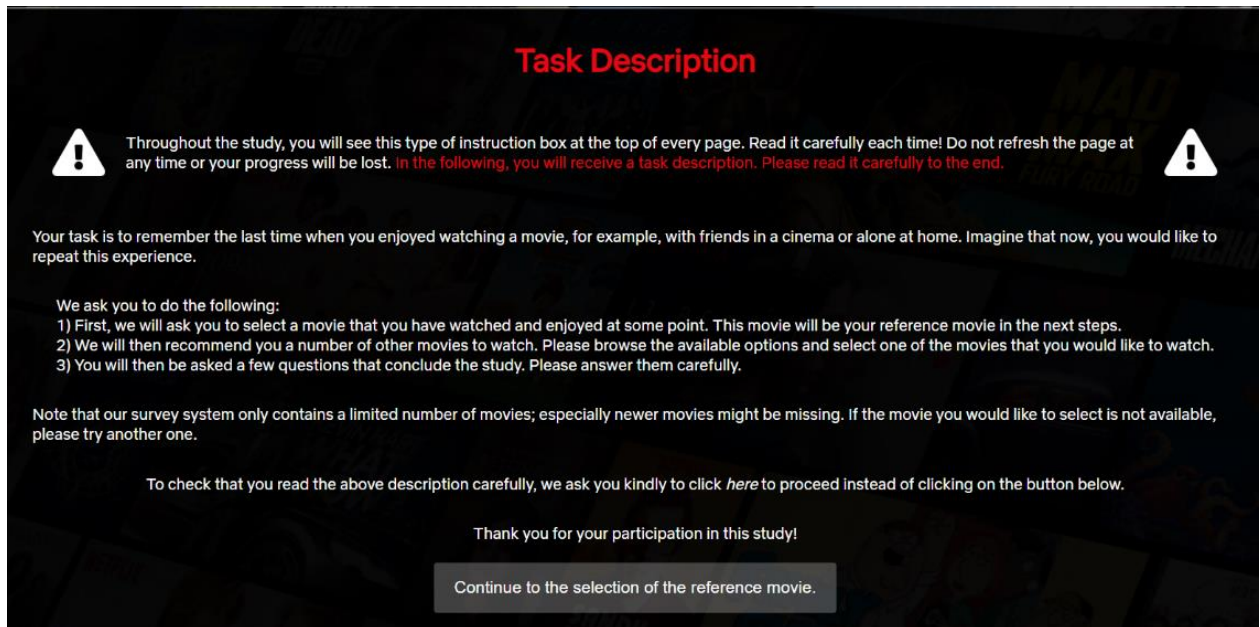


# “Exploring Multi-List User Interfaces for Similar-Item Recommendations”

## Online Study: Screen Captures

### 1 Task description



The screenshot shows a dark-themed interface with a red title 'Task Description' at the top. Below the title, there are two white warning icons (exclamation marks inside triangles) flanking a paragraph of text. The text explains that throughout the study, users will see this type of instruction box and should read it carefully each time, not refreshing the page. It also states that in the following, they will receive a task description and should read it carefully to the end. Below this, a paragraph describes the task: to remember the last time they enjoyed watching a movie, for example, with friends in a cinema or alone at home, and imagine that now they would like to repeat this experience. Then, a section titled 'We ask you to do the following:' lists three steps: 1) Select a reference movie, 2) Browse and select a recommended movie, and 3) Answer questions. A note mentions that the survey system has a limited number of movies, especially newer ones might be missing. At the bottom, there is a line of text asking users to click a link (represented by the word 'here') to proceed instead of clicking the button below. The button itself is labeled 'Continue to the selection of the reference movie.'

**Task Description**

Throughout the study, you will see this type of instruction box at the top of every page. Read it carefully each time! Do not refresh the page at any time or your progress will be lost. In the following, you will receive a task description. Please read it carefully to the end.

Your task is to remember the last time when you enjoyed watching a movie, for example, with friends in a cinema or alone at home. Imagine that now, you would like to repeat this experience.

We ask you to do the following:

- 1) First, we will ask you to select a movie that you have watched and enjoyed at some point. This movie will be your reference movie in the next steps.
- 2) We will then recommend you a number of other movies to watch. Please browse the available options and select one of the movies that you would like to watch.
- 3) You will then be asked a few questions that conclude the study. Please answer them carefully.

Note that our survey system only contains a limited number of movies; especially newer movies might be missing. If the movie you would like to select is not available, please try another one.

To check that you read the above description carefully, we ask you kindly to click [here](#) to proceed instead of clicking on the button below.

Thank you for your participation in this study!


