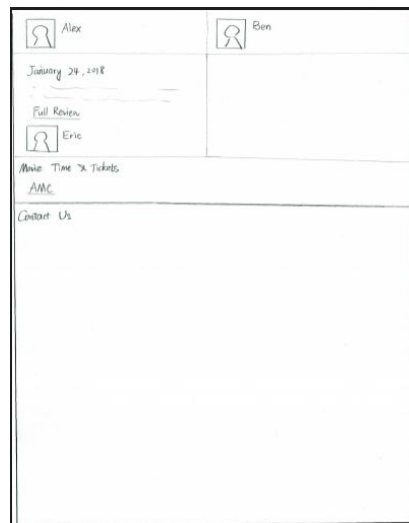
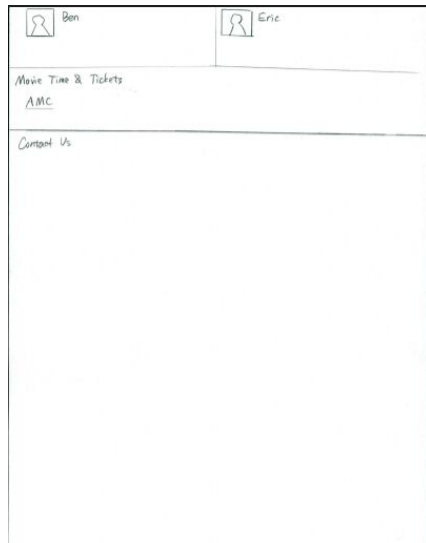
Add a review

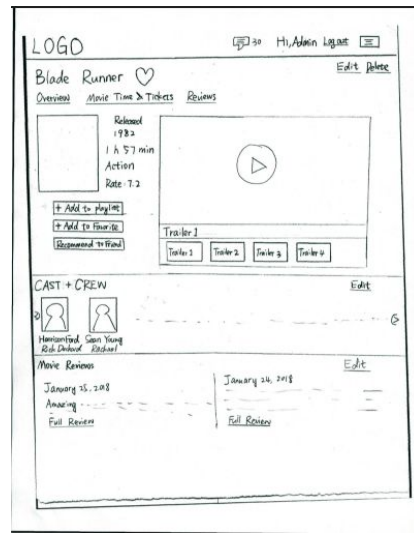
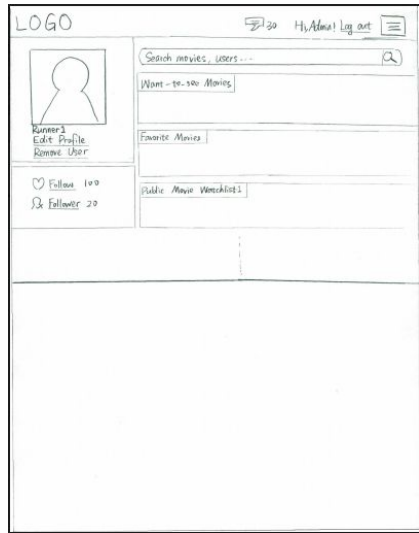
More

January 24, 2018

Amazing

Full Review





Participants

This part shows the demographic information of those volunteers. It contains their age, gender, education level, major and their technical competency.

For those participant subjects, we selected subjects randomly on campus, such as snell library, in the parking lot, curry student center, and so on. As for the technical competency, we evaluate this by asking participants to rate themselves as having a high, medium, or low technical competency based on the number of hours spent online and the amount of prior experience with these kind of products.

	Age	Gender	Education	Major	Technical Competency
Subject 1	20	Male	Undergraduate 2nd-yr	Business	Medium
Subject 2	25	Male	Graduate	Finance	High
Subject 3	19	Female	Undergraduate 2nd-yr	Computer Science	Medium
Subject 4	20	Male	Undergraduate	Economics	Medium
Subject 5	24	Female	Graduate 1st-yr	Global Fashion Study	Low

Tasks

For this usability report assignment, we came up with 6 different tasks together as a team. Three for the end users and three for the admin users.

1. Task 1 (End User): Search for a movie and add it to your favorite movie list.

Before the task begins, the subject should be told to start from the home page of the application, and we assume the user has already logged in. The correct procedures to perform this action will be:

- Type the movie name in the search bar.
- Press ENTER on the keyboard or click the search icon to perform a search.
- In the search result page, click to choose the correct movie.
- In the movie detail page, click “Add to favorite” button to add this movie to the user’s favorite movie list.

