Usability Study Report

Note: Don't forget to add evidence of the recordings, and that I can access the document from john.guerra@gmail.com

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Application scope

Application description:
Users - Target audience: (user personas, as specific as possible)
- Alex, a college student
- Bob, a huge fan of Hitchcock
- Claire, a software engineer whose hobby is watching movies

Data description: (what data is stored and displayed)
- Users credentials namely first name, last name, email and password are stored in a users collection in our database.
- Our database includes a movie collection with 1000 records. Each record includes details about the movie. These are displayed when users query for movies. Some movies are displayed automatically as part of the top ten recommendation list.
- Our database also contains a Favorites List collection which contains each respective user's Favorites List and the movies they added to it.
- Similarly our database also contains a To Watch List collection which contains each respective user's To Watch list and the movies they added to it.
- Both the Favorites List and To Watch List are displayed in the Dashboard
- Lastly, our database has a Reviews collection that stores user's comments on the movie profile. These comments are displayed in the movie profile review section. Additionally, each comment is associated with the corresponding user.

Main tasks - use cases:
- T0: First impressions of the website based on the home page. What is the website for and who is the target audience?
- T1: Is the user able to reach the login page and sign up page to **create an account**.
- T2: If the user wants to **query** for a specific movie, can the user navigate to search menu?
- T3: User really enjoys a specific movie. Can the user **share their thoughts** about the movie? If they want to edit their comment, can they do so? If they want to delete their comment, can they do so?
- T4: User wants to **keep track** of movies they like and plan to watch. Can the users locate the dashboard to view their Favorites Lists and To Watch List. Are they able to **manage/ modify** either lists.
- T5: If the user is done using the website, can they **log out**?

Experiment

Pre-tasks survey:

1. Instructions for the participant, explain the things (consent form)
2. What this website for?
3. What is the target user for this website?
4. Introduce the purpose of the website to the participant
5. Ask participants to perform each task (one by one)
   List of tasks and time table:
   1. See if the user can reach the login/register page. Are they able to register with ease? (2-3 minutes)
   2. See if the users locate the search menu to look up a movie they would like to see. (3 minutes)
   3. In the movie profile, see if the user can add to the movies to the favorite list/ wish list and see if the user can post/edit/delete comments in the review section. (5 minutes)
   4. Locate the dashboard and modify list (2-3 minutes)
   5. Logout (1 minute)

Post study survey:

6. Participant scale for the tasks(post study survey)

Task	Rating (1-5) 1 = very difficult 2 = somewhat difficult 3 = neutral 4 = somewhat easy 5 = very easy	Comments
Login/ register		
Search menu		
Movie profile		

Dashboard		
Logout		

7. Demographic information gathering

Age	Gender	How many movies watch every month	Comments

Experiment Notes

Participant 1 (Study conducted by Aaron Leung)
Demographics answers
- 27 year old male
- Casual movie watcher; watches about 5 movies per month

Detailed notes
- First impressions
  - When asked what the purpose of the site was for, the participant guessed it was a site to watch or look up movies. The reason being is that he immediately noticed the top 10 movie recommendations and the search bar which he inferred could be used to look up movies.
  - When asked who the target user for this website is, he commented it was most likely for someone who loves movies and he presumes the general target audience would be young adults like himself who like to watch movies.
- Task 1 Notes (login and register)
  - Participant was able to reach the login page, register page with ease and able to register with no problem.
  - However, he was a bit surprised when he had to login after registering successfully. He joked that he almost forgot what password he registered with. It took him a moment to remember what credentials he entered.
- Task 2 Notes (Locate search menu and search for a specific movie)
  - Participant immediately knew to click Moviewer to navigate to the search menu.
  - However, he struggled a bit when searching for a specific movie. For instance, nothing was returned when he searched for the movie star wars. Although the

movie does exist in the database, the query was not recognized since it did not exactly match the same name (case-sensitive).
- ○ Participant attempted to search for a movie via partial search.
- ○ Ended up copying and pasting a movie title from the 10 top movies into the search bar to get to movie profile.
- Task 3 Notes (Comment/ edit/ delete and adding movie to favorite/ to watch list)
  - ○ Participant quickly notice the review section area below. He was able to post a comment, edit comment and delete comment with ease.
  - ○ When asked to add movies to his favorite and to watch list, he immediately went to each respective icon and clicked. However, he wasn't 100% sure whether the movie was added but assumed it was added since both icons disappeared.
- Task 4 Notes (Locate dashboard and modify lists)
  - ○ Participant was able to locate dashboard quickly in navbar
  - ○ Both lists were successfully loaded but there was an image for a movie that could not load. There was an alt text for the movie but it was not specific enough (can't tell which movie it was)
  - ○ Participant was able to remove movies from both lists with ease.
- Task 5 Note (Logout)
  - ○ Participant had no issues locating the logout button
  - ○ Able to logout successfully

