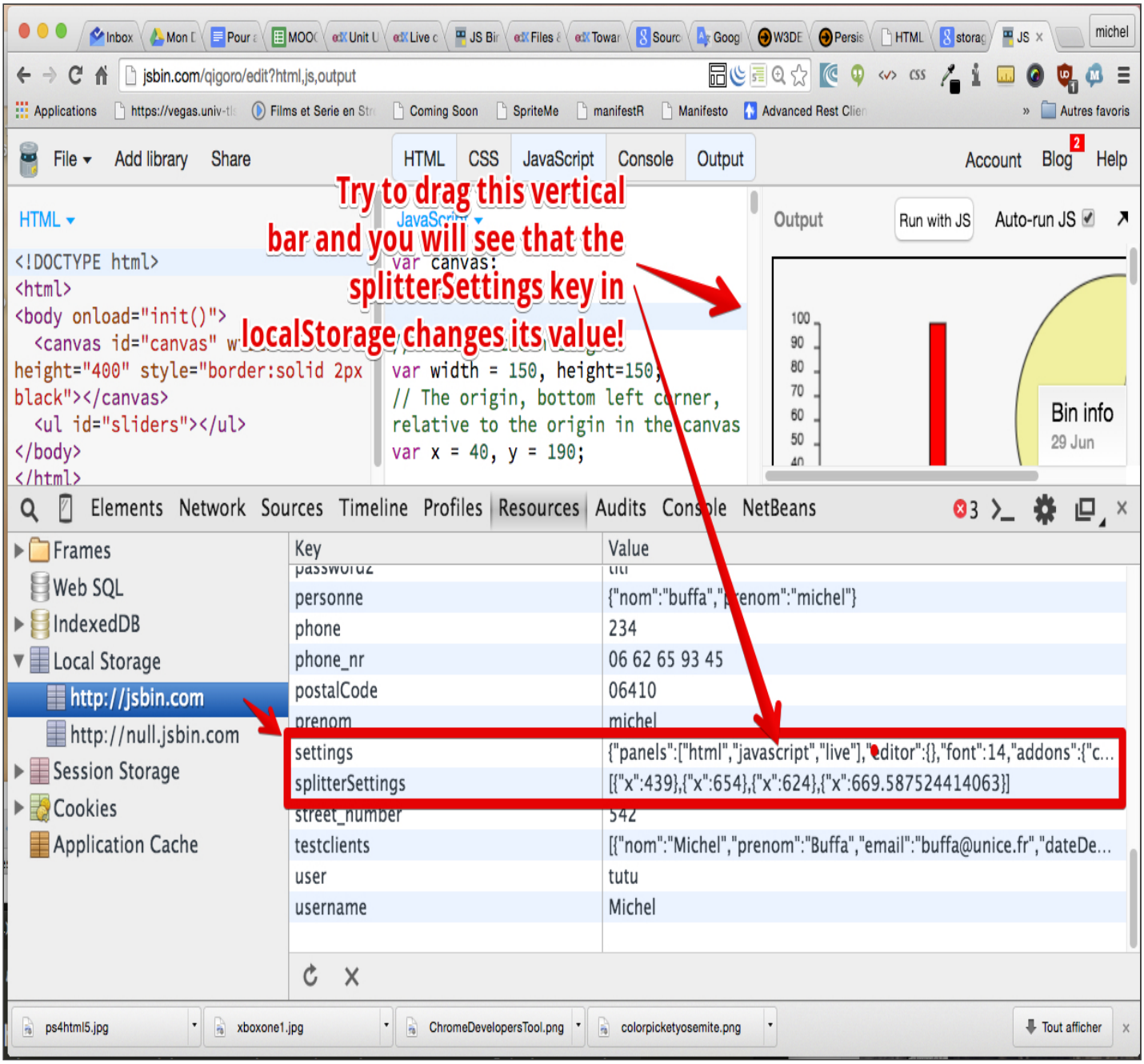
Practical example 2: save/restore user's preferences

