

Coding Exercise - Mein-Recycling Savings Calculator

Context

Resourcify offers the Mein Recycling App to companies so that they can organize their recycling better. Besides some more we are highlighting the time savings as an advantage. On our website we are adding more and more content to attract potential customers (inbound marketing).

(Hint: This exercise targets the waste producing companies a bit more. In the meantime Resourcify has shifted focus more to the recyclers.)

Exercise

Please develop a small browser-based application that could be integrated with our [Mein-Recycling Website](#). The purpose is to calculate the time and cost saving potential per month for a potential customer. The following parameters are important:

- Number of interval containers (recurring order)
- Number of on-demand containers (on-demand order)
- Number of total orders per month (exchange, emptying, or pickup of container)
- How are the orders organized (in percent)? Phone, e-mail, fax, recycler portal
- How many different recyclers do you have?

Bonus: Each time someone presses „Calculate“ (or however you name that button), please store the input parameters and the result in a JSON data structure and save it in a custom backend.

Assumptions

- Time saving per order by channel (on-demand orders)
 - Phone: 20 min
 - E-Mail: 15 min
 - Fax: 30 min
 - Portal: 15 min
- Time saving interval orders = 50% of above values as less attention is needed
- Per month 2 hours basic time saving for reporting and accounting tasks
- Per additional recycler 30% surplus on time saving
- Labor cost: 75 EUR / hour
- Cost of app (Hint: old business model)
 - Up to 3 containers: free
 - Up to 8 containers: 19 EUR / month
 - 8+ containers: 45 EUR / month

General points

- Technologies: HTML, CSS, JavaScript + framework of your own choice (jQuery, Angular...)

- Technologies (for bonus, see above): free of choice, but a no-sql approach and NodeJS seems appropriate, like in the MEAN stack
- Look-and-Feel according Mein Recycling Website (you can steal CSS, but please make sure your own CSS is clearly separated)
- Responsive (usable on a smartphone)
- Please use widgets and value range that fit the purpose, e. g. slider ranging from 0 bis 50 for number of containers