Post-test questionnaire results (Likert scales):
- Task 1 score and notes
  - ○ Participant gave task 1 a rating of 5. He said that the login button was easy to find and that he immediately notice where it was.
  - ○ Once he reached the login page, participant said it was clear there were two options: sign in and sign up.
  - ○ He found the login/ register process very easy and intuitive.
- Task 2 score and notes
  - ○ Score for task 2 divided into two part: locating search menu and search query itself
  - ○ Participant gave locating search menu a rating of 4.
    - ■ He said having seen the landing page with the search menu initially gave him an idea of where to locate the search menu after logged in.
    - ■ However, he said that if he had not seen the landing page with the search bar initially, it could maybe have been difficult finding the search menu.
  - ○ Participant gave search query a rating of 3
    - ■ Participant remarked looking up a specific movie was difficult and that it was hard to get a successful result.
- Task 3 score and notes
  - ○ Score for task 3 divided into two part: writing/ edit/ delete of comment and adding movie to favorite list and to watch list
  - ○ Participant gave writing/ edit/ delete comment a rating of 4
    - ■ Participant remarked basic functionality worked but expected his name to be associated with comment
  - ○ Participant gave adding to favorite list and to watch list a rating of 4.

- - - ■ Participant noticed the icons but commented that he probably would need a bit of knowledge beforehand to know that the heart icon is associated with adding to favorite list and the plus icon is associated with adding to to watch list.
      - ■ He had to infer a little bit since there was no explicit labels
  - Task 4 score and notes
    - Participant gave dashboard a rating of 5.
    - Remarked that the dashboard was easy to locate in navbar
    - Instructions to remove movies was very clear
  - Task 5 score and notes
    - Participant gave logout a rating of 5
    - Very clear

Final comments and suggestions for improvements
- Overall, good site, pretty intuitive
- Maybe the only improvement is the search. Even if it has to match the title, provide a prompt saying like having to match exact title would help.
- Appearance: site made a lot of sense. Maybe can show grid so you see more movies at once.

Participant 2 (Study conducted by Aaron Leung)
Demographics answers
- 23 year old female
- Loves watching movies; watches about 10 movies per month

Detailed notes
- First impressions
  - When asked what the purpose of the site was for, the participant guessed it was a site for movies as she scrolled through the top 10 movies list. She also noticed the two icons which suggested to her that a user could make a list of some sort.
  - When asked who the target user for this website is, she commented the site was for movie enthusiast or for the general public who like to watch movies. She also speculated that users could see what other user think of a particular movie.
- Task 1 Notes (login and register)
  - Participant was able to reach the login page, register page with ease and able to register with no problem.
  - Participant saved password for site she recalling credentials for new account was not an issue.
- Task 2 Notes (Locate search menu and search for a specific movie)
  - Participant immediately knew to click Moviewer to navigate to the search menu.
  - Participant able to find movie relatively easy. She typed the movie name with capital letters (matched name in database)
- Task 3 Notes (Comment/ edit/ delete and adding movie to favorite/ to watch list)
  - Participant able to comment, edit comment and delete comment with ease.

- ○ When asked to add movies to his favorite and to watch list, participant was initially unsure how to add movie to lists. Took a moment to realize the function of the icons. Eventually added movie by adding icons.
- ● Task 4 Notes (Locate dashboard and modify lists)
  - ○ Participant was able to locate dashboard quickly in navbar
  - ○ Scroll effect for viewing list works
  - ○ Participant able to remove movie from both lists with ease
- ● Task 5 Note (Logout)
  - ○ Participant had no issues locating the logout button
  - ○ Able to logout successfully

