

# Web Developer Test

The purpose of this exercise is for you to show your ability to create a functional, modern and userfriendly webpage. The application should be written in HTML5 that passes W3C validation, use CSS3 and support modern browsers. You may design the page however you like.

The required features on this page are listed below. Don't feel stressed... If you're running out of time, we'd rather see you do your best on implementing a few of these requirements, than submitting something that you're not fully satisfied with.

## The test

The end product should be a portfolio of my favorite King games. To add games to the favorites I need to be able to search and browse through all the games on king.com and have a way of adding and removing them from my personal game portfolio. I also want to be able to browse and search through my portfolio once I have added games to it.

I would also like to have a view for each game with the possibility to add/remove them from my portfolio, and the possibility to play (the actual playing is not required, just show that there is a way to navigate there, it doesn't have to do anything).

### Bonus:

It would be nice if I could keep my favorites after reloading and if I could use the application on my mobile device.

## Technology stack requirements

The goal of this technical test is to check how would you handle with our current technology stack. That's why you must use the following:

- JavaScript or TypeScript
- React.js or vanilla JavaScript/TypeScript
- CSS3: You can use preprocessors (SASS or LESS) but please avoid CSS frameworks or widget libraries (Bootstrap, Bulma, MaterialUI,...)
- HTML5

## Non-functional requirements

- The application should be client based only.
- Pay attention to the **performance** of your solution.
- For the user the **load times are critical** so have that in mind when developing.
- Pay attention to **code clarity, structure and legibility**.
- We expect you to include some kind of **test automation**.



- It should work nicely in **modern browsers** in their stable versions (current -1).
- The solution should be **bug-free**.
- We will value positively if you include a `README.md` file in your solution with your comments about your approach to the implementation or any relevant information you'd like to include.

## What we look at

- Code quality
- Code structure
- Tests
- Performance / Optimization
- Search algorithm
- User interface / experience

## Resources

Inside the `service` folder you will find a small HTTP server to provide the games' data, please use it as your backend.

*Game screenshots:*

[http://www.royalgames.com/images/games/\[short\]/dumps/screen\\_\[short\].gif](http://www.royalgames.com/images/games/[short]/dumps/screen_[short].gif)

*60x60px game icons:*

[http://www.royalgames.com/images/games/\[short\]/\[short\]\\_60x60.gif](http://www.royalgames.com/images/games/[short]/[short]_60x60.gif)

*81x46px game icons:*

[http://www.royalgames.com/images/games/\[short\]/\[short\]\\_81x46.gif](http://www.royalgames.com/images/games/[short]/[short]_81x46.gif)

*170x80px game icons:*

[http://www.royalgames.com/images/games/\[short\]/\[short\]\\_170x80.gif](http://www.royalgames.com/images/games/[short]/[short]_170x80.gif)

*764x260px game images:*

[http://www.royalgames.com/images/games/\[short\]/tournamentPage/\[short\]\\_764x260.jpg](http://www.royalgames.com/images/games/[short]/tournamentPage/[short]_764x260.jpg)

## Delivery

Please deliver your work as a `.zip`, `.rar`, `.tar.gz` or any archive type of your choice. Make sure we can simply unpack it and open the page directly on a local server.

Good luck!

## FAQ

“ *Can I use [Angular/Vue/Ember/Elm/...] instead of React?* ”

**Short answer:** No, we're sorry; but you can do it with vanilla JavaScript/TypeScript instead.

**Long answer:** We work with React, so we want to see how do you use it or which are your skills with raw JavaScript/Typescript. Also, we might not have experience with your chosen framework, so it would be hard for us to evaluate if your code follows the good practices in that ecosystem or if there's any anti-pattern.

“ *Can I use CSS Modules, Styled components... or similar?* ”

Yes. As long as we can see your styles you can use those tools.

“ *Can I install any npm dependencies?* ”

Even though **we would like to see as much code as you can do without installing additional dependencies**, it's allowed to use any JavaScript library or utility.

“ *Can I use Redux/MobX/react-router... or any other libraries from the React ecosystem?* ”

Here applies the same answer as any other npm dependency. If you need any of these utilities, feel free to use it.

“ *Can I use create-react-app or any other generator?* ”

Yes. **We won't pay attention to your skills configuring development tools such as webpack or babel**, so feel free to save your time using anything to help you implement a better code solution.