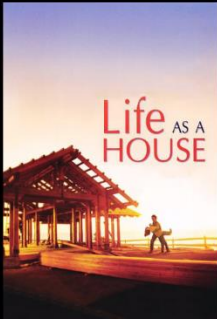

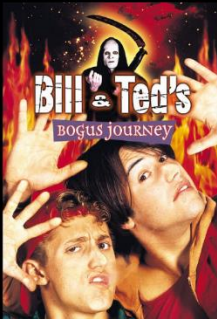
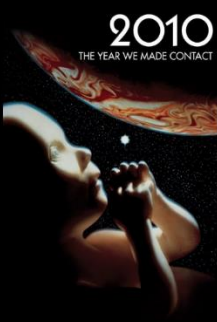



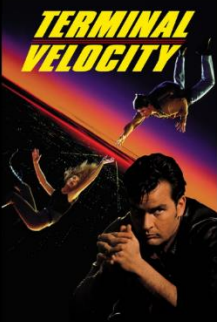
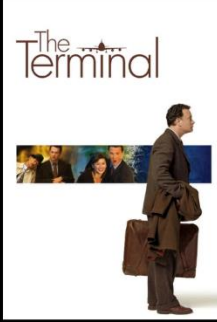



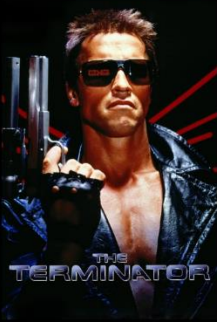
Continue to the selection of the reference movie.

## 2 Reference item selection

### Reference Item Selection

Please search for and select a movie that you have watched and enjoyed at some point. In the following step, we show you other movies that might be interesting for you.

Note that our survey system only contains a limited number of movies; especially newer movies might be missing. If the movie you would like to select is not available, please try another one.



### 3 Presentation of items

#### 3.1 Condition with one row, line breaks and one list label

**Your Reference Movie:**

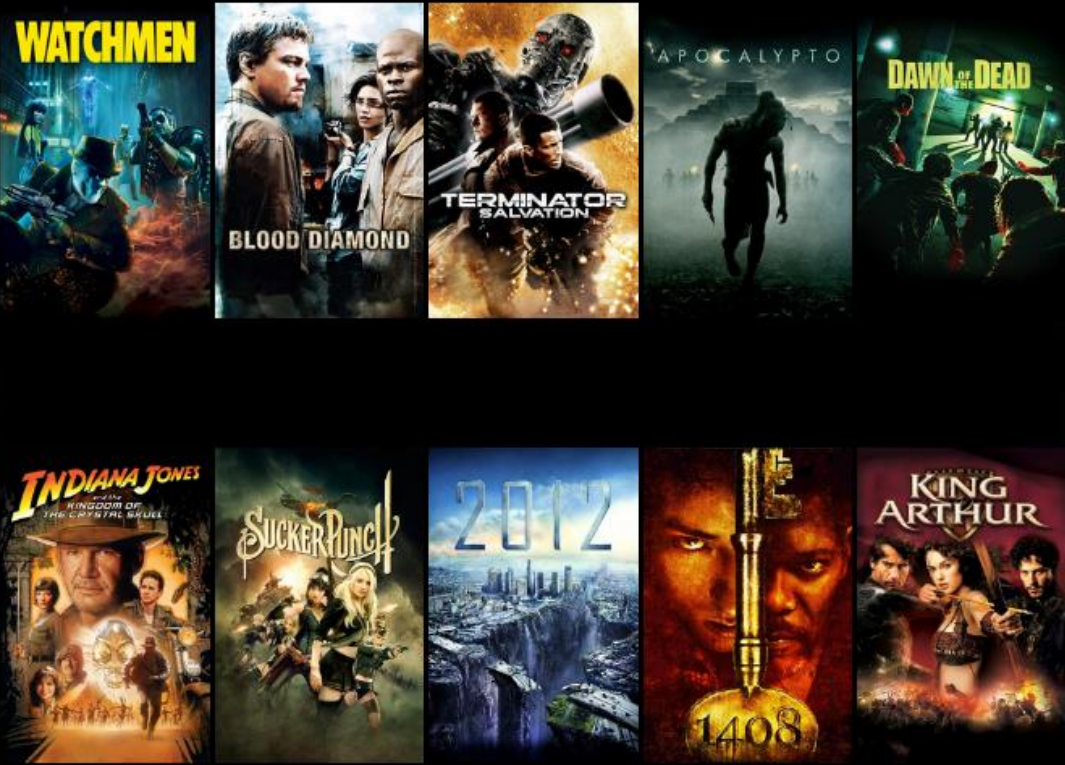
## 300

**2006**

Based on Frank Miller's graphic novel, "300" is very loosely based the 480 B.C. Battle of Thermopylae, where the King of Sparta led his army against the advancing Persians; the battle is said to have inspired all of Greece to band together against the Persians, and helped usher in the world's first democracy.