2. Task 2 (End User): Follow an user and view his/her movie collections.

Before the task begins, the subject should be told to start from the home page of the application, and we assume the user has already logged in. The correct procedures to perform this action will be:

- Type the user name in the search bar.
- Press ENTER on the keyboard or click the search icon to perform a search.
- In the search result, click to choose the correct user.
- In the user home page, click “Follow” to follow this user.
- Also in the user home page, click “Favorite Movies” to view this user’s favorite movies.

3. Task 3 (End User): Search for a movie, and find where you can purchase it.

Before the task begins, the subject should be told to start from the home page of the application, and we assume the user has already logged in. The correct procedures to perform this action will be:

- Type the movie name in the search bar.
- Press ENTER on the keyboard or click the search icon to perform a search.
- In the search result page, click to choose the correct movie.

- In the movie detail page, click “Movie Time & Tickets” link, and navigates to some third party markets such as iTunes, YouTube, and AMC to purchase and watch this movie.
4. Task 4 (Admin User): As an admin, deleting an user with ID 12345
- Before the task begins, the subject should to told to start from the home page of the application, and the we assume the user has already logged in. The correct procedures to perform this action will be:
- Type the user name in the search bar.
 - Press ENTER on the keyboard or click the search icon to perform a search.
 - In the search result page, there are two buttons, “Edit” and “Delete” followed by the user name, choose the correct user and click “Delete” to remove this user.
5. Task 5 (Admin User): As an admin, deleting the movie “Shrek 2”
- Before the task begins, the subject should to told to start from the home page of the application, and the we assume the user has already logged in. The correct procedures to perform this action will be:
- Type the movie name in the search bar.
 - Press ENTER on the keyboard or click the search icon to perform a search.
 - In the search result page, there are two buttons, “Edit” and “Delete” followed by the movie name and poster, choose the correct movie and click “Delete” to remove this movie.
6. Task 6 (Admin User): As an admin, change the email address for user with ID 12345
- Before the task begins, the subject should to told to start from the home page of the application, and the we assume the user has already logged in. The correct procedures to perform this action will be:
- Type the user name in the search bar.
 - Press ENTER on the keyboard or click the search icon to perform a search.
 - In the search result page, there are two buttons, “Edit” and “Delete” followed by the user name, choose the correct user and click “Edit” to edit this user’s profile
 - Type the new email address and click “Update” button to update the user’s profile.

Measurements

At the beginning of each task, we give the participant a pen to or have them use their finger to simulate a mouse. This can help us to track mouse movement. After that, we make sure the subject understands the task accurately. We prepare to take notes and prime the stopwatch. Then after double checking that the subject is ready, we start the stopwatch.

During the task, we take note of the subject's mouse movement to track which areas can cause confusion, and track how many incorrect movements or clicks he does. Meanwhile, we record anything the subject says and any facial expression or signs of confusion, such as scowl or shaking their head. If the subject completes the task or gives up, we stop the stopwatch.

After the task, we ask the subject for feedback. For example, we may ask "why did you shake your head during task 2?" to make sure we do not misunderstand their body language or verbal feedback. We then let them finish the survey. In summary, the information we collect includes:

- The timing of the tasks
- Verbal feedback given during the task as well as the volunteer's explanation for that feedback
- Non-verbal feedback and its explanation
- Numerical results of the post-test survey
- Verbal responses to the post-test survey

Test Results

Task Part

The following are the results for the tasks we gave the volunteers. Note that 3 of the volunteers did all 6 of the tasks while the other two only did 3 of the tasks (one did the three end-user tasks and the other did the admin tasks). This resulted in each task having four trials.

