



LAMBDA TEST

By :-

S DHRUVA 4NM18CS140

SAMIT D MANVAR 4NM18CS152

Agenda



01. Introduction

What is Cross browsing compatibility - why we need cross browsing testing

03. Working

Demonstration of Lambda Test application by taking a simple web application as an example

02. Lambda Test

What is Lambda Test
Features of Lambda Test
Types of Testing Performed

04. Pros and Cons

Advantages and Disadvantages.

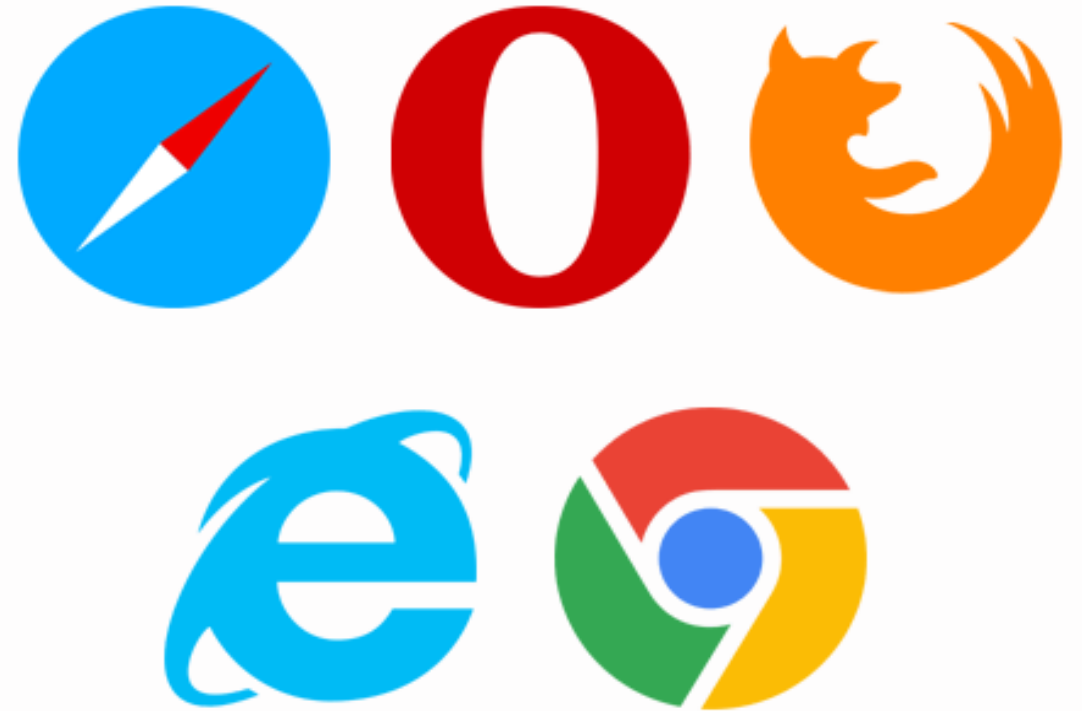
05. Conclusion

Conclusion of the topic

Introduction

What is Cross Browser Compatibility?

Cross Browser compatibility is the ability of a website or web application to function across different browsers and operating systems. Compatibility testing is a part of non functional testing .



Browser Compatibility Testing

Introduction

Why do we need Cross Browser Compatibility?

Once the application is stable, we moved it to the production, it may be used or accessed by multiple users on the different platforms, and they may face some compatibility issues, to avoid these issues, we do one round of compatibility testing. A simple website is comprised of 3 major technologies HTML , CSS and JAVASCRIPT. In the backend different technologies are used . But overall in the front end in the rendering only these 3 main technologies are used. Each browser used different rendering engine.



Introduction

Why do we need Cross Browser Compatibility?



Rendering Engine

Blink



Gecko



Web Kit



What is Lambda Test?

Lambda Test

- ✓ Lambda Test is a scalable cloud-based cross browser testing platform.
- ✓ Designed to offer all website or web app testing need to cloud infrastructure.
- ✓ Lambda Test platform helps you to ensure your web app elements (such as JavaScript, CSS, HTML5, Video etc.) render seamlessly across every desktop and mobile web browser
- ✓ Can test on 2000+ Real Browsers and operating systems .

Features

- ✓ It supports automated cross-browser testing across 2,000+ real browsers, platforms, and device emulators.
- ✓ Supports Parallel Execution
- ✓ It lets you check the responsiveness of the website or web application across different devices (iOS and Android) and viewport sizes.
- ✓ Locally hosted web testing.
- ✓ Supports automation testing with Selenium 4, the latest release of the Selenium framework.

Types of Testing Performed

- ✓ Real Time Testing (Live Testing)
- ✓ LT Browser Testing
- ✓ Automation Testing
- ✓ Screenshot Testing
- ✓ Integration Testing

DEMONSTRATION

Dashboard

LAMBDATEST

Dashboard

Real Time Testing

Automation

LT Browser

Visual UI Testing

Test Logs


Issue Tracker

Integrations

Projects

Configure Tunnel

Upgrade



Hi SAMIT MANVAR, what will you be using LambdaTest for ?

Select the test you want to run first.
Don't worry, you can explore other options later.

Live Test

Automation Test

Responsive Test

Screenshot Test

Got questions? [Chat](#) with us, we are always happy to help.

LIVE TESTING

LAMBDATEST

Dashboard

Real Time Testing

Automation

LT Browser

Visual UI Testing

Test Logs

Issue Tracker

Integrations

Projects

Browser Testing

App Testing

Select your configuration to start Real time testing!