Stars: Gerard Butler, Lena Headey, David Wenham  
Director: Zack Snyder  
Genres: Action, Fantasy, War

**SIMILAR MOVIES**



The image displays a collection of movie posters arranged in two rows. The top row includes 'WATCHMEN', 'BLOOD DIAMOND', 'TERMINATOR SALVATION', 'APOCALYPTO', and 'DAWN OF THE DEAD'. The bottom row includes 'INDIANA JONES AND THE KINGDOM OF THE CRYSTAL SKULL', 'SUCKER PUNCH', '2012', '1408', and 'KING ARTHUR'.



### 3.2 Condition with multiple rows, line breaks and multiple list labels

**Your Reference Movie:**

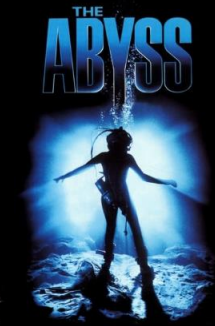
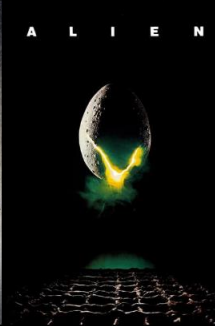


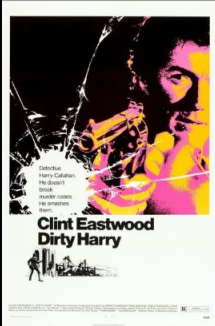
## The Terminator

1984



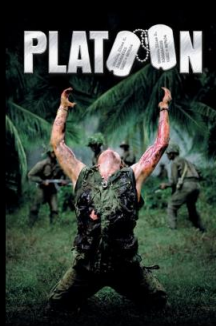

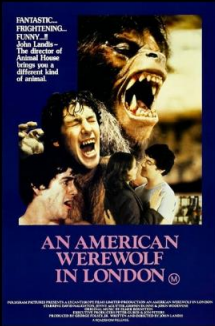
In the post-apocalyptic future, reigning tyrannical supercomputers teleport a cyborg assassin known as the "Terminator" back to 1984 to kill Sarah Connor, whose unborn son is destined to lead insurgents against 21st century mechanical hegemony. Meanwhile, the human-resistance movement dispatches a lone warrior to safeguard Sarah. Can he stop the virtually indestructible killing machine?

Stars: Arnold Schwarzenegger, Linda Hamilton, Michael Biehn  
Director: James Cameron  
Genres: Action, Sci-Fi

