base7booking

Software Engineering Palma
Challenges

Introduction

To be considered for the next step in the recruiting process you must successfully complete two of the following challenges.

Challenges Available:

Youtube video	All applicants are required to submit a video.
html/js/css project	This challenge is aimed at frontend developers
Semantic Text Analysis	This challenge is aimed at backend developers

More information on the above challenges is available below.

If you are applying to the *frontend position*, you should do the *frontend challenge* (and *backend challenge* for *backend position*).

When you have completed your challenges (you are also welcome to try all of them) please get back to us with an email containing relevant information.

Please remember that this is *not about perfection* it is just about us seeing what makes your brain tick, and, how you go about solving problems. We also *completely* understand that you are busy, so just try to do your best with the time you have available.

Challenge #1 - Youtube video

Background

It is always hard to figure out people just through looking at a resume, therefore, base7 has devised the use of video submission as a way for us to learn more about you.

Challenge Description

You need to record and provide us a link to a youtube video (in English) that outlines your **best/proudest achievement(s) in software/web development**, including all of the interesting technologies, ideas, concepts and problems involved. You should also be sure to include **your biggest failure** as it helps us see how you overcome struggles!

This video is your best chance to illustrate how much you understand about technology and it also helps you practice your English skills (if you need to). Being competent at English speaking *is not a mandatory requirement*. The entire team works hard to learn and practice their English speaking skills so don't worry about it, just try your best!

You should try to make it somewhere between 7 and 15 minutes, so go crazy!

It really doesn't matter how you look, this video is something where we want to know what is inside your head, we are not interested in your haircut or what clothes you wear, so definitely *do not stress*! Make sure you **set your video to unlisted**, not private!!

Common Questions

1. Do I *REALLY* have to do this video?   **YES**

Challenge #2 - html/js/css project (Frontend Challenge, FE)

Background

It is always difficult to see how competent an individual is when it comes to frontend development work. The goal is to "reinvent" one of our core products (the base7 booking engine) and show off your abilities without having to learn our software platform(s). In the hospitality industry, an **Internet booking engine** (IBE) is a website that allows consumers to search for & book hotel rooms, packages for a given hotel. Typically, the consumer will go to the hotel's website and then be redirected to the IBE platform when searching for room availabilities in that hotel.
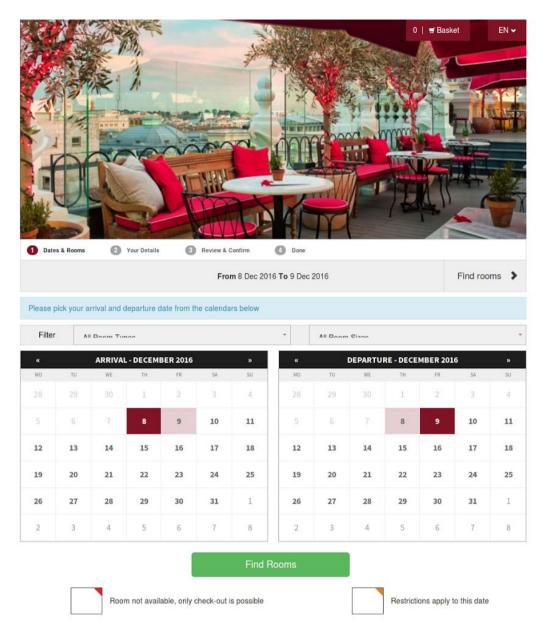
Challenge Description

For the FE challenge, the goal is to implement a simple yet effective one-page booking engine that allows users to look for available rooms in a hotel. At a minimum, the user should be able to choose a checkin/checkout date, the number of people, the room type (single, double, suite) and a page should display a list of results. The user should then be able to add one or more rooms, and a summary of the selected rooms and price should be provided at all times.
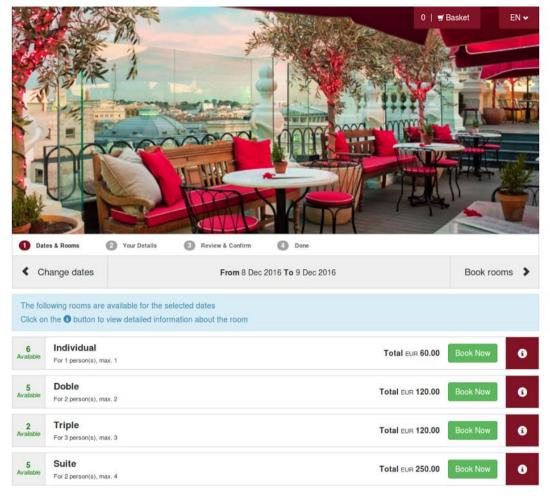
What we are looking for:

- Clean, readable html5 markup
- Clean, readable css styles (use of a preprocessor like sass is fine)
- A well structured javascript application (you can use any modern js framework, we prefer react+redux, but you can also use Angular2 or Angular or a good framework as long as you explain why). **Providing jQuery code without using any framework or code structure will not be enough)**
- Your end project should be 30% html, 30% css and 30% js in complexity and contribution (allowing us to assess all of your skills).

Feel free to experiment here, the key is to show off your frontend development knowledge & ideas.

Screenshots:

Your popup (press button then show us the magic!)

NOTE: The above screenshots are here for reference, feel free to depart from them and add other functionality if you have time.

Remember! *We can help you with any questions or guides!*

Challenge #3 - Semantic Text Analysis - (Backend Challenge, BE)

Background

This is a PHP challenge aimed at backend developers, it must be written through using the Symfony PHP framework.

Challenge Description

We want you to see if you can search text, and within this text provide a score on certain words, whether the text is positive or negative (for that word).

If you look at the spreadsheet we share with you, you will see one sheet containing the words (and text that is positively attributed or negatively attributed to a topic (room, hotel etc). And in the second sheet you will see sample review text.

Please review this spreadsheet for sample data:

https://docs.google.com/spreadsheets/d/14LLbCl9pdBAS-yzfFQF4THEYYw8d9g0Mp1xYeYdvxaY/edit?usp=sharing

Your goal:

Create some PHP code (in Symfony) that can go through the review text, process each one, score it, then return for each row in the review text it's score (for any found words).

This is a relatively simple concept and we would like to see if you can crack it.

You are also able to re-invent the criteria to achieve the objective (ie using RegEx or anything else) the key is that we give you a list of words and attributes for each (ie great ROOM) and then attribute a score to it.

Definitely feel free to re-invent the concept as I have just dumped it here (we do this differently but it is a cool idea), and we are here to help you if you need it!
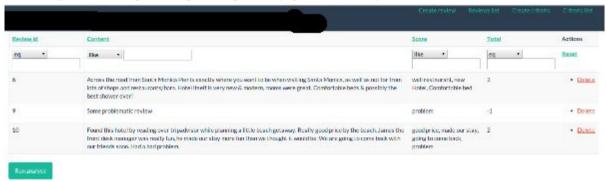
What we want:
- PHP 5.6
- Symfony 2.8 based website
- A gui that lets me add criteria.
- A gui that lets me add reviews csv
- A RUN button that tries to rate each review.

- Use sqlite composer dependency (do not use MySQL)

What is actually important:

- An example of you showing for each db entry (for each review) attaching score for each topic and criteria that you match.
- You get a basic understanding of how symfony works

The following image is a screenshot from a *very basic* demo a developer did to show how they were progressing, it might help you come up with ideas:

Common Questions

1. How should I prepare it for you to test it?
   Please ensure the following commands can be run:
   composer install
   php app/console cache:clear
   php app/console assets:install
   php app/console assetic:dump
   php app/console doctrine:database:create
   php app/console doctrine:migrations:migrate
   phpunit -c app/
   php app/console server:run

   Create a run.sh or run.bat file for us to test your application.

Remember! We can help you with any questions or guides!

Next Steps

When you have completed your challenges you are then required to send an email containing the following:

- A link to the youtube video (or a link to a video stored elsewhere online)
- A zip file attachment for each challenge (containing all required information) OR a link to github or similar, OR a ssh account with information on how to see the data.

You have **2 weeks** to complete your challenges. If you are not able to finish the challenges in that time, please contact us.

Definitely let us know if this is *too much* or if you have an issue or *anything at all!*