Place your URL
https://www.irctc.co.in/nget/train-search

Optional
Select Tunnel

START

VERSION

OS

RESOLUTION

96 Beta

95

94

93

92

91

90

89

88

87

86

85

Windows 10

Windows 8.1

Windows 8

Windows 7

Windows 11 Beta

macOS Big Sur

macOS Catalina

macOS Mojave

macOS Monterey Beta

1024x768

1280x720

1280x800

1280x1024

1366x768

1440x900

1600x1200

1680x1050

1920x1080

1920x1200

2048x1536

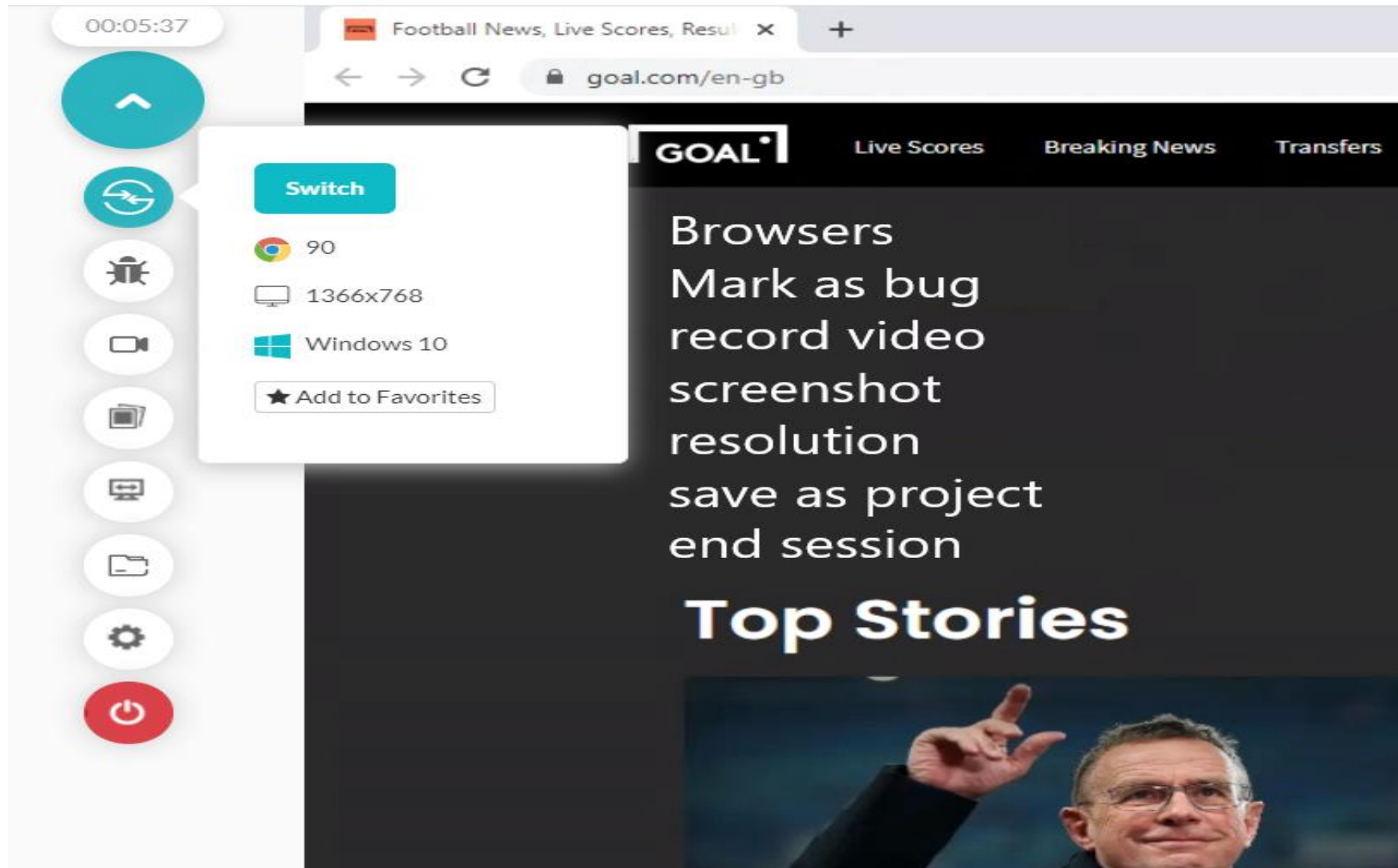
2560x1440

12

Lambda Test

November 30,2021

LIVE TESTING



LIVE TESTING

Realtime Browser Viewer x IRCTC Next Generation eTicketing x +

app.lambdatest.com/viewer/TES1001131637605321268523

00:09:29

IRCTC Next Generation eTicketing x +

irctc.co.in/nget/train-search

IRCTC

LOGIN REGISTER AGENT LOGIN CONTACT US ASK DISHA ALERTS 22-Nov-2021 [19:22:36] A A A हिंदी

IRCTC EXCLUSIVE TRAINS BUSES FLIGHTS HOTELS HOLIDAYS LOYALTY MEALS PROMOTIONS PREMIUM PARTNER MORE

PNR STATUS CHARTS / VACANCY

BOOK TICKET

From DD/MM/YYYY * 22/11/2021

To All Classes

GENERAL

☐ Divyaang Concession ☐ Flexible With Date

☐ Train with Available Berth ☐ Railway Pass Concession

Search

Due to re-numbering of special trains with regular train numbers, booking and cancellation facility will not be available from the intervening night of 14.11.2021 and 15.11.2021 to 20.11.2021 and 21.11.2021, starting at 23:30 hrs till 05:30 hrs.

