

Recommender System Evaluation Platform API Documentation - Version 1

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This documentation helps to elaborate the functionalities of the recommender system evaluation platform API. The examples are based on the Movielens dataset. If you're using other APIs, some request and response bodies may have different JSON structure.

1 Route */survey*

1.1 HTTP Method: GET

- Request URL: `<domain_name>/api/survey`
- Request Parameters: None
- Request Body: None
- Response Type: JSON
- Response Example:

```
1  {"surveys":
2  [{"
3    "id": 1,
4    "name": "Usability Test 2",
5    "num_questions": 6,
6    "num_tokens": 5,
7    "description": "Final Usability Test",
8    "tokens": "[\"ftz5jrx5kiv2jwzq\", \"g65xzoei88vknn6m\", \"yf1s3j6mv21lztz5\"
9      , \"yqc5scgmel5qte84\", \"0rb3uedp78plw9jd\", \"t52tuucatbws9i02\"]",
10   "dataset_id": 2,
11   "matchmaking_strategy": "naive_matchmaking_strategy",
12   "item_selection_strategy": "most_popular",
13   "reclist_filenames": "[\"random_reclist2\", \"random_reclist\"]",
14   "active_status": "started",
15   "mailing_list": "mailist1"}
16  "datasets":
```

```

17     [ "
18     { "id": 1,
19       "file_path": "backend/data/datasets/jester/ratings.csv",
20       "num_items": 12745,
21       "num_users": 620,
22       "name": "jester" }
23     ],
24     "reclists": ["random_reclist2", "random_reclist3", "random_reclist"],
25     "strategies": {
26       "matchmaking": ["naive_matchmaking_strategy", "test_matchmaking_strat"
27                       ],
28       "item_selection": ["static_item_selection", "
29                         naive_item_selection_strategy", "most_popular"]
29     },
30     "mailing_lists": ["mailist1"] }

```

1.2 HTTP Method: POST

- request URL: <domain_name>/api/survey
- Request Parameters: None
- Request Body: JSON
- Response Type: JSON
- Request Example:

```

1     {
2       "surveyName": "Usability Test 1",
3       "surveyDescription": "This is a test survey for usability test",
4       "surveyDataSet": "movielens_small",
5       "surveyNumQuestions": 10,
6       "surveyItemSelectionStrategy": "most_popular",
7       "surveyMatchmakingStrategy": "random_matchmaking",
8       "surveyEvalReclists": ["reclist_1", "reclist_2"],
9       "surveyMailingList": "mailing_list1"
10    }

```

- Response Example:

```

1     {
2       'OK': 'Successfully created survey.'
3     }

```

2 Route */questionnaire*

2.1 HTTP Method: GET

- request URL: `<domain_name>/api/questionnaire?token=<token>`
- Request Parameters: token
- Request Parameters Example: n6t67bs50zw0s4r6
- Request Body: None
- Response Type: JSON
- Response Example:

```

1  {"survey_name": "Usability Test 2",
2  "num_items": 6,
3  "ratings": {"110": "-1", "296": 2, "589": 2.5},
4  "previous_session_items":
5  [{"current_ratings": {"110": "-1", "296": 2, "589": 2.5}, "next_item": {"
    item_id": "110", "description": {"movie_id": "110", "imdb_id": "tt0112573",
    "title": "Braveheart", "year": "1995", "genre": "Biography, Drama, History
    ", "director": "Mel Gibson", "writer": "Randall Wallace", "actors": "Mel
    Gibson, Sophie Marceau, Patrick McGoohan", "plot": "Scottish warrior
    William Wallace leads his countrymen in a rebellion to free his homeland
    from the tyranny of King Edward I of England.", "poster": "https://m.media-
    amazon.com/images/M/MV5BMzkzMmU0YTtOWM3M.jpg"}}, {"current_ratings":
    {"110": "-1", "296": 2, "589": 2.5}, "next_item": {"item_id": "296", "
    description": {"movie_id": "296", "imdb_id": "tt0110912", "title": "Pulp
    Fiction", "year": "1994", "genre": "Crime, Drama", "director": "Quentin
    Tarantino", "writer": "Quentin Tarantino, Roger Avary", "actors": "John
    Travolta, Uma Thurman, Samuel L. Jackson", "plot": "The lives of two mob
    hitmen, a boxer, a gangster and his wife, and a pair of diner bandits
    intertwine in four tales of violence and redemption.", "poster": "https://m
    .media-amazon.com/images/M/MV5BNGNhMDIzZTUtNTBlZi.jpg"}}, {"
    current_ratings": {"110": "-1", "296": 2, "589": 2.5}, "next_item": {"
    item_id": "589", "description": {"movie_id": "589", "imdb_id": "tt0103064",
    "title": "Terminator 2: Judgment Day", "year": "1991", "genre": "Action,
    Sci-Fi", "director": "James Cameron", "writer": "James Cameron, William
    Wisher", "actors": "Arnold Schwarzenegger, Linda Hamilton, Edward Furlong",
    "plot": "A cyborg, identical to the one who failed to kill Sarah Connor,
    must now protect her ten-year-old son John from a more advanced and
    powerful cyborg.", "poster": "https://m.media-amazon.com/images/M/
    MV5BMGU2NzRmZjUtOGUx"} } } } }
```

