



## UNIT 03

### LESSON 03.07



## Apartment Rent Estimator

### Apartment Rent Estimator Form

In this **form**, we present the user with two select menus and four "amenities checkboxes" from which they configure their desired apartment. Each choice has a price: the more bedrooms, bathrooms and amenities chosen, the higher the rent. The choices are:

- Number of Bedrooms, chosen from a select menu.
- Number of Baths, also chosen from a select menu.
- Doorman Building checkbox
- Parking Space checkbox
- Fitness Center checkbox
- Skyline View checkbox

The html and css are already done, but of course the form doesn't work yet. We will write the JS that powers the form.

The select menus are for choosing numbers of Bedrooms and Baths. The greater the choice, the higher the value (rent).

- The 1 Bath choice has a value of 0, so choosing that will not raise the rent.
- One bedroom is pre-selected by default, even though it is not the first menu choice:

```
<select name="bdrms" id="bdrms">
  <option value="1000">Studio ($1,000)</option>
  <option value="1400" selected>1 Bedroom ($1,400)</option>
  <option value="1800">2 Bedrooms ($1,800)</option>
  <option value="2300">3 Bedrooms ($2,300)</option>
</select>

<select name="baths" id="baths">
  <option value="0">1 Bath</option>
  <option value="450">1.5 Baths (+$450)</option>
  <option value="850">2 Baths (+$850)</option>
  <option value="1250">2.5 Baths (+$1,250)</option>
</select>
```

### checkboxes

The fees associated with the checkboxes will only be charged if the checkbox is checked. We will first assess the flat fees and add those to the rent. Then we will calculate the percent surchargess on top of the

rent.

- Parking value = 350, for the \$350 parking fee
- Fitness Center (gym) value = 100, for the \$100 gym fee
- Skyline View value = 0.25, for the 25% surcharge for a skyline view.
- The Doorman value = 0.1, for the 10% surcharge for a doorman building.

```
<input type="checkbox" id="doorman" value="0.1">
<label for="doorman">Doorman Building (+10%)</label><br>

<input type="checkbox" id="parking" value="350">
<label for="parking">Indoor Parking (+$350)</label><br>

<input type="checkbox" id="riverview" value=".25">
<label for="riverview">Overlooking River (+25%)</label><br>

<input type="checkbox" id="gym" value="350">
<label for="gym">Fitness Center (+$100)</label>
```

The html also includes a `calculate rent()` button and an `h3` for posting the answer.

```
<button>calculate rent</button>
<h3></h3>
```

1. Get the button and have it call the function when clicked:

```
const calcBtn = document.querySelector('button');
calcBtn.addEventListener('click', calculateRent);
```

2. Get the "feedback" tag:

```
const feedback = document.getElementById('feedback');
```

3. Declare the function. Start with the `preventDefault()` method, so that the button click does not reload the page and reset the form:

```
function calculateRent(event) {
  event.preventDefault();
}
```

4. Get the values of the select menus. We don't need the whole objects--just their values:

```
function calculateRent(event) {
  event.preventDefault();

  let bdrms = document.getElementById('bdrms').value;
  let baths = document.getElementById('baths').value;
}
```

5. The **bdrms** and **baths** values come in as strings, so convert them to numbers. Then add them together, saving them to a var called **rent**:

```
bdrms = Number(bdrms);
baths = Number(baths);
let rent = bdrms + baths;
```

6. Get the checkboxes:

```
let doorman = document.getElementById('doorman'); // +10%
let parking = document.getElementById('parking'); // +$350
let view = document.getElementById('view'); // +25%
let gym = document.getElementById('gym'); // +$100
```

See if each checkbox has its **checked** property set to true. If it returns true, increase the rent accordingly:

- Charge the flat fees first (parking, gym)
- For percent surcharges (doorman and view), multiply the value by the rent and then add that fee to the rent.
- Round off the final rent and output it to the feedback tag.

7. Write if-statements to see if the checkboxes are checked, and if so, increase the rent, accordingly:

```
if(parking.checked) {
  rent += Number(parking.value);
}

if(gym.checked) {
  rent += Number(gym.value);
}

if(doorman.checked) {
  rent += rent * Number(doorman.value);
}

if(view.checked) {
  rent += rent * Number(view.value);
}
```

8. Round off rent to an integer, and output the estimated rent:

```
rent = Math.round(rent);  
  
feedback.textContent = 'Your estimated rent is: $' + rent;  
  
} // calculateRent(event)
```

9. Run the page in the browser.

- Choose the most expensive configuration: 3 bedrooms, 2.5 baths, and check all four boxes.
- Follow that by choosing the cheapest configuration (no checkboxes).
- Try various other configurations.

**END: Lesson 03.07**

**NeXT: Lesson 03.08**