Deep Clone

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⟨/⟩ **JS** **TS**   🔥 Medium   🕐 25mins   ✓ 4.4k done

The term "deep clone" is not formally defined in JavaScript's language specification, but is generally well understood in the community. A deep clone makes a copy of JavaScript value, leading to a completely new value that has no references pointing back to the properties in the original object (if it's an object). Any changes made to the deep-copied object will not affect the original object.

Implement a `deepClone` function that performs a deep clone operation on JavaScript objects. You can assume the input only contains JSON-serializable values (`null`, `boolean`, `number`, `string`, `Array`, `Object`) and will not contain any other objects like `Date`, `Regex`, `Map` or `Set`.

Examples

```
1    const obj1 = { user: { role: 'admin' } };
2    const clonedObj1 = deepClone(obj1);
3
4    clonedObj1.user.role = 'guest'; // Change the cloned user's role to 'guest'.
5    clonedObj1.user.role; // 'guest'
6    obj1.user.role; // Should still be 'admin'.
7
8    const obj2 = { foo: [{ bar: 'baz' }] };
9    const clonedObj2 = deepClone(obj2);
10
11   obj2.foo[0].bar = 'bax'; // Modify the original object.
12   obj2.foo[0].bar; // 'bax'
13   clonedObj2.foo[0].bar; // Should still be 'baz'.
```
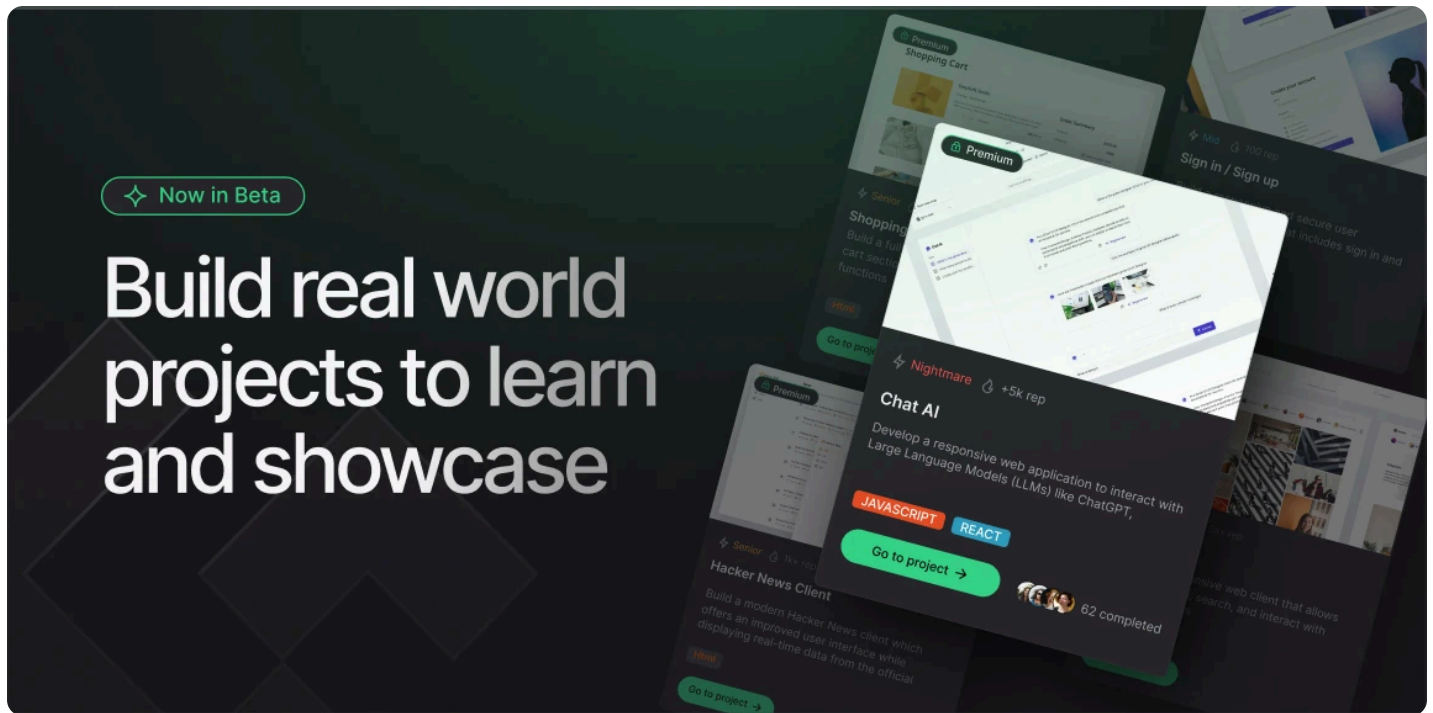
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