

# Blocks and Events

## Exercise

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# Outline

In this exercise, we will introduce Blocks in our app to allow users to like or dislike a movie. The rating will be based on choosing thumbs up for “like” and thumbs down for “dislike”. This functionality should be implemented in a Block and then used in the MovieDetail Screen.

To accomplish this objective, we will:

1. Create a new Block.
2. Use the thumbs up and thumbs down icons (filled and hollowed) to display the several options the user has to choose from.
3. Display the thumbs up/down information in the MovieDetail Screen.
4. Make the icons “clickable” and trigger the logic to create/update the rating for that particular movie/person.
5. Make sure the rating chosen is recorded in the database.
6. Make sure the thumbs are only clickable by users with the OSMDbUser Role.

A user can rate the same movie more than once. In those cases, the application should consider this as an update of the previous rating, and not as a new rating from that user.

## Star Wars: The Force Awakens

[Add Cast/Crew to Movie](#)

Title \*

Star Wars: The Force Awakens

Year \*

2015

Plot Summary

Three decades after the defeat of the Galactic Empire, a new threat arises. The First

Genre

(Select a Genre) ▾

Gross Takings

815843529



Is Available On DVD

☒

Save

Back to Movies

### Your Rating



### Production Talent

George Lucas (Director)

### Cast and Crew

Harrison Ford (Actor)

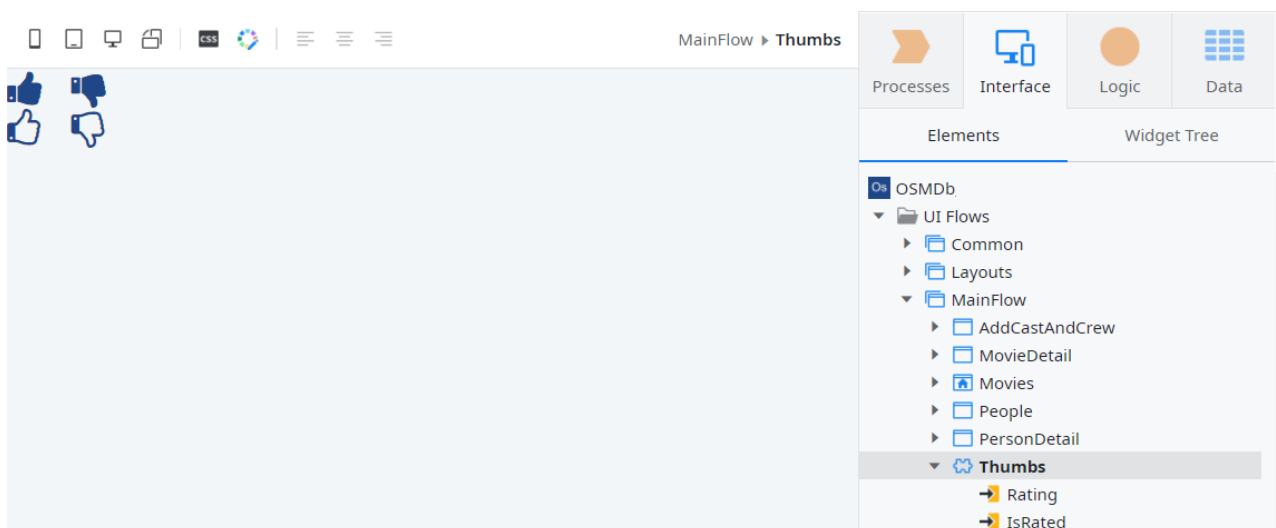
# Hands-on

In this exercise, we will expand the UI of our app with the functionality that allows a user to rate movies. The MovieDetail Screen will allow rating a movie by clicking on the thumb icon representing the options “like” or “dislike”.

Since this seems a functionality that can easily be used on other Screens, we will use Blocks to implement the thumbs up and thumbs down behavior.