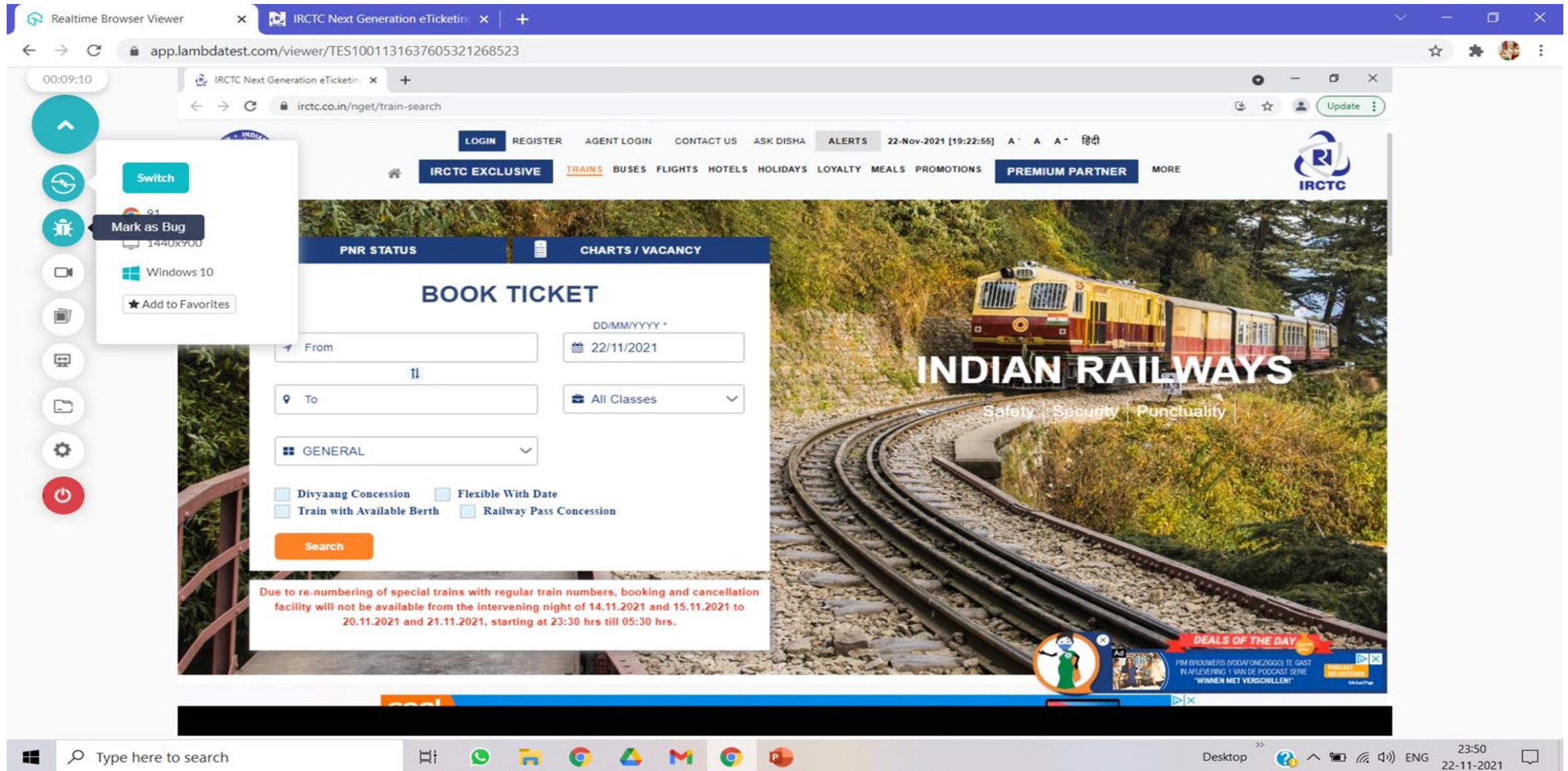
INDIAN RAILWAYS

Safety | Security | Punctuality

DEALS OF THE DAY

Ad echama every day is black friday 10% korting up to ₹ 1000000 10% korting up to ₹ 1000000 10% korting up to ₹ 1000000