LIST  $\Xi$

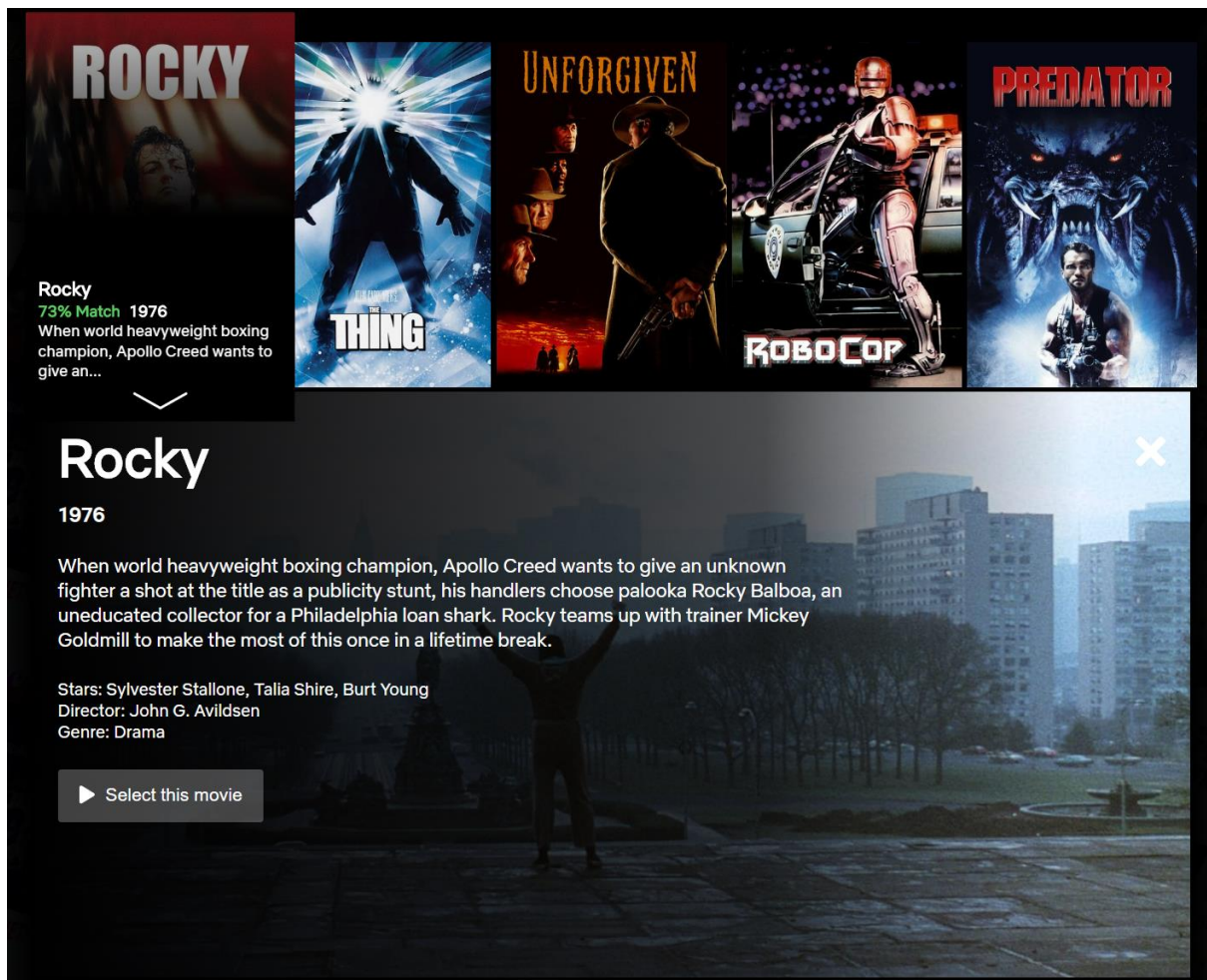


LIST  $\Psi$



#### 4 Detail view of a movie

When clicking on a movie cover, more information was displayed along with a button where participants could make their selection.



## Post-Task Questionnaire

Questionnaire (Statement to rate)	Key in Output Data	Possible values
It was difficult to find similar movies.	q_difficulty1	Likert scale (1-7)
All of the presented movies were similar to the reference movie.	q_similarity	Likert scale (1-7)
Searching for similar movies took a lot of time.	q_time_effort	Likert scale (1-7)
Deciding between the large number of options was difficult.	q_nb_alternatives	Likert scale (1-7)
The arrangement of the movies was well organized.	q_order	Likert scale (1-7)
It was difficult to find a suitable movie.	q_difficulty2	Likert scale (1-7)
I found more than one suitable movie.	q_more_than_once	Likert scale (1-7)
The proposed movies were diverse.	q_diversity	Likert scale (1-7)
The number of options was sufficient.	q_sufficient	Likert scale (1-7)
I was satisfied with the number of options.	q_satisfaction_with_options	Likert scale (1-7)
I am familiar with the movie that I chose.	q_decision_familiarity	Likert scale (1-7)
I am satisfied with the movie that I chose.	q_decision_satisfaction	Likert scale (1-7)
I was able to discover new movies.	q_novelty	Likert scale (1-7)
The application was easy to use.	q_ease_of_use	Likert scale (1-7)
Searching for a suitable movie was intuitive.	q_intuitive	Likert scale (1-7)
The situation described in the study was realistic	q_realistic1	Likert scale (1-7)
I had no difficulty imagining myself in the situation described in the study.	q_realistic2	Likert scale (1-7)

Personal information	Key in Output Data	Possible values
Your age:	q_age	Textfield
Your gender:	q_gender	Dropdown (Male, Female, Other)
Which of the following statements best describes your use of online movie services (e.g, Netflix, IMDB, etc.)?	q_streaming_consumption	Dropdown (Daily, Once a week, Once a month, Every 3 month, Hardly use them)
On average, how many days per week do you watch a movie?	q_movie_consumption	Dropdown (0 to 7)
General comments	q_comment	Textfield

## Objective Measurements

Documentation of Data	Description
session_id	Unique identification of the session
start_time	Timestamp the participant started the survey
condition	The condition group the participant was assigned
ref_item	The movie the participant chose as a reference
choice	The recommended movie the participant chose
choice_list_index	The index of the list in which the recommended movie is that the participant selected
choice_item_index	The index of the recommended movie participant selected
choice_list_name	In condition #4, #5 and #6 this attribute is used to group different lists
choice_time	How long did the participant take to make a choice
search_time	How long did the participant take to search
failed_first_check	Did the participant fail the first check?
failed_second_check	Did the participant fail the second check?
intro_time	How long did the participant take for the intro
survey_time	How long did the participant take for the survey
recommended_movies	What movies have been recommended to the participant
nb_hovered	Over how many movies did the user hover with the mouse
nb_unique_hovered	Over how many unique movies did the user hover with the mouse
overall time (derived)	How long did the participant take for the complete study