2.2 HTTP Method: POST

- request URL: `<domain_name>/api/questionnaire?token=<token>`
- Request Parameters: token
- Request Parameters Example:

- Request Body: JSON
- Response Type: JSON
- Request Example: n6t67bs50zw0s4r6

```

1      {
2      "token": "n6t67bs50zw0s4r6",
3      "ratings": "{253:5.0, 5482:1.0, 471980:., -1.0, 6833:4.5}"
4      }

```

- Response Example:

```

1      {
2      current_ratings: {'126:3.0', 48675: '1.0', '539':4.0},
3      'next_item': {
4          'item_id': 1625,
5          'description': {
6              'movie_id': 1625,
7              'imdb_id': 'tt0119174',
8              'title': 'The Game',
9              'year': '1997',
10             'genre': 'Drama, Mystery, Thriller',
11             'director': 'David Fincher',
12             'writer': 'John Brancato, Michael Ferris',
13             'actors': 'Michael Douglas, Deborah Kara Unger,
14                      Sean Penn',
15             'plot': 'After a wealthy San Francisco....',
16             'poster': 'https://<poster URL>' }}
17      }
18      }

```

3 Route */recommendation*

3.1 HTTP Method: GET

- request URL: <domain_name>/api/recommendation?token=<token>
- Request Parameters: token
- Request Parameters Example: n6t67bs50zw0s4r6
- Request Body: None
- Response Type: JSON
- Response Example:

```

1  {"saved_session": {"satisfaction": 2, "diversity": 4, "serendipity": 3
    , "accuracy": 2, "understandsMe": 3}},
2  "offline_user_id": 222,
3  "reclists": [
4  {"reclist_filename": "random_reclist2", "items": [{"item_id": "27584",
    "description": {"movie_id": "27584", "imdb_id": "tt0308152", "title"
    : "Dead End", "year": "2003", "genre": "Adventure, Horror, Mystery",
    "director": "Jean-Baptiste Andrea, Fabrice Canepa", "writer": "Jean
    -Baptiste Andrea, Fabrice Canepa", "actors": "Ray Wise, Lin Shaye,
    Mick Cain", "plot": "Christmas Eve. On his way to his in-laws with
    his family, Frank Harrington decides to try a shortcut, for the
    first time in 20 years. It turns out to be the biggest mistake of
    his life.", "poster": "https://m.media-amazon.com/images/M/
    MV5BNTM2YWZhMjktMDk5My00YzMxLTk5ZDAtNmMONTkyMDZmMWE2XkEyXkFqcGdeQXVyMTQxNzMzND
    ._V1_SX300.jpg"}}, {"item_id": "95441", "description": {"movie_id":
    "95441", "imdb_id": "tt1637725", "title": "Ted", "year": "2012", "
    genre": "Comedy", "director": "Seth MacFarlane", "writer": "Seth
    MacFarlane, Alec Sulkin, Wellesley Wild", "actors": "Mark Wahlberg,
    Mila Kunis, Seth MacFarlane", "plot": "John Bennett, a man whose
    childhood wish of bringing his teddy bear to life came true, now
    must decide between keeping the relationship with the bear, Ted or
    his girlfriend, Lori.", "poster": "https://m.media-amazon.com/images
    /M/MV5BMTQ1OTU0ODcxMV5BMl5BanBnXkFtZTcwOTMxNTUwOA@@._V1_SX300.jpg"}},
    {"item_id": "2268", "description": {"movie_id": "2268", "imdb_id":
    "tt0104257", "title": "A Few Good Men", "year": "1992", "genre": "
    Drama, Thriller", "director": "Rob Reiner", "writer": "Aaron Sorkin"
    , "actors": "Tom Cruise, Jack Nicholson, Demi Moore", "plot": "
    Military lawyer Lieutenant Daniel Kaffee defends Marines accused of
    murder. They contend they were acting under orders.", "poster": "
    https://m.media-amazon.com/images/M/
    MV5BMmRlZDQlMmUtMzE2Yi00YTkwLTk1MGMtYmIyYWQwODcxYzRlXkEyXkFqcGdeQXVyNTI4MjkwNj
    ._V1_SX300.jpg"}}, {"item_id": "65230", "description": {"movie_id":
    "65230", "imdb_id": "tt0822832", "title": "Marley & Me", "year":
    "2008", "genre": "Comedy, Drama, Family", "director": "David Frankel
    ", "writer": "Scott Frank, Don Roos, John Grogan", "actors": "Owen
    Wilson, Jennifer Aniston, Eric Dane", "plot": "A family learns
    important life lessons from their adorable, but naughty and neurotic
    dog.", "poster": "https://m.media-amazon.com/images/M/
    MV5BYTdiZGYlMTctMjQyYy00ZTc0LTk1M2EtY2U2OGIwYjBiNTM2XkEyXkFqcGdeQXVyMTQxNzMzND
    ._V1_SX300.jpg"}}, {"item_id": "2427", "description": {"movie_id":
    "2427", "imdb_id": "tt0120863", "title": "The Thin Red Line", "year"
    : "1998", "genre": "Drama, History, War", "director": "Terrence
    Malick", "writer": "James Jones, Terrence Malick", "actors": "Jim
    Caviezel, Sean Penn, Nick Nolte", "plot": "Adaptation of James Jones
    ' autobiographical 1962 novel, focusing on the conflict at
    Guadalcanal during the second World War.", "poster": "https://m.
    media-amazon.com/images/M/
    MV5BYjEzMjM2NjAtNWZmZC00MTVlLTgyMmQtMGQyNTFjZDk5N2NmXkEyXkFqcGdeQXVyNzQ1ODk3MT
  
