

WIPC - Widgets Interview Programming Challenge 2017

SimpleSpreadSheet

In this challenge you must build a simple spreadsheet application using JavaScript, jQuery, CSS, and HTML.

The purpose of this challenge is to determine your ability to follow instructions as well as evaluate your programming skills.

Expected Level of Effort by Seniority

Junior Level – One week

Senior Level – 2 days

Staff Level+ – 1 day or same day

Features you must develop

Two text inputs, one labeled “Rows” and one labeled ”Columns” and a “Generate” button

- If you specify the **Rows** and **Columns** values and submit, it will generate a spreadsheet table at that size
- Cells should be uniform in size and never change size. If values inside cells are too big, show ellipses.
- Show Column and Row labels (Alpha characters for columns, numbers for rows)

If you click on a cell once, you select that cell. It should have an outline color to indicate selection

- If you hit the delete key while a cell is highlighted, it erases the value in that cell
- If you press the Enter key, the selection should move one row down. Shift+Enter moves selection one row up
- If you press the Tab key, the selection should move one column right. Shift+Tab moves selection one column left.

If you double-click on a cell, it becomes a text input, you can enter in any value

- Text input should be styled to fit within cell and to look like a cell to give the appearance of editing-in-place
- Hitting Enter or Tab key submits value
- Hitting ESC key cancels
- Clicking outside of cell submits value
- When value is submitted, the text input disappears and the value displays in the cell

Below your table add a textarea and two buttons: “EXPORT” and “IMPORT”

- “EXPORT” button exports the data in the table as JSON into the textarea
- “IMPORT” button imports JSON from the text area
- Create your own data format for this

Styling the table

- Each cell should have a border of 1px set to the color #999999
- Every EVEN row should have a #FFFFFF background color
- Every ODD row should have a #EEEEEE background color
- Row and Column labels should have a background color of #CCCCCC
- All text should be black

Programming Rules and Limitations

- You may only use JavaScript, CSS, HTML, and the jQuery library.
- **No other plugins, libraries, or frameworks allowed.**
- You must write everything yourself. Do not copy solutions from online or get help from someone else.
- Work inside a folder. Inside should be:
 - an **index.html** file, where you'll put your HTML
 - a **spreadsheet.js** file, where you'll put your code
 - a **spreadsheet.css** file, where you'll put your CSS
 - **jquery.min.js**
- Deliver your folder inside a zip file to: [Benjamin Friend](#)

Areas we will focus on

- How your table is generated
- How dynamic is your code
- How efficient is your spreadsheet
- How well do you use CSS to style your spreadsheet
- How good is the User Experience
- How good are your programming skills
- How well do you know Mouse and keyboard events
- How familiar are you with HTML, CSS, and JavaScript
- How you handle your data model
- How original is your code