# JS Advanced: Exam Preparation June 2019

Exam problems for the [“JavaScript Advanced” course @ SoftUni](https://softuni.bg/courses/javascript-advanced). Submit your solutions in the SoftUni judge system at <https://judge.softuni.bg/Contests/Practice/Index/1664#0>.

# Problem 3. SoftUniFy (Unit Testing)

Use the provided SoftUniFyclass to solve this problem.

### Functionality

An **instance** of the **SoftUniFy** class should support the following operations:

* Should contain **allSongs property** that is initialized as an **empty** object
* **downloadSong(artist, song, lyrics) adds** the given information to the **allSongs** in format:

**{artist**: {

**rate**: **0**,

**votes**: **0**,

**songs: [**

**song1 - song1Lyrics,**

**song2 - song2Lyrics....**

**]**

**}**

**}**,

**songs** property, should contain **all songs** from the current artist in format: **[song1 - song1Lyrics, song2 - song2Lyrics....]**

* **playSong(song) searches** all already downloaded songs and **returns** them in format: **{artist}:  
  {song} – {lyrics}  
  ...  
  If we do not have at least one downloaded song** or the one we have given is **not found** should **return the following string:  
  `You have not downloaded a {song} song yet. Use SoftUniFy's function downloadSong() to change that!`**
* **songsList() gets all** already downloaded songs in format: **{song1} - {song1Lyrics}  
  {song2} - {song2Lyrics}  
  {song3} - {song3Lyrics}**... **If we do not have at least one downloaded song return the following string:  
  `Your song list is empty`**
* **rateArtist()** **sums** the values of all votes on the current artist and return the **average rate.  
  Keep in mind that, this function has two overloads!**

### TODO

Using **Mocha** and **Chai** write **JS unit tests** to test the entire functionality of the **SoftUniFy** class. You may use the following code as a template:

**Wrap all the tests in one describe statement and submit it.**

|  |
| --- |
| describe(**"*TODO* …"**, **function**() {  describe(**"*TODO* …"**, **function**() {  ***it***(**"*TODO …*"**, **function**() {  *//* ***TODO:*** …  });  *//* ***TODO:*** …  });  ***it***(**"*TODO …*"**, **function**() {  *//* ***TODO:*** …  });  *//* ***TODO:*** …  });  ...  ... |

**Don't forget to require the chai library!**

### Examples

|  |
| --- |
| **Input 1 (downloadSong)** |
| **let *sofunify*** = **new** SoftUniFy();  ***sofunify***.downloadSong(**'Eminem'**, **'Venom'**, **'Knock, Knock let the devil in...'**); ***sofunify***.downloadSong(**'Eminem'**, **'Phenomenal'**, **'IM PHENOMENAL...'**); ***sofunify***.downloadSong(**'Dub Fx'**, **'Light Me On Fire'**, **'You can call me a liar.. '**);  ***console***.log(***sofunify***.**allSongs**); |

|  |
| --- |
| **Output 1 (downloadSong)** |
| { Eminem:  { rate: 0,  votes: 0,  songs:  [ 'Venom - Knock, Knock let the devil in...',  'Phenomenal - IM PHENOMENAL...' ] },  'Dub Fx':  { rate: 0,  votes: 0,  songs: [ 'Light Me On Fire - You can call me a liar.. ' ] } } |

|  |
| --- |
| **Input 1 (rateArtist)** |
| **let *sofunify*** = **new** SoftUniFy();  ***console***.log(***sofunify***.rateArtist(**'Eminem'**));  ***console***.log(***sofunify***.rateArtist(**'Eminem'**, 50)); |

|  |
| --- |
| **Output 1 (rateArtist)** |
| The Eminem is not on your artist list.  The Eminem is not on your artist list. |

### Hints

**If at first look, you do not understand exactly how a certain function works, just do your own tests by calling it to find out exactly what result returns...**

*GOOD LUCK… C(:*