LIVE TESTING



LIVE TESTING

00:08:08

app.lambdatest.com/viewer/TES1001911638120954704541

IRCTC Next Generation eTicketing

irctc.co.in/nget/train-search

IRCTC EXCLUSIVE TRAINS BUSES FLIGHTS HOTELS HOLIDAYS LOYALTY MEALS PROMOTIONS PREMIUM PARTNER MORE

PNR STATUS CHARTS / VACANCY

BOOK TICKET

DD/MM/YYYY * 28/11/2021

From To

GENERAL

BUG1

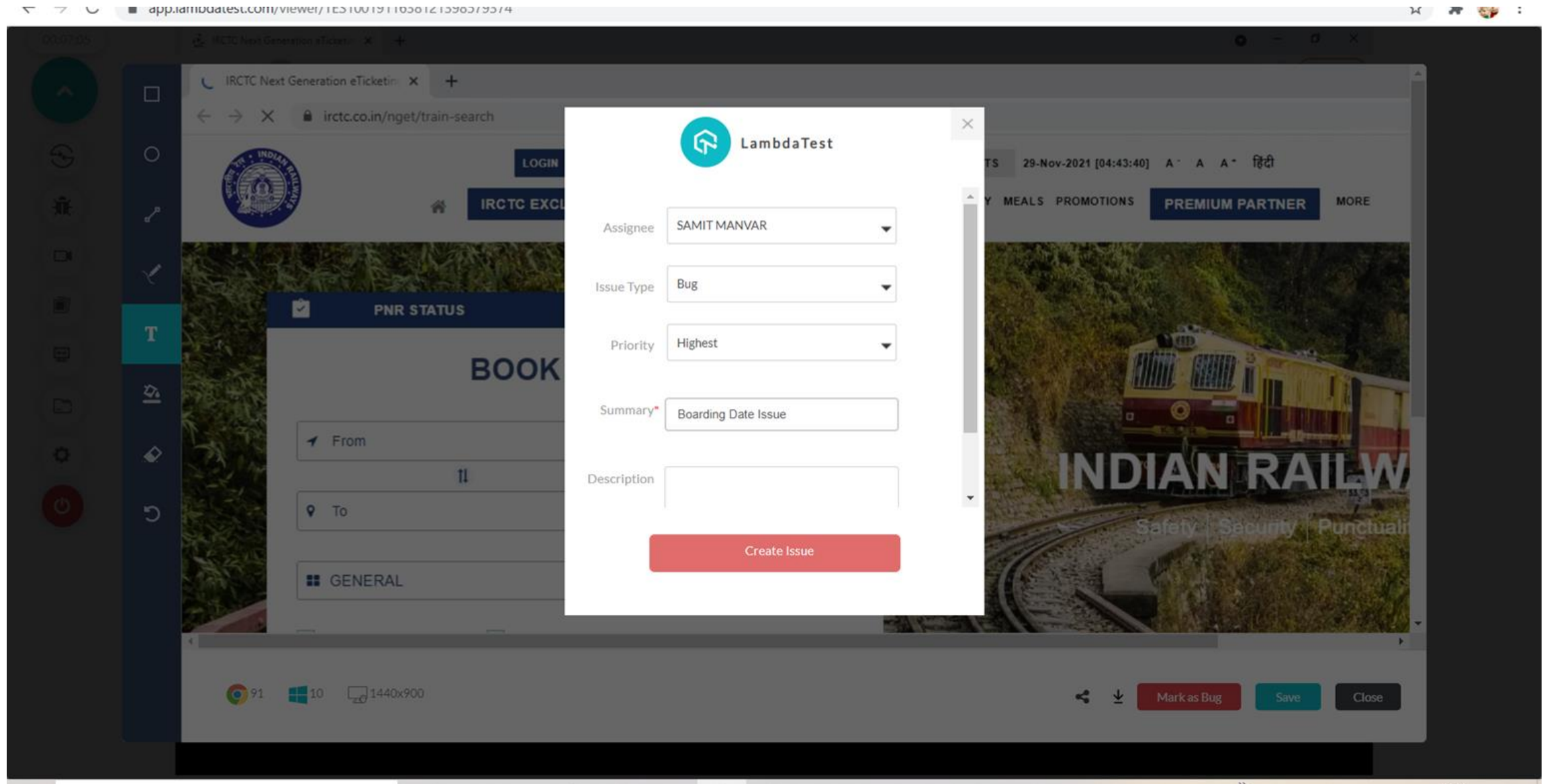
INDIAN RAILWAYS

Safety | Security | Punctuality

91 10 1440x900

Mark as Bug Save Close

LIVE TESTING



Test Logs

app.lambdatest.com/console/test-logs

LAMBDATEST Cyber-Monday Deal 🥳 - 20% Discount on LambdaTest Live Testing Annual Plans 🚀. Code - **CYBER20** Expires In: 4d 0h 45m 25s