## Create the Block to Display the Thumbs

In this first part of the exercise, we will create the Thumbs Block. This Block will display thumbs up and down icons, allowing users to vote if they like or dislike something. The thumbs will appear filled or hollowed depending if the movie has been already rated and the rating given by the user. This information can be passed to the Block via the Input Parameters. The Block should look something like this:



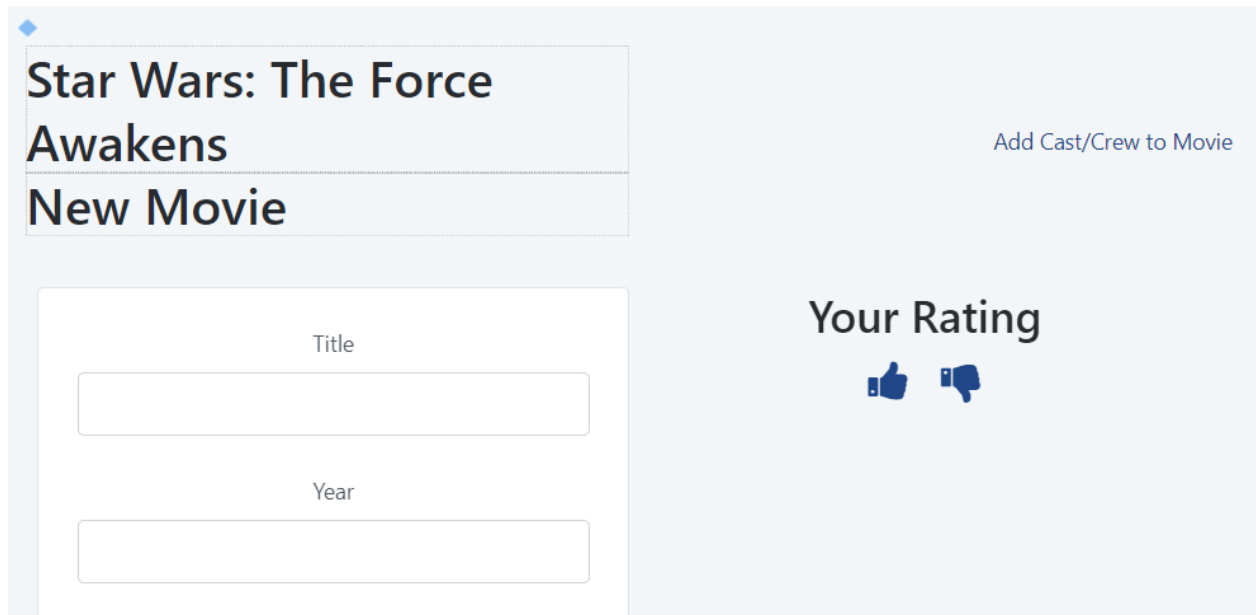
To create this Block, we need to use icons. We will use the **thumbs up** and **thumbs down** icons that can be filled or hollowed (there are two icons with the same name for each option, so you will use four in total).

### Using Booleans

To display the icons, we need to create a condition that will define when the icons appear filled or white. We will use two variables to define if a movie has already been rated or not, and in case it was rated if it was a positive or negative rating.

## Add the Block to the Screen

On the MovieDetail Screen, we want to display your rating side-by-side with the Form. For that, we need to make sure the Screen is split in two columns and use the space on the right to display the rating.



The screenshot shows a light blue background with a white dashed border. On the left, there's a movie title "Star Wars: The Force Awakens" and a "New Movie" button. Below this is a form with two input fields labeled "Title" and "Year". On the right, there's a link "Add Cast/Crew to Movie" and a "Your Rating" section with two thumbs icons.

In terms of UI, we can set the *Your Rating* text to the styles we want. In the example, the text uses the **heading2** style class.

As we know, the Block has an Input Parameter for the Rating and one to define if it was rated or not. In each instance of the Block in the MovieDetail, we need to pass the values for the Rating and IsRated, so that the Block knows how to display the thumbs appropriately. To do that, we need an aggregate to fetch the rating that you gave to the movie (if any).

## Make the Thumbs Clickable

Finally, we need to make the thumbs clickable so you can rate a movie. To achieve this, we need to follow the next steps:

- In the Block, create a Link on the thumbs. When clicked, the Link should trigger a non-mandatory Event, then pass the selected rating and if we're rating or removing a rating (Is Rated).
- Create a Handler for the instance of the Block in the MovieDetail Screen to:
  - Create/update the rating of the movie in the database. This Action should only be possible to users with the OSMDbUser Role.

- Guarantee that the Block will display the correct filled/white thumbs. Since we're updating the ratings, the Input Parameter of the Block will change, so the thumbs will also change.
- Ensure that the thumbs can only be clickable by users with the OSMDbUser role.