

Challenge for Fullstack Developers

I am glad you made it this far, now it is your time to shine! See you on the other side :)

SQL

Assume the following scenario: There are ads, each belonging to exactly one campaign. A campaign can have multiple ads. Each campaign belongs to exactly one advertiser. An advertiser can have multiple campaigns. Only the following ad properties are relevant for the task: *title*, *text*, *image*, *sponsoredBy*, *trackingUrl*.

Assuming those tables are already present in a SQL server, write down the queries to fulfil the following tasks:

- showing all campaigns of advertiser #100 that have more than 50 ads
- showing all campaigns that do not have any ads

API

Assume the data structure from the SQL task. Please write down the rest-ful API calls for the following actions. Do not implement anything here, just specify *URL*, *HTTP method* and the *request body* for each action.

- selecting a specific ad
- selecting all ads of a specific campaign
- selecting all ads of a specific advertiser
- creating an ad
- modifying a specific ad

Application

Use .Net Core + JavaScript to build a web-based device detector which can classify the user's device. Create a front-end that enables the user to start the detection and outputs the result. The detector should be able to classify the device in terms of its type (tablet, phone, desktop) and its operating system. Don't reinvent the wheel but use an existing open-source project for device detection. Along with the code please submit tests.

Have Fun!