Post-test questionnaire results (Likert scales):
- ● Task 1 score and notes
  - ○ Participant gave task 1 a rating of 5.
  - ○ She remarked that the process was pretty straightforward since the prompts were clear.
- ● Task 2 score and notes
  - ○ Participant gave locating search menu a rating of 5.
    - ■ Participant remarked to it was easy to navigate to the search menu by clicking site name. She mentioned that she was familiar with the structure of the site (similar to other sites she has used) so it was instinctual for her to click the movie site to get to the search menu
    - ■ Seeing the landing page before logging in also helped her realize how to navigate to the search menu
- ● Task 3 score and notes
  - ○ Score for task 3 divided into two part: writing/ edit/ delete of comment and adding movie to favorite list and to watch list
  - ○ Participant gave writing/ edit/ delete comment a rating of 5
    - ■ Participant remarked basic functionality worked and that it was simple and easy to use
  - ○ Participant gave adding to favorite list and to watch list a rating of 5.
    - ■ Participant remarked that although the icons to add movies to either list didn't have labels, she was able to infer the purpose of the buttons because the symbols were universal.
    - ■ However, remarked that it could have been potentially difficult if she didn't have prior knowledge about the meaning of the symbols
- ● Task 4 score and notes
  - ○ Participant gave dashboard a rating of 5.
  - ○ Remarked that the dashboard was easy to locate in navbar
  - ○ Instructions to remove movies was very clear.
  - ○ Also commented that she liked how the dashboard displayed the movies as well as the horizontal scroll effect.
- ● Task 5 score and notes
  - ○ Participant gave logout a rating of 5
  - ○ Remarked it was super easy as the logout button is in the same spot as the login button

Final comments and suggestions for improvements
- Like how homepage has top ten movies; like recommendations.
- Question about moviewer index; is there a way for users to rate the movie (possibly a feature to add)
- Liked the orange color
- Suggested the name of the website could stand out a little bit more.
- Liked the color contrast
- Liked how the search button changed color to indicate that the button was clicked.

Participant 3 (Study conducted by Aaron Leung)
Demographics answers
- 61 year old male
- Casual movie watcher; watches about 4-6 movies per month

Detailed notes
- First impressions
  - When asked what the purpose of the site was for, the participant guessed it was for looking up movies.
  - When asked who the target user for this website is, he commented that it was basically for anyone who is looking for a movie
- Task 1 Notes (login and register)
  - Participant was able to reach the login page, register page with ease and able to register with no problem.
  - Initially, participant input an invalid email address. However, participant was eventually able to successfully register after following error message prompts.
  - Initially when clicking sign up, nothing happened (frozen, perhaps lag?). Participant decided to re-enter password.
  - Had to repeat process again but was able to successfully register on second try.
- Task 2 Notes (Locate search menu and search for a specific movie)
  - Participant found it difficult to locate search menu.
  - Seemed like the participant was looking explicitly for the word "search"
  - Participant was mainly looking at the right side of the navbar. Didn't know he could click on Moviewer to reach the search menu
  - Initially clicked Movies tab but nothing showed. Asked for guidance on how to get to the search menu
  - When asked to search for a movie, participant initially scrolled down through top 10 movies. He then typed the name of a movie that was listed in the recommendation list but in lowercase. He was surprised to see that the movie didn't exist and scrolled back down to double check.
  - Participant tried another movie, this time typing the exact title (case-sensitive)
- Task 3 Notes (Comment/ edit/ delete and adding movie to favorite/ to watch list)
  - Participant able to comment, edit comment and delete comment with ease.
  - Added a movie (Day of the Doctor) to the favorite list (unsuccessful)
  - When asked to add additional movies, forgot how to get to the search menu

- ○ Participant wasn't aware he could add movies directly from the recommendation list via icons. He thought he had to search of the specific movie
- Task 4 Notes (Locate dashboard and modify lists)
  - ○ Participant was able to locate dashboard quickly in navbar
  - ○ Participant able to remove movie from both lists with ease
- Task 5 Note (Logout)
  - ○ Participant had no issues locating the logout button
  - ○ Able to logout successfully

