

## **WEB ENGINEERING**

HANDLE DATA WITH LOCAL STORAGE

## **CONTENT**

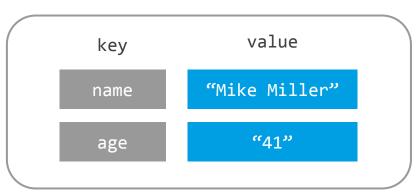
- Data Structure
- **CRUD** Operations
  - Create
  - Read
  - Update
  - o **D**elete
- JSON with localStorage





- The Web Storage API offers two ways to handle data: sessionStorage and localStorage
- localStorage keeps data across browser sessions
- Similar to JSON, the **localStorage** stores data in the form of key / value pairs
- localStorage stores only character strings

## LocalStorage





## **CRUD OPERATIONS**

**C**reate Data

Read Data

**U**pdate Data

Delete Data



We can add new key / value pairs:

localStorage.setItem("name", "Mike");



We can read the value of a particular key:

let name = localStorage.getItem("name");



We can update the value of a particular key by setting a new value:

```
let name = localStorage.getItem("name");
let fullName = name + " Miller";
localStorage.setItem("name", fullName);
```



• We can **delete** a particular key from storage:

• We can **delete** all data, too:

localStorage.clear();

- localStorage can only store character strings
- To store JSON data, we need to store JSON as a string and parse it back when reading:

```
profile = { name : "Mike Miller", age: 42 };
profileString = JSON.stringify(profile);
localStorage.setItem("profile", profileString);
```



The same way, we can parse a string back into a JSON object:

```
let profileString = localStorage.getItem("profile");
let profile = JSON.parse(profileString);
```

