nordan

introduction

Sencha's Ext JS is a powerful JavaScript framework. With over 7.2 million downloads and more than 60% of all fortune 100 companies making use of its many features, it is one of the key frameworks in the corporate sphere. It allows developers to hit the market quickly and deliver a great user experience across desktops, tablets, and smartphones alike. However, it is quite expensive and not too many developers have experience with it. Moreover, and though the comprehensive documentation aids the experienced JavaScript developer to success quickly, Ext JS commonly takes some time to get used to. We know that and do not expect you to be a Ext JS master. In the following, you will see a few challenges that will allow you to familiarize yourself with Ext JS if you don't know it already. Though we surely love correct answers, you will find the challenges designed in a non-binary way. Instead, we ask you to reflect the tasks critically and come up with your best answer. Have a blast and good luck!

environment

Please make sure to use **Ext JS 6.5** and install Sencha Cmd. We know it's not the latest version. But more recent releases are a little buggy here and there:

https://www.sencha.com/products/extjs/cmd-download/

useful content

- Sencha Cmd Smart Guide:
  - o http://docs.sencha.com/extjs/6.0.2/guides/getting_started/getting_started.html

- MVVM vs. MVC
  - o https://www.sencha.com/blog/ext-js-5-mvc-mvvm-and-more/

- Sencha Guides
  - o http://docs.sencha.com/extjs/6.0.2/guides/core_concepts/classes.html
  - o http://docs.sencha.com/extjs/6.0.2/guides/application_architecture/application_architecture.html

- Grids and renderer method:
  - o http://docs.sencha.com/extjs/6.0.2/classic/Ext.grid.Panel.html

- Examples & Kitchensink Classic
  - o http://examples.sencha.com/extjs/6.2.0/examples/
  - o http://examples.sencha.com/extjs/6.2.0/examples/kitchensink/

challenge

step 1 - warm up: We use MVVM basically everywhere. Your task is to familiarize yourself with MVVM in the Sencha environment. The useful content section provides a link.

step 2 – get your hands dirty: nordantech works with user data on a daily basis. A neat way to show user data is a simple table. Build a Ext JS grid using users.csv. Make sure to implement a MVVM structure.

step 3 – show off some skillzzz: our clients tend to provide data in various formats. Build your own CSV-reader that converts to JSON.

step 4 – pick some low-hanging fruits: you are basically done and now you can use what you have learned on the way to get a little creative. Here is your task: a potent element of managing projects is having a keen eye for potential delays. We make use of user specific activities showing who is supposed to do what and when. We contrast these activity plans to reality – the so-called actuals. The actuals show when something truly happened. You task is to convert the activities.csv to JSON via your csv-reader and to build an Ext JS grid using a JSON proxy. Further: think about using color, sparklines or anything that comes to mind to indicate where a project might be behind schedule.

Congrats! You are done! This is all we are asking from you – and it's more than enough. If you feel like you love this challenge, go ahead and have some fun with a few extras. Otherwise, send that baby over and we'll give it a look asap.

Bonus-3. get dirty: a key aspect of project management is to understand complex relationships at a single glance. More often than not, graphic illustrations are the way to go. Take your grid from above and illustrate the delays graphically.

Bonus-4. expert mode: Check out effects.csv. It gives you the planed and actual performance of some machine over time. Use your csv-reader and build an informative graphic illustration for a CEO, who wants to see if things are going according to plan. Remember, input data is often faulty – and users don't really like that. Moreover, they often use mobile devices and need responsive design.

Best of Luck! If you have any further questions, give us a shout any time!

Arne: ab@nordantech.com

Jonas: js@nordantech.com

Christian: ck@nordantech.com