Task 1 (End User): Search for a movie and add it to your list

Time (seconds)	Notes
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70	<p>During the login page, he asked about the remember me check box for automated log in in the future.</p> <p>Easily found the search bar to enter in the movie name and easily found how to access that movie's page</p> <p>Easily found the button for adding the movie to the list</p>
40	overall good.
30	On the movie profile page, the ♥ and “add to favorite” may be duplicate. Just keep one, may be the ♥ symbol.
20	<p>On the movie detail page, the subject was confused about the “like button” and the “add to favorite button”.</p> <p>The subject complained about the category button in the front of the search bar is confusing.</p> <p>The subject was confused about the difference between hot movies and top-rated movies.</p>

Task 2 (End User): Follow any user and view their list of movies

Time (seconds)	Notes
40	<p>Easily found out how to search for another user</p> <p>She said there is too much white space in the profile page of the other user</p> <p>Asked for a section for the user's recent comments.</p>

30	overall good.
30	Straight forward. Click a user and it's done.
20	The subject thought when checking another user's home page, the search bar should not exist here.

Task 3 (End User): Search for a movie, and then find a link where you can buy that movie

Time (seconds)	Notes
60	The link button name is ambiguous and is too small and hard to find. The link to the website should be in the popup window, not a new page.
60	he thought the search bar under his profile page should not be as powerful as the search bar under the homepage, i.e. users should just go back to the homepage to search anything about movie and other users.
24	Also straight forward, but he is wondering few seconds to find the "Move Tome & Tickets" Link.
20	The subject thought the "but tickets" button was placed at the wrong position. She thought it's better to have the "buy tickets" button right after trailers.

Task 4 (Admin): As admin delete user id 12345

Time (seconds)	Notes
36	he was unclear about the admin profile page.
26	Straight forward.
100	He is confused with how to find the user id. Search bar is too small to notice
20	<p>The subject suggested to have a specific button for managing user accounts and movies. By only using the search bar is confused sometimes.</p> <p>On the search detail page, the subject suggested to arrange the movie list and user list horizontally in order to show more information.</p> <p>In the user profile page, it should show the user id as well.</p>

Task 5 (Admin): As admin delete the movie “Shrek 2”

Time (seconds)	Notes
42	overall good

17	Straight forward. (but there was no search result for Sherk2, used Runner instead)
70	He looked around 3 times. He could not find the “delete” button. It is not hard to find the user page. But he said “it’s better to put the delete button at the end of the page, from my perspective”
15	Same issue as deleting a user.

Task 6 (Admin): As admin change the email address of user id 12345

Time (seconds)	Notes
47	he mentioned that the admin profile page should look a bit more different than the end user profile page, like slightly changing the appearance of logo, tec.
20	when “edit profile” link under the use profile page was clicked, nothing happened.
100	He watched around and looked like confused. He said “can’t find change the email button. Oh! It’s here. The edit button is too small!”
30	The user profile page is disorganized. She suggested to put all the user information on top of the page and keep the user movie lists down low.

Survey Part

Question 1: On a scale from 1 to 7, how easy to use did you find our interface to be?

6 - Some buttons are hard to find, but the most part looks good.
6
6
4
5

Question 2: Which was your least favorite part of our interface and why?

Movie information page is nice. And the trailer idea is good.
profile. People can share what they like with others.
Add to favorite, heart symbol and “add to favorite” do the same thing
The edit function in the interface.
User profile page

Question 3: Were there any parts of our interface that had an unexpected effect when you clicked them?

No
No

The “user” interface is too simple.
No
No

Question 4: Are there any other general suggestions or improvements you have for our UI?

Add some pictures on movie information page
Will admin be confused when they log into a normal account? May make some changes to improve it.
No
After typing something in the search bar, put more relative record info in the box.
The footer doesn’t always stick at the bottom, and some pages are just disorganized.

Discussion

We found that the survey is very important for the start of a project. The advice given by volunteers will bring great benefits to our project. Many deficiencies have been pointed out, which will help us to improve our design in order to get a better user experience. According to the project requirements, we looked for volunteers from different professions, different genders and different technical levels to participate in the survey. We think this is very important, because they can provide multi-level and multi-perspective advice, making our design improved in all aspects for all types of users.

Our main design problem is the location of some links or buttons are not obvious enough or large enough to be found, and some buttons functions are repeated. We will focus on improving

the design of this piece. In addition, repetitions of icons and words, unclear labeling of elements, etc are also something we need to pay attention to. At the same time, we will continuously improve our page layout, making the page more pleasing to look at and clear. Volunteers also made some great suggestions on the some parts of functions. For example, the search bar in the user profile may need less functions, and the “buy ticket” link to external websites might be a popup window instead of a new window. These suggestions are very insightful, and we will discuss how to properly incorporate them into our design.