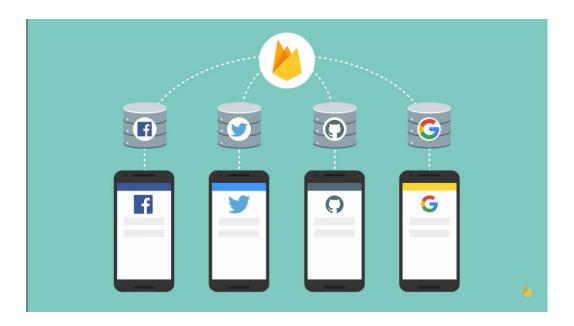
Use of a single sing- on service with an authorization framework

Provides an authentication solution, through flows managed by a user access UI. It has an Auth component implemented which is used for websites and mobile devices that can maximize access conversion. Through this authentication you have a better security since you can get relevant data that are accessible with verified emails.



It has a comprehensive security through Google, Smart lock and by the password manager in Chrome.



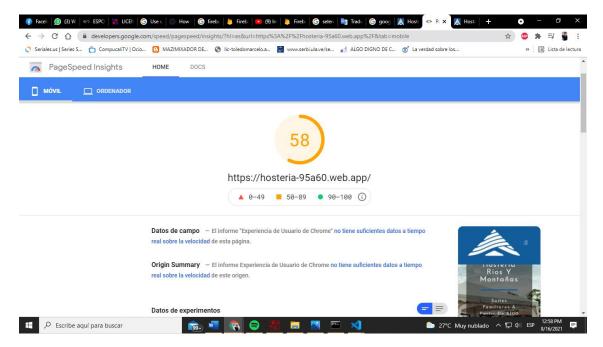
Our code validates the emails, if they exist it returns a token with that information.

```
const login = React.useCallback(async () => {
   try {
       const res = await auth.signInWithEmailAndPassword(email, pass)
       console.log(res.user)
       setEmail('')
       setPass('')
       setError(null)
       props.history.push('/')
    } catch (error) {
       console.log(error)
        if(error.code === 'auth/invalid-email'){
            setError('Email no válido')
            setEmail('')
            setPass('')
        if(error.code === 'auth/user-not-found'){
           setError('Email no registrado')
            setEmail('')
            setPass('')
        if(error.code === 'auth/wrong-password'){
            setError('Contraseña incorrecta')
            setEmail('')
            setPass('')
}, [email, pass, props.history])
```

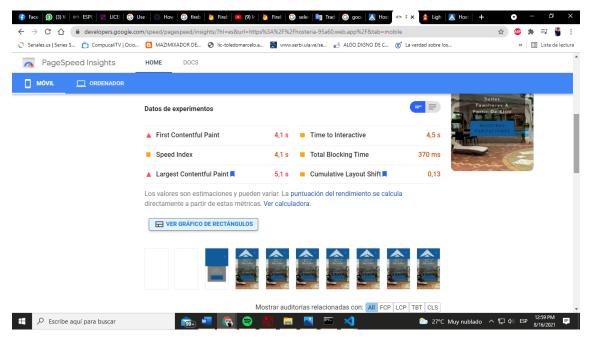
Through this function we can validate registered users in our application and thanks to the comprehensive security you can reset the password by means of "firebase" where a link is sent to the end user's email and if you wish you can proceed to make the change.

Extra-Use of a GUI test automation tool

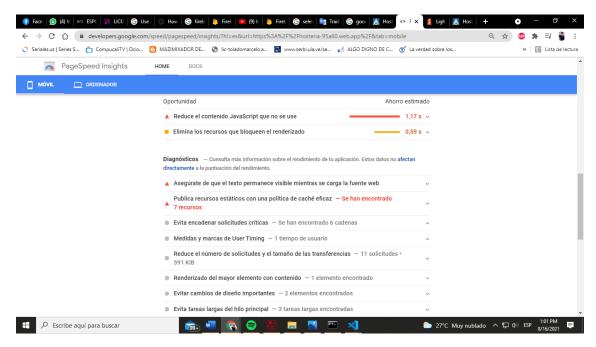
It has been used "google developers", is a tool created for developers with many functions, with which we have tested some windows of our page.



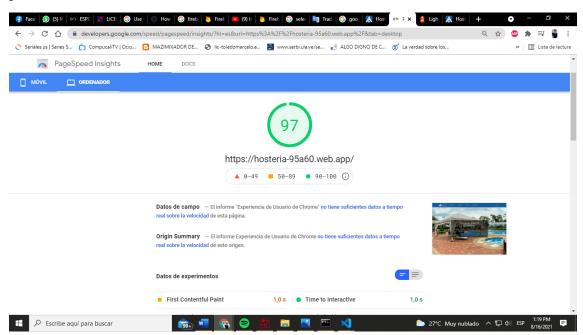
For the mobile and web part the load test has medium speed in load time from a mobile application, in the web part a certain similarity was shown in the load test.