```

```

._V1_SX300.jpg"}}, {"item_id": "72407", "description": {"movie_id":
"72407", "imdb_id": "tt1259571", "title": "The Twilight Saga: New
Moon", "year": "2009", "genre": "Adventure, Drama, Fantasy", "
director": "Chris Weitz", "writer": "Melissa Rosenberg, Stephenie
Meyer", "actors": "Kristen Stewart, Robert Pattinson, Taylor Lautner
", "plot": "Edward leaves Bella after an attack that nearly claimed
her life, and, in her depression, she falls into yet another
difficult relationship - this time with her close friend, Jacob
Black.", "poster": "https://m.media-amazon.com/images/M/
MV5BMTI3MjE3NDIxNF5BMl5BanBnXkFtZTcwODM3NTY5Mg@@._V1_SX300.jpg"}}, {
"item_id": "67508", "description": {"movie_id": "67508", "imdb_id":
"tt0765432", "title": "The Baader Meinhof Complex", "year": "2008",
"genre": "Action, Biography, Crime", "director": "Uli Edel", "writer
": "Bernd Eichinger, Uli Edel, Stefan Aust", "actors": "Martina
Gedeck, Moritz Bleibtreu, Johanna Wokalek", "plot": "A look at
Germany's terrorist group, The Red Army Faction (RAF), which
organized bombings, robberies, kidnappings, and assassinations in
the late 1960s and '70s.", "poster": "https://m.media-amazon.com/
images/M/
MV5BOWViYjU3MGYtMTExYy00OTgzLThtZWItZTgwNDI0NDM3OWNlXkEyXkFqcGdeQXVyMDAyMjM2OQ
._V1_SX300.jpg"}}, {"item_id": "4573", "description": {"movie_id":
"4573", "imdb_id": "tt0096943", "title": "Blaze", "year": "1989", "
genre": "Biography, Comedy, Drama", "director": "Ron Shelton", "
writer": "Blaze Starr, Huey Perry, Ron Shelton", "actors": "Paul
Newman, Lolita Davidovich, Jerry Hardin", "plot": "A middle-aged
Louisiana governor falls in love with a young stripper, which
jeopardizes his political career and the radical policies which have
made him a controversial figure.", "poster": "https://m.media-
amazon.com/images/M/
MV5BN2UzODlhNjEtYjEwYS00N2Q0LTlhMWUtZWl4YzZhMWNhYTRiL2ltYWdlXkEyXkFqcGdeQXVyMT
._V1_SX300.jpg"}}, {"item_id": "176601", "description": {"movie_id":
"176601", "imdb_id": "tt2492564", "title": "Black Mirror", "year":
"2011", "genre": "Short", "director": "Doug Aitken", "writer": "Doug
Aitken, Haider I. Mohsin", "actors": "Leo Gallo, Abdul Hakim Joy,
Charlotte Le Moignan", "plot": "Black Mirror presents Chlo\u00eb
Sevigny, as a nameless drifter navigating a barren landscape
punctuated by satellite dishes, radio towers and droning airplanes.
Stopping periodically in anonymous hotel rooms, she makes attempts
to con...", "poster": "N/A"}}, {"item_id": "131013", "description":
{"movie_id": "131013", "imdb_id": "tt2561572", "title": "Get Hard",
"year": "2015", "genre": "Comedy, Crime", "director": "Etan Cohen",
"writer": "Jay Martel, Ian Roberts, Etan Cohen", "actors": "Will
Ferrell, Kevin Hart, Alison Brie", "plot": "When millionaire James
King is jailed for fraud and bound for San Quentin, he turns to
Darnell Lewis to prep him to go behind bars.", "poster": "https://m.
media-amazon.com/images/M/
MV5BMTc3OTc1NjM0Ml5BMl5BanBnXkFtZTgwNjAyMzE1MzE@._V1_SX300.jpg"}]]},
5 {"reclist_filename": "random_reclist", "items": [{"item_id": "27255", "