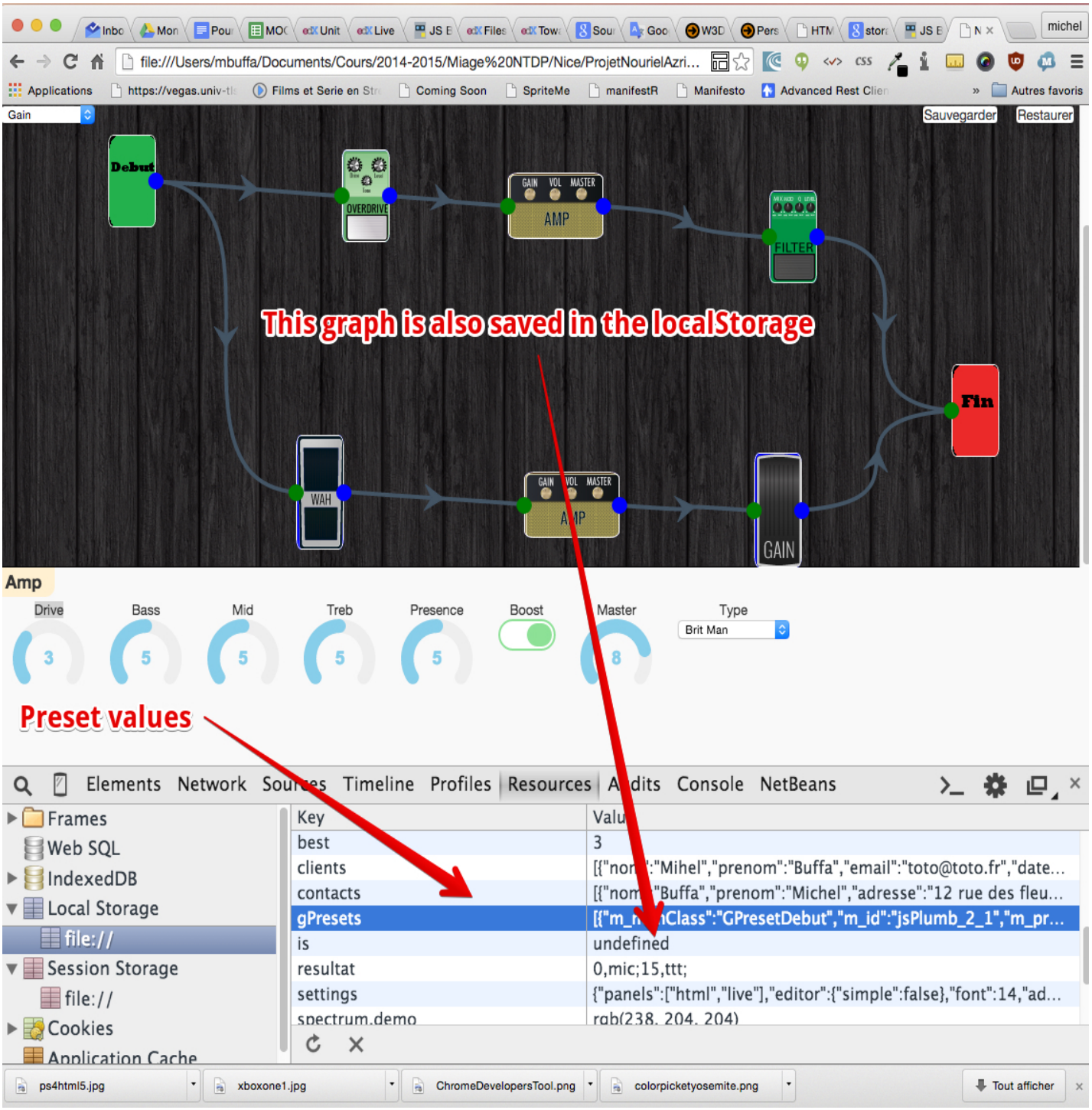
INTRODUCTION

Local stores are also useful for saving/restoring user preferences of Web Applications. For example, the JS Bin tool you have been using since the beginning of this course uses localStorage to store the list of tabs you open and their width:



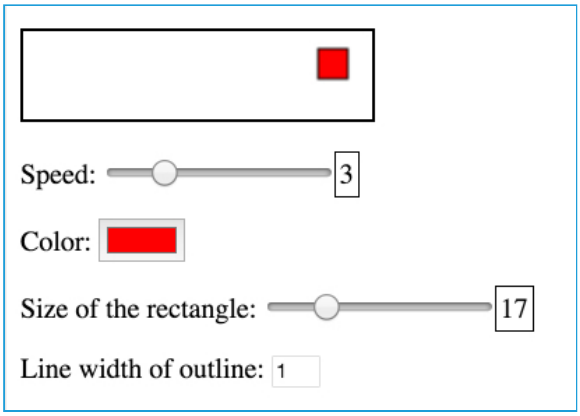
Like that, the next time you come back to JS Bin, "it will remember your last settings".

Another example is a guitar FX processor / amp simulator your instructor is writing with some of his students. It uses localStorage to save/restore presets values:



PRACTICAL EXAMPLE: SAVE/RESTORE PREFERENCES OF AN EXAMPLE YOU HAVE ALREADY SEEN

Original example on JS Bin: we can change the color, size and speed of the animated rectangle. However, each time we come back to the page default values are restored.



We would like to save the current values and find them back as they were when we come back to the page.

Here is a modified example that saves/restores its state, you can try it at JS Bin. In this modified version of the animated rectangle example, you can set the color, size, speed, etc. And if you reload the page, the state of the different input field is restored, but also the internal variables. Check the source code in the JS Bin example and also read the following explanations.

We used the same generic code for saving/restoring input fields' values we saw in the first example that used `localStorage`. The only difference is that we renamed the two generic functions so that they correspond better to their role here (instead of `saveFormContent` we called the function `restorePreferences`).

The function `initPreferences` is executed when the page is loaded.

Source code extract:

```
function initPreferences() {
  console.log("Adding input listener to all input fields");
  // add an input listener to all input fields
  var listOfInputsInForm =document.querySelectorAll("input");
  for(var i= 0; i < listOfInputsInForm.length; i++) {
    addInputListener(listOfInputsInForm[i]);
  }
  // restore preferences
  restorePreferences();
  applyGUIvalues(); // Use the input fields' values we just restored to
set internal
```

```
                    // size, incX, color, lineWidth variables
}

function addInputListener(inputField) {
 // same as before
}

function restorePreferences() {
 // same as old restoreFormContent
}

function applyGUIvalues() {
  // Check restored input field content to set the size of the rectangle
  var sizeWidget = document.getElementById("size");
  size = Math.sign(incX)*parseInt(sizeWidget.value);
  // update also the outline element's value
  document.getElementById("sizeValue").innerHTML= size;
  // Check restored input field content to set the color of the rectangle
  var colorWidget =document.getElementById("color");
  ctx.fillStyle = colorWidget.value;

  // Check restored input field content to set the speed of the rectangle
  var speedWidget =document.getElementById("speed");
  incX =Math.sign(incX)*parseInt(speedWidget.value);
  // update also the outline element's value

 document.getElementById("speedValue").innerHTML= Math.abs(incX);
  // Check restored input field content to set the lineWidth of the
rectangle
  var lineWidthWidget =document.getElementById("lineWidth");
  ctx.lineWidth = parseInt(lineWidthWidget.value);
}
```