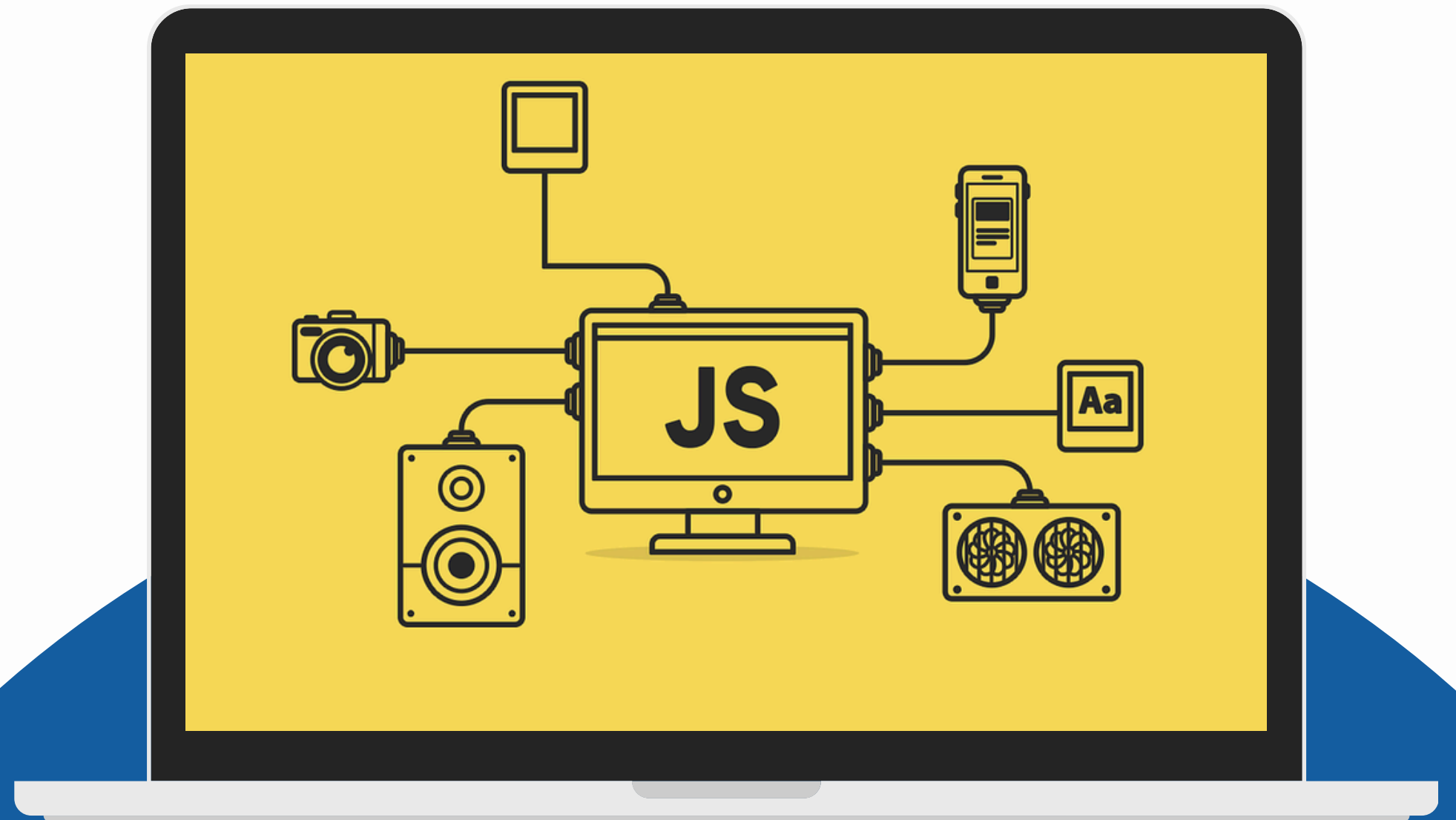


JavaScript Funcional

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Objetivos del Proyecto

- **Transformar datos CSV usando JavaScript con enfoque funcional.**
- **Aplicar conceptos funcionales.**



DEMO

Conceptos aplicados

- Inmutabilidad
- Pipelining
- Funciones de primera clase
- Funciones de orden superior

map() & filter()

```
const deleteRow = (csvData: string[][], index: number) =>
  csvData.filter((_, i) => i !== index)

const deleteColumn = (csvData: string[][], index: number) =>
  csvData.map((row) => row.filter((_, i) => i !== index))
```

```
const swapColumns = (csvData: string[][], index1: number, index2: number) =>
  csvData.map(row => {
    if (row.length > Math.max(index1, index2)) {
      [row[index1], row[index2]] = [row[index2], row[index1]];
    }
    return row;
  });
```

slice() & ... operator

```
const insertRow = (csvData: string[][], index: number, rowToInsert: string[]) => [  
  ...csvData.slice(0, index),  
  rowToInsert,  
  ...csvData.slice(index)  
];  
  
const insertColumn = (csvData: string[][], index: number, columnToInsert: string[]) =>  
  csvData.map((row, i) => [  
    ...row.slice(0, index),  
    columnToInsert[i] || "",  
    ...row.slice(index)  
  ])  
);
```

slice() sin ...

```
[  
  [ ["ID", "Name", "Age"], ["1", "Alice", "30"] ],  
  ["3", "Charlie", "28"],  
  [ ["2", "Bob", "25"] ]  
]
```

slice() con ...

```
[  
  ["ID", "Name", "Age"],  
  ["1", "Alice", "30"],  
  ["3", "Charlie", "28"],  
  ["2", "Bob", "25"]  
]
```

zip() & unzip()



```
const rowsToColumns = (csvData: string[][]) => _.zip(...csvData);
```

```
const columnsToRows = (csvData: string[][]) => _.unzip(csvData);
```


_.flow()

```
const createRow = _.flow(  
  (row: string[]) => _.map(row, (dataField) => `\\t\\t<td>${dataField}</td>`),  
  (dataFields: string[]) => `\\t<tr>\\n${_.join(dataFields, '\\n')}\\n\\t</tr>`  
);  
  
const createTable = (csvData: string[][]): string => {  
  const rows = _.map(csvData, createRow).join('\\n');  
  return `<table>\\n${rows}\\n</table>`;  
};
```

**Muchas
gracias!**

