

JS Advanced Regular Exam – 19 Feb 2022

Problem 2. Wine Selection

```
class WineSelection {  
  //TODO Implement this class  
}
```

Write a class **WineSelection**, which implements the following functionality:

Functionality

Constructor

Should have these **3** properties:

- **space** – Number
- **wines** – Array (empty)
- **bill** - number

At the initialization of the **WineSelection** class, the **constructor** accepts the **space**.

Hint: You can add more properties to help you finish the task.

reserveABottle (wineName, wineType, price)

The **wineName** and **wineType** are of type **string** and **price** is type **number**.

- If there's **not enough space in the cellar** for the bottle, **throw an Error**:
"Not enough space in the cellar."
- Otherwise, this function should add the wine, with the properties: **wineName**, **wineType**, **price**, **paid**: **default false**, to the wines array and **return**:
"You reserved a bottle of {wineName} {wineType} wine."

payWineBottle(wineName, price)

The **wineName** is type **string** and **price** is type **number**.

- If the wine is not found, **throw an Error**:
"{wineName} is not in the cellar."
- If the wine has already paid, **throw an Error**:
"{wineName} has already been paid."
- Otherwise, this function set **paid** to **true** on the found wine, add **price** of the bottle to **bill** and **return**:
"You bought a {wineName} for a {price}\$."

openBottle(wineName)

- If the wine is **not found**, throw an **Error**:
`"The wine, you're looking for, is not found."`
- If the wine **hasn't paid**, throw an **Error**:
`"{wineName} need to be paid before open the bottle."`
- Otherwise, this function should **remove** the wine from the array and **return**:
`"You drank a bottle of {wineName}."`

cellarRevision(wineType)

This **method** can be called **with one parameter** or **without** any.

If **no** parameter is provided, the method should **return** the full information of the cellar

- At the first line:
`"You have space for { emptySlots } bottles more."`
- At the second line:
`"You paid {bill}$ for the wine."`
- On the next lines, display information about each wine, **sorted alphabetically ascending**, by their **wineName**:
`"{wineName} > {wineType} - {Has Paid / Not Paid}."`

If the method is called with a parameter for **wineType**:

- **Return** only the information about the wine from the given **wineType**:
`"{wineName} > {wineType} - {Has Paid / Not Paid}."`
- If there is **no such wine type** found, throw an **Error**:
`"There is no {wineType} in the cellar."`

Example

Input 1
<pre>const selection = new WineSelection(2) console.log(selection.reserveABottle('Sauvignon Blanc Marlborough', 'White', 50)); console.log(selection.reserveABottle('Cabernet Sauvignon Napa Valley', 'Red', 120));</pre>

```
console.log(selection.reserveABottle('Bodegas Godelia Mencía', 'Rose',  
144));
```

Output 1

You reserved a bottle of Sauvignon Blanc Marlborough White wine.

You reserved a bottle of Cabernet Sauvignon Napa Valley Red wine.

Uncaught Error Error: Not enough space in the cellar.

Input 2

```
const selection = new WineSelection(2)  
  
selection.reserveABottle('Sauvignon Blanc Marlborough', 'White', 50);  
  
console.log(selection.payWineBottle('Sauvignon Blanc Marlborough', 120));  
  
console.log(selection.payWineBottle('Bodegas Godelia Mencía', 144));
```

Output 2

You bought a Sauvignon Blanc Marlborough for a 120\$.

Uncaught Error Error: Bodegas Godelia Mencía is not in the cellar.

Input 3

```
const selection = new WineSelection(2)  
  
selection.reserveABottle('Sauvignon Blanc Marlborough', 'White', 50);  
selection.reserveABottle('Cabernet Sauvignon Napa Valley', 'Red', 120);  
  
selection.payWineBottle('Sauvignon Blanc Marlborough', 50);  
  
console.log(selection.openBottle('Sauvignon Blanc Marlborough'));  
  
console.log(selection.openBottle('Cabernet Sauvignon Napa Valley'));
```

Output 3

You drank a bottle of Sauvignon Blanc Marlborough.

Uncaught Error Error: Cabernet Sauvignon Napa Valley need to be paid before open the bottle.

Input 4

```
const selection = new WineSelection(2)

console.log(selection.reserveABottle('Bodegas Godelia Mencía', 'Rose', 144));

console.log(selection.cellarRevision('Rose'));
```

Output 4

You reserved a bottle of Bodegas Godelia Mencía Rose wine.

Bodegas Godelia Mencía > Rose - Not Paid.

Input 5

```
const selection = new WineSelection(5)

selection.reserveABottle('Bodegas Godelia Mencía', 'Rose', 144);

selection.payWineBottle('Bodegas Godelia Mencía', 144);

selection.reserveABottle('Sauvignon Blanc Marlborough', 'White', 50);

selection.reserveABottle('Cabernet Sauvignon Napa Valley', 'Red', 120);

console.log(selection.cellarRevision());
```

Output 5

You have space for 2 bottles more.

You paid 144\$ for the wine.

Bodegas Godelia Mencía > Rose - Has Paid.

Cabernet Sauvignon Napa Valley > Red - Not Paid.

Sauvignon Blanc Marlborough > White - Not Paid.