Configure Tunnel ? Upgrade

Select Project Test Type Select Users Oct 29, 2021 - Nov 28, 2021

☐ Select All

☐ Realtime Browser
Nov 28, 2021 | https://www.irctc.co.in/nget/train-search

☐ Realtime Browser
Nov 28, 2021 | https://www.irctc.co.in/nget/train-search

☐ Realtime Browser
Nov 22, 2021 | https://www.irctc.co.in/nget/train-search

Test Details

Untitled/Realtime Browser/TES1001911638121398579374

Tester: SAMIT MANVAR Date: Nov 28, 2021

Start time: 11:13 PM End time: 11:16 PM

Base URL: https://www.irctc.co.in/nget/train-search

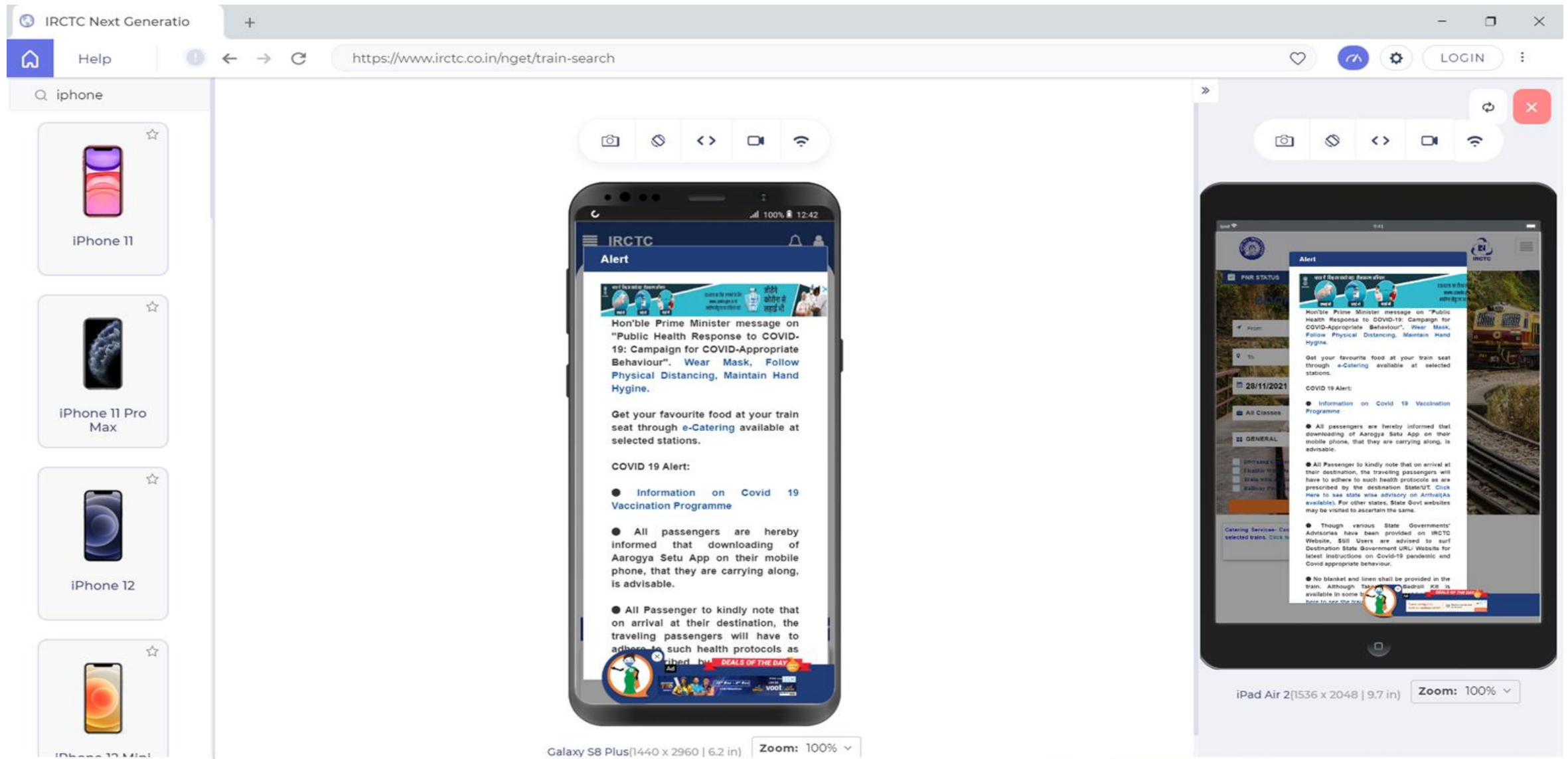
Environment: 91 Windows 10 1440 x 900

Screenshots: 2 Download All .zip

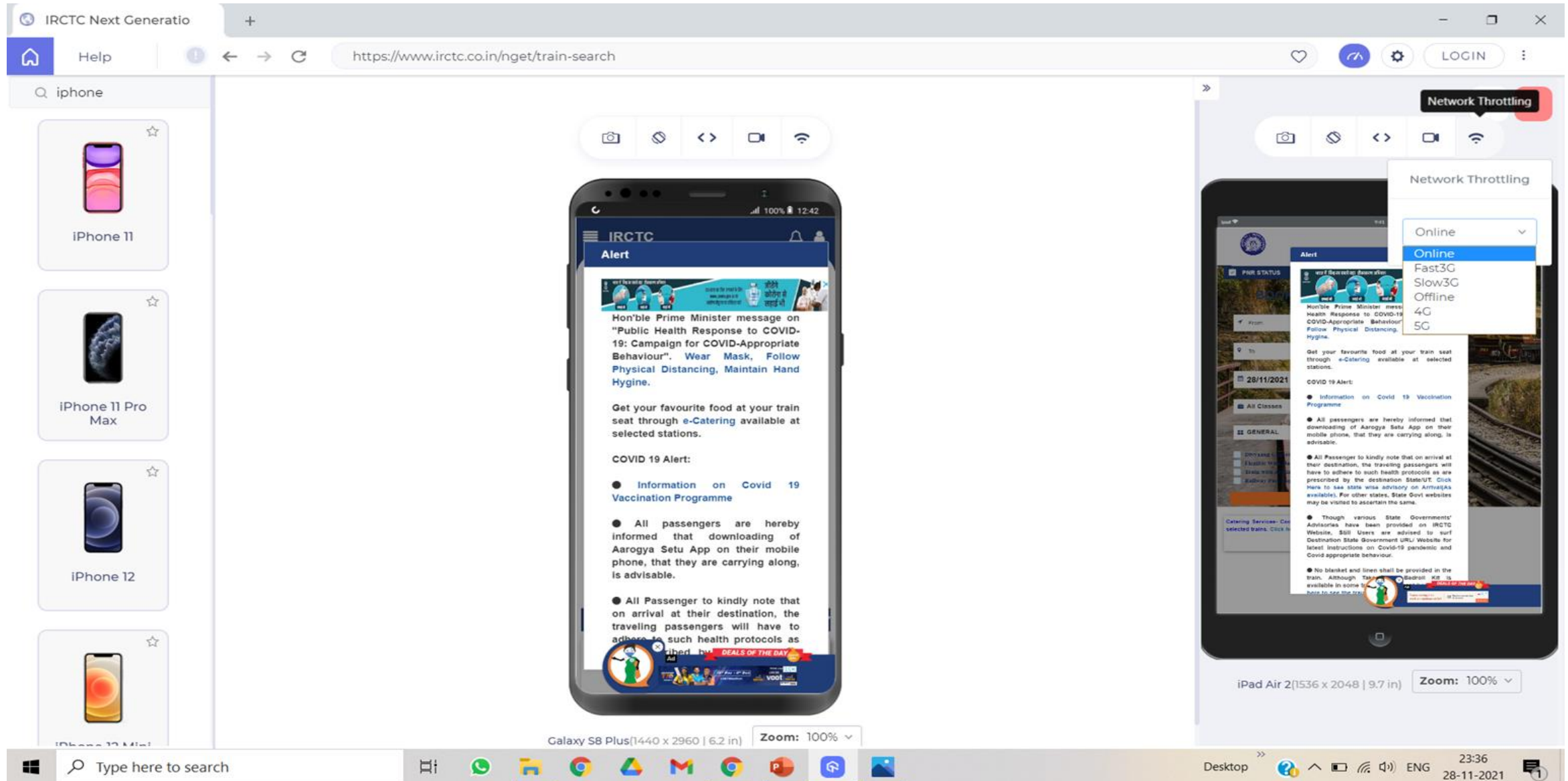
All With Issues

Showing 1-3 of 3 Go to Page: 1

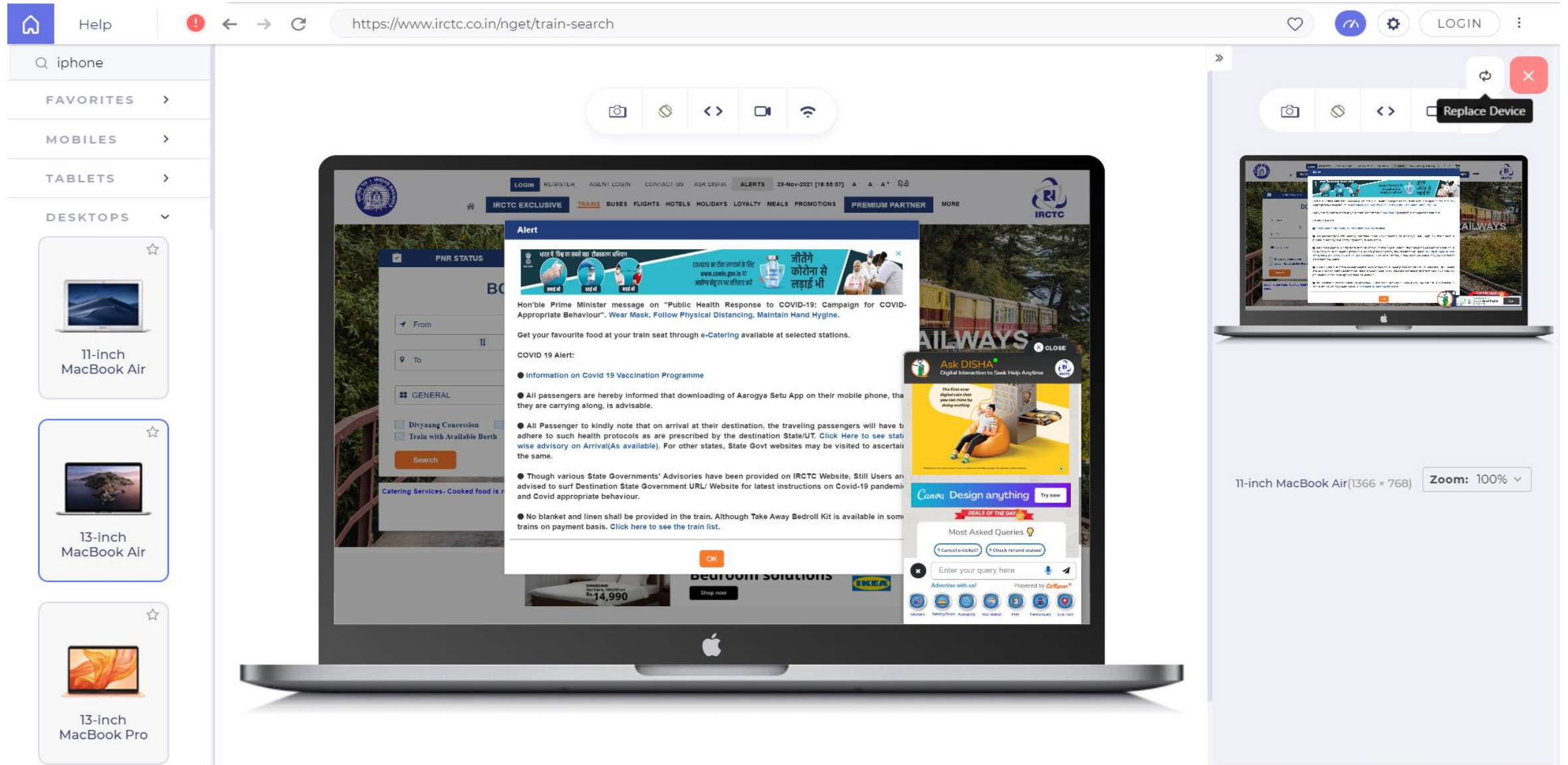
LT BROWSER TESTING



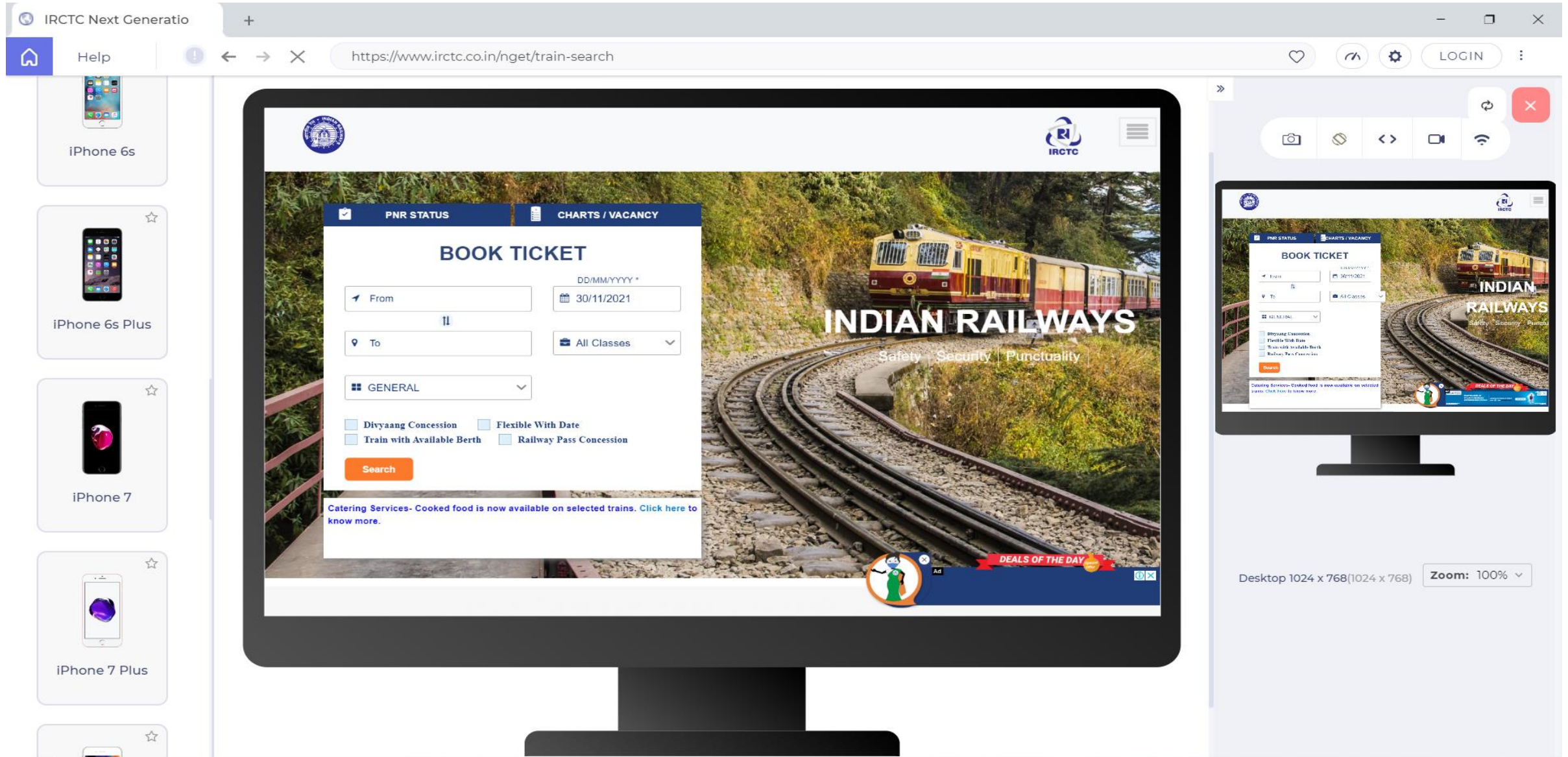
LT BROWSER TESTING



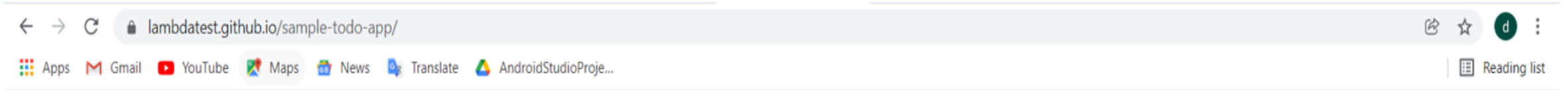
LT BROWSER TESTING



LT BROWSER TESTING



AUTOMATION TESTING



LambdaTest Sample App

5 of 5 remaining

- ☐ First Item
- ☐ Second Item
- ☐ Third Item
- ☐ Fourth Item
- ☐ Fifth Item

Want to add more

add

AUTOMATION TESTING

```
import java.net.MalformedURLException;
import java.net.URL;
import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.remote.RemoteWebDriver;
public class JavaTodo {
    String username = "dhruwaah";
    String accesskey = "eRKxKjJ7gjD7wn1StYm3f2g0Hj0r7r28bDQhKoH8wOZNtnkrZk";
    static RemoteWebDriver driver = null;
    String gridURL = "@hub.lambdatest.com/wd/hub";
    boolean status = false;
    public static void main(String[] args) {
        new JavaTodo().test();
    }
}
```