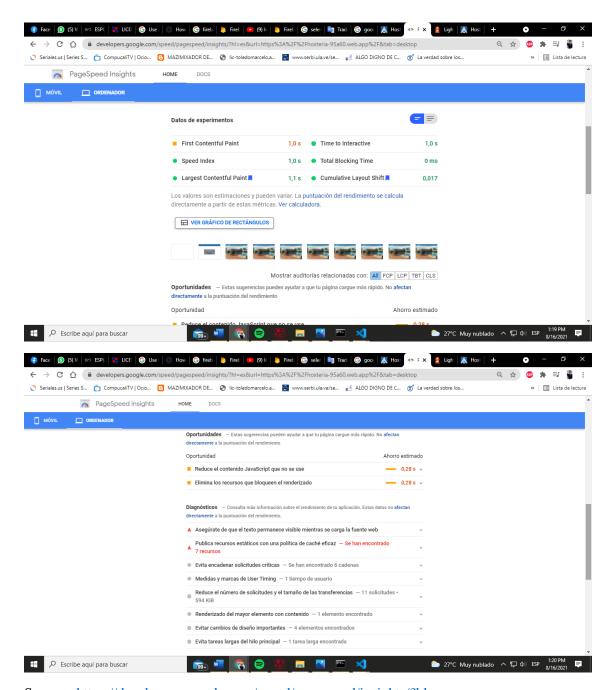


The app gives us a lot of data, such as data from experiments and some recommendations for diagnosis by web and mobile.



After applying the appropriate modifications to the code, the app improves its loading performance.

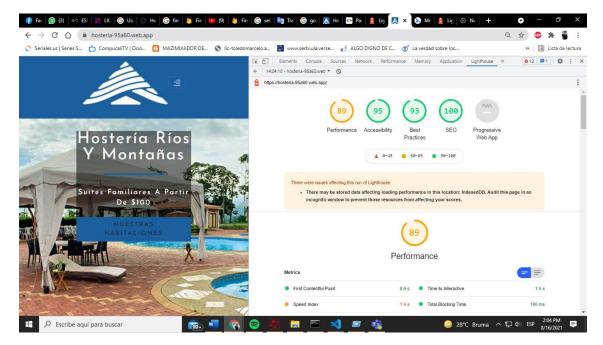




Source: https://developers.google.com/speed/pagespeed/insights/?hl=es

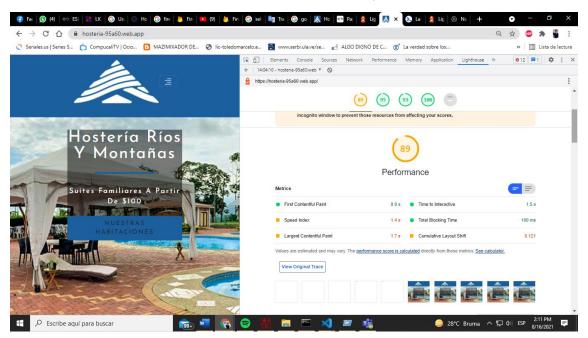
Extra-Load Testing

With the same "Google developers"but now we use "Lighthouse" with all its features. To access this Google feature or tool we must place ourselves on the website you want to analyze, then press inspect and in the bar on the right side where it says: elements, console, source and others. Search lighthouse, select the categories to analyze and the type of device. To finish just click on generate report and wait.

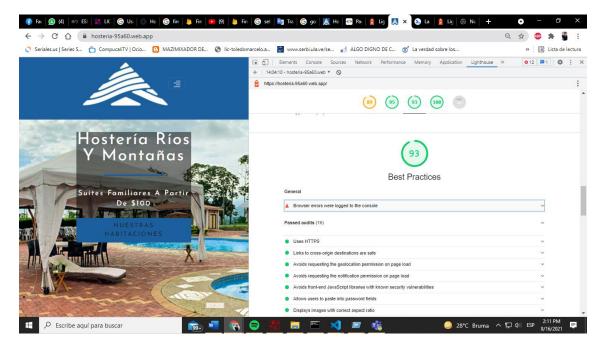


With improved code, we can see how performance is in range. To be extremely optimal, you should reach more than 90 in each section.

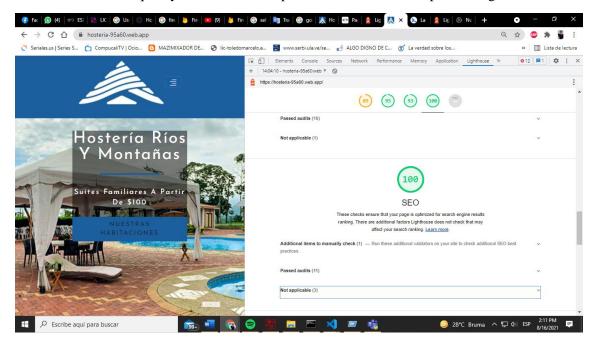
Performance is the interaction time to determine the load delay, in other words, the load time.



In **best practices**, rate the use of HTTPS within the entire render of the page.



In **SEO** verifies the quality of the code or implementation for a better positioning on the web.



Accessibility checks for common issues that might prevent multiple users from accessing content.