```

```

description": {"movie_id": "27255", "imdb_id": "tt0209463", "title":
  "The Wind Will Carry Us", "year": "1999", "genre": "Drama", "
director": "Abbas Kiarostami", "writer": "Mahmoud Aiden, Abbas
Kiarostami", "actors": "Behzad Dorani, Noghre Asadi, Roushan Karam
Elmi", "plot": "Irreverent city engineer Behzad comes to a rural
village in Iran to keep vigil for a dying relative. In the meanwhile
the film follows his efforts to fit in with the local community and
how he changes his own attitudes as a result.", "poster": "https://
m.media-amazon.com/images/M/
MV5BNzVhOGUwOWMtZTY2MC00NWEzLWlYnNWMtOWVmYWRjNjBjMmFiXkEyXkFqcGdeQXVyMjUzOTY1NT
.V1_SX300.jpg"}}, {"item_id": "27627", "description": {"movie_id":
"27627", "imdb_id": "tt0320193", "title": "Oasis", "year": "2002", "
genre": "Drama, Romance", "director": "Lee Chang-dong", "writer": "
Lee Chang-dong", "actors": "Sol Kyung-gu, Moon So-ri, Ahn Nae-sang",
"plot": "An irresponsible and childish ex-con befriends a girl with
cerebral palsy and develops a progressively stronger bond with her
.", "poster": "https://m.media-amazon.com/images/M/
MV5BZjRkYWFlNTctMTA2Ni00MGZmLWE1MGYtZDFlYmUzYjMlY2Q5XkEyXkFqcGdeQXVyMTMxMTY0OT
.V1_SX300.jpg"}}, {"item_id": "61210", "description": {"movie_id":
"61210", "imdb_id": "tt0490181", "title": "Mutant Chronicles", "year
": "2008", "genre": "Action, Adventure, Mystery", "director": "Simon
Hunter", "writer": "Philip Eisner", "actors": "Thomas Jane, Ron
Perlman, Devon Aoki", "plot": "28th century soldier Mitch Hunter
leads a fight against an army of underworld Mutants.", "poster": "
https://m.media-amazon.com/images/M/
MV5BMTEzMTQ4MjQ1ODFeQTJJeQWpwZ15BbWU4MDU4MTUyNTEx.V1_SX300.jpg"}}, {"
"item_id": "95761", "description": {"movie_id": "95761", "imdb_id":
"tt1726669", "title": "Killer Joe", "year": "2011", "genre": "Drama,
Thriller", "director": "William Friedkin", "writer": "Tracy Letts",
"actors": "Matthew McConaughey, Emile Hirsch, Juno Temple", "plot":
"When a debt puts a young man's life in danger, he turns to putting
a hit out on his evil mother in order to collect the insurance.", "
poster": "https://m.media-amazon.com/images/M/
MV5BN2JhZDlmY2MtOWM4Yi00ODNlLWlY4NjItOTY4MjEyYzQ0ZGI2XkEyXkFqcGdeQXVyNTQzOTc3MT
.V1_SX300.jpg"}}, {"item_id": "1910", "description": {"movie_id":
"1910", "imdb_id": "tt0126344", "title": "I Went Down", "year":
"1997", "genre": "Action, Comedy, Crime", "director": "Paddy
Breathnach", "writer": "Conor McPherson", "actors": "Brendan Gleeson
, Peter McDonald, Antoine Byrne", "plot": "Irish action comedy. An
ex-con is forced into taking on a new task by a ruthless crime-boss,
but finds he is hindered by the partner he has been teamed up with.
However, he soon realizes they must work together if they are to
surv...", "poster": "https://m.media-amazon.com/images/M/
MV5BZjljNTBlYmItYTY0NS00ODQ0LTljNTMtZmYlNTU4NTQ0MzM5XkEyXkFqcGdeQXVyMDU5NDcxNW
.V1_SX300.jpg"}}, {"item_id": "3963", "description": {"movie_id":
"3963", "imdb_id": "tt0058708", "title": "The Unsinkable Molly Brown
", "year": "1964", "genre": "Comedy, Musical, Romance", "director":
"Charles Walters", "writer": "Helen Deutsch, Richard Morris", "

```

```

actors": "Debbie Reynolds, Harve Presnell, Ed Begley", "plot": "A
poor, uneducated mountain girl leaves her cabin in search of respect
, a wealthy husband, and a better life in this fictionalized biopic
of Margaret \"Molly\" Brown, who survived the 1912 sinking of the
RMS Titanic.", "poster": "https://m.media-amazon.com/images/M/
MV5BMWMxMjQ2YTMtNDRkNC00ODNjLWI4ODItODFmNDU3OWJhYWIwXkEyXkFqcGdeQXVyNjc0MzMzMzNj
.V1_SX300.jpg"}}, {"item_id": "6888", "description": {"movie_id":
"6888", "imdb_id": "tt0306047", "title": "Scary Movie 3", "year":
"2003", "genre": "Comedy", "director": "David Zucker", "writer": "
Craig Mazin, Pat Proft, Shawn Wayans", "actors": "Anna Faris,
Charlie Sheen, Regina Hall", "plot": "Cindy must investigate
mysterious crop circles and video tapes, and help the President in
preventing an alien invasion.", "poster": "https://m.media-amazon.
com/images/M/MV5BNDE2NTIyMjg2OF5BMl5BanBnXkFtZTYwNDEyMTg3.V1_SX300.
jpg"}}, {"item_id": "47937", "description": {"movie_id": "47937", "
imdb_id": "tt0464196", "title": "Severance", "year": "2006", "genre"
: "Comedy, Horror", "director": "Christopher Smith", "writer": "
James Moran, Christopher Smith", "actors": "Danny Dyer, Laura Harris
, Tim McInnerny", "plot": "During a team-building retreat in the
mountains a group of sales representatives are hunted down one by
one.", "poster": "https://m.media-amazon.com/images/M/
MV5BN2FkZjM2ZTUtMGNlYy00MTQwLWlYNDktN2Q0MzNiYzEwMDA1XkEyXkFqcGdeQXVyMTQxNzMzND
.V1_SX300.jpg"}}, {"item_id": "2565", "description": {"movie_id":
"2565", "imdb_id": "tt0049408", "title": "The King and I", "year":
"1956", "genre": "Biography, Drama, Musical", "director": "Walter
Lang", "writer": "Ernest Lehman, Oscar Hammerstein II, Margaret
Landon", "actors": "Yul Brynner, Deborah Kerr, Rita Moreno", "plot":
"A widow accepts a job as a live-in governess to the King of Siam's
children.", "poster": "https://m.media-amazon.com/images/M/
MV5BNmJkYTViMzItZDM3YS00MDU2LTkzYWItMGJkYjVjMjU2YjNlL2ltYWdlL2ltYWdlXkEyXkFqcG
.V1_SX300.jpg"}}, {"item_id": "156553", "description": {"movie_id":
"156553", "imdb_id": "tt3763866", "title": "Zoom", "year": "2015",
"genre": "Comedy, Drama", "director": "Pedro Morelli", "writer": "
Matt Hansen, Pedro Morelli", "actors": "Tyler Labine, Alison Pill,
Michael Eklund", "plot": "A multi-dimensional interface between a
comic book artist, a novelist, and a film director. Each lives in a
separate reality but authors a story about one of the others.", "
poster": "https://m.media-amazon.com/images/M/
MV5BNzh1M2Y2ZWUtZWJmZi00N2Y1LTg0ZTItZjgzZjA0MGVjOTQ0XkEyXkFqcGdeQXVyMjgyNjk3Mz
.V1_SX300.jpg"}]]]]}

```

3.2 HTTP Method: POST

- request URL: <domain_name>/api/recommendation
- Request Parameter: None
- Request Body: JSON

- Response Type: JSON

- Request Example: n6t67bs50zw0s4r6

```
1  {
2      'offline_user_id': offlineUserId,
3      'reclist_filenames': reclistFilenames,
4      'token': searchParams.get('token'),
5      'ratings': res.data
6  }
```

- Response Example:

```
1  {'Success': 'Ratings saved successfully'}
```