AUTOMATION TESTING

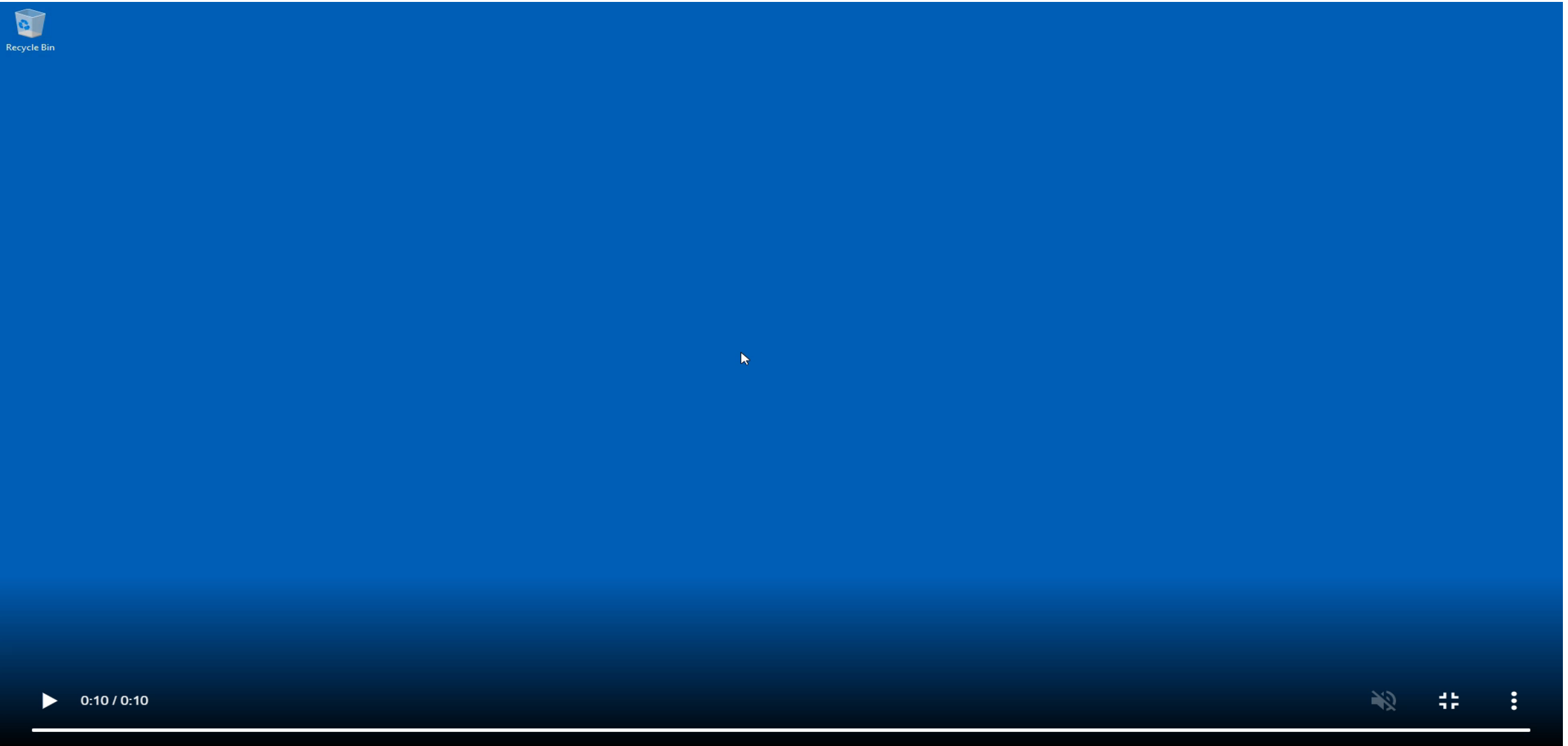
```
public void test() {  
    // To Setup driver  
    setUp();  
    try {  
        //Change it to production page  
        driver.get("https://lambdatest.github.io/sample-todo-app/");  
  
        //Let's mark done first two items in the list.  
        driver.findElement(By.name("li1")).click();  
        driver.findElement(By.name("li2")).click();  
  
        // Let's add an item in the list.  
        driver.findElement(By.id("sampletodotext")).sendKeys("Yey, Let's add it to list");  
        driver.findElement(By.id("addbutton")).click();  
  
        // Let's check that the item we added is added in the list.  
        String enteredText = driver.findElementByXPath("/html/body/div/div/div/ul/li[6]/span").getText();  
        if (enteredText.equals("Yey, Let's add it to list")) {  
            status = true;  
        }  
    } catch (Exception e) {  
        System.out.println(e.getMessage());  
    } finally {  
        tearDown();  
    }  
}
```

AUTOMATION TESTING

```
private void setUp() {
    DesiredCapabilities capabilities = new DesiredCapabilities();
    capabilities.setCapability("browserName", "chrome");
    capabilities.setCapability("version", "70.0");
    capabilities.setCapability("platform", "win10"); // If this cap isn't specified, it will just get any available
    capabilities.setCapability("build", "LambdaTestSampleApp");
    capabilities.setCapability("name", "LambdaTestJavaSample");
    try {
        driver = new RemoteWebDriver(new URL("https://" + username + ":" + accesskey + gridURL), capabilities);
    } catch (MalformedURLException e) {
        System.