Post-test questionnaire results (Likert scales and reasons):
- Task 1 score and notes
  - ○ Participant gave task 1 a rating of 5.
  - ○ He remarked that the process was very straightforward and self-explanatory.
- Task 2 score and notes
  - ○ Score for task 2 divided into two part: locating search menu and search query itself
  - ○ Participant gave locating search menu a rating of 3.
    - ■ Participant remarked that the directions were not clear and that he did not know where to go
  - ○ Participant gave search query a rating of 4
    - ■ Participant found it a little bit frustrating that typing the right name in lowercase didn't return the result.
    - ■ But commented that the overall functionality was simple.
  - ○
- Task 3 score and notes
  - ○ Score for task 3 divided into two part: writing/ edit/ delete of comment and adding movie to favorite list and to watch list
  - ○ Participant gave writing/ edit/ delete comment a rating of 5
    - ■ Participant remarked basic functionality worked and that it was simple and everything went smoothly.
  - ○ Participant gave adding to favorite list and to watch list a rating of 4.
    - ■ Participant also commented that the icons were very clear despite not having explicit labels
    - ■ Commented that everything went smoothly except for the one movie that didn't get added
- Task 4 score and notes
  - ○ Participant gave dashboard a rating of 5.
  - ○ Remarked that the dashboard was easy to locate in navbar
  - ○ Instructions to remove movies was very clear.
  - ○ Also commented that he liked how the movie posters were displayed
- Task 5 score and notes
  - ○ Participant gave logout a rating of 5
  - ○ Remarked super easy, no problem

Final comments and suggestions for improvements
- No additional comments

Participant 4 (Study conducted by Yao Zhong)
Demographics answers
- Age 27, Male, watch 2-3 movies per month

Detailed notes
- First impressions
  - The participant thinks this website is for movie display, which means we selected some of the movies and display them at the website
  - He also thinks this site is for the young teenagers who likes movies
- Task 1 Notes (login and register)
  - The participant can easily find the login button and login
- Task 2 Notes (Locate search menu and search for a specific movie)
  - For look up the movie the participant took some time to find out the button going back to the search page and opened the empty page "movies"
  - The first search was not successful because of the case sensitive problem
- Task 3 Notes (Comment/ edit/ delete and adding movie to favorite/ to watch list)
  - The participant asked "what is this for" about the two buttons
  - But the review section went well.
- Task 4 Notes (Locate dashboard and modify lists)
  - After knowing what the buttons are for, the participant can now add movies to the lists easily
- Task 5 Note (Logout)
  - Easily logout

Post-test questionnaire results (Likert scales and reasons):
- Task 1 score and notes
  - 5, This website is pretty easy to use
- Task 2 score and notes
  - 4, It is case sensitive, so it is a little bit hard to use
- Task 3 score and notes
  - 5, no comments
- Task 4 score and notes
  - 5. no comments
- Task 5 score and notes
  - 5. no comments

Final comments and suggestions for improvements
- Pretty great and easy to use.

Participant 5 (Study conducted by Yao Zhong)
Demographics answers
- Age:21, Male, Watches 1 movies per month.

Detailed notes
- First impressions
  - Thinks this website is for people who loves movies
  - This website displays the details of the movies.

- Task 1 Notes (login and register)
  - The participant can easily find out where to login.
  - The participant met with some issue, when he signed up for the first time(did not automatically re-direct)
- Task 2 Notes (Locate search menu and search for a specific movie)
  - The participant can not find where to go back to the home page, and did not know that the "Moviewer" is clickable.
  - The participant tried to search for the movie which is already in the suggestion, but due to the case sensitive, the result is none.
- Task 3 Notes (Comment/ edit/ delete and adding movie to favorite/ to watch list)
  - The participant hovered around the button which adds movies to the list but there were no response, so he did not know that the button is clickable.
  - The participant also added to the wish list but did not show up.
  - The review part is smoothly.
- Task 4 Notes (Locate dashboard and modify lists)
  - The participant can easily remove movies from the fav list and wish list
  - But the remove function for the movies are sometimes slow.
- Task 5 Note (Logout)
  - Easily logged out

Post-test questionnaire results (Likert scales and reasons):
- Task 1 score and notes
  - 4, Firstly it is convenient to find the login place and the process is not hard.
- Task 2 score and notes
  - 4, Input the wrong word, we can not find the movie. This part can be improved.
- Task 3 score and notes
  - 5, It's not difficult, I think it's a good website to store a movie.
- Task 4 score and notes
  - 4, I think the interface of the website is great and easy to use
- Task 5 score and notes
  - 5, Its so easy, just on the right place.

Final comments and suggestions for improvements
- No additional comments

Participant 6 (Study conducted by Yao Zhong)
Demographics answers
- Age 24, Male, watches 3-4 movies per month.

Detailed notes
- First impressions
  - The participant thinks this is a movie review app and provided some detail informations about the movie.
  - And the target user is the audience who want to post movie reviews or read movie reviews
- Task 1 Notes (login and register)

- ○ The user can easily register and login.
- Task 2 Notes (Locate search menu and search for a specific movie)
  - ○ The participant clicked the empty page by accident.
  - ○ The participant did not know that the "moviewer" is clickbale.
  - ○ Easily find the movie he wants to look up.
- Task 3 Notes (Comment/ edit/ delete and adding movie to favorite/ to watch list)
  - ○ The review part is smoothly.
  - ○ And the participant also noticed that the username which displays at the comment is different from the real username.
- Task 4 Notes (Locate dashboard and modify lists)
  - ○ The participant knows the buttons are for add to the list, but did not know that which one is which list.
  - ○ The participant can easily remove the move from the lists.
  - ○ Suggested that we should add some prompt for the usage of the buttons.
- Task 5 Note (Logout)
  - ○ Easily logged out.

Post-test questionnaire results (Likert scales and reasons):
- Task 1 score and notes
  - ○ 5, very easy to login, but you can also add some pop out message about user logged in.
- Task 2 score and notes
  - ○ 5, add more movies to the database so that the users can get what they want. Another advance feature is give more suggestions for the users rather than just give one.
- Task 3 score and notes
  - ○ 5, Very easy, but the participant expect a new functionality of rating for the movie.
- Task 4 score and notes
  - ○ 4, Could not tell which button stands for which list.
- Task 5 score and notes
  - ○ 5, very straightforward.

Final comments and suggestions for improvements
- The design for this site is more of personal than commercial. The design should be improved if it is a commercial site.

Prioritized list of issues and corresponding changes:

Summarize the most crucial issues and changes proposed

Issue: Some users initially hesitated before clicking the add buttons to the favorite list and to watch list. Remarked that although these icons are universally known, would be good idea to add a small prompt describing the purpose of each icon (AL)

Change: Could add a hover effect where if you hovered over the icon, it would have a small prompt describing the purpose of the button.
Priority: Should
Implemented: Added hover effect for both of the buttons so that the user knows it is clickable, also added the title for the buttons, when the user over on the button, they will get the prompt.

Issue: Some users were unable to locate the search menu via clicking on "Moviewer" label on the top left hand corner. (AL)
Change: Add a "Search" icon next to the "Moviewer" label as well as a hover effect over the whole thing (Search icon + "Moviewer")
Priority: Must
Implemented: Added hover effect so that the user knows it is clickable, also added a "search" icon next to it so that the users knows where to start search.

Issue: Users noticed that they were able to edit every comment in the review section of a movie.
Change: Make it such that only users can edit their own comments.
Priority: Could
Implemented: Now the review section checks what the review belongs to and only allow the user who posted the comment to edit.

Issue: Query for a specific movie required the user to type the exact name that matched the name in the database. (YZ)
Change: Either use regular expression or provide a more detailed prompt to user when result is not found. For example, let users know that the query should be case-sensitive.
Priority: Must (with different solutions that could be implemented)
Implemented: changed the way the search happens, now used the regex of mongoDB to search for the movies. Also, the search result will come with multiple choices, so that the user can choose the correct movie to review.

Issue: Comments that users wrote showed up under a different user name.
Change: Make the user of the comments dynamic so that it will show the actual user.
Priority: Could
Implemented: Now the review section checks what the review belongs to and displays the owner of the review..

Issue: Some participants were not able to successfully register on first try but able to upon second try.
Change: Have to investigate further
Priority: Would
Not solved, the problem is not stable and may be related with the deployment service.

Issue: Movies tab is empty. It was initially used in the development process. (YZ)
Change: Remove the tab
Priority: Must (with different solutions that could be implemented)
Implemented: removed the empty page from the Nav Bar.

Issue: Background color for the login/ sign up page doesn't match with the overall color of the website. (AL)
Change: Find a more suitable color that matches the color of our website.
Priority: Must
Implemented: changed the background color of the login/sign up page to a color which is more suitable to the main color of the website according to the color palette.

Issue: Broken image currently displays a very general description for the alt text
Change: Make alt text more descriptive based on movie
Priority: Must
Implemented: the alt value for the images are set to be the movie title.

Issue: Design of the dashboard could be improved
Change: Improve the design to make it easier for users to understand what to do
Priority: Could
Partially implemented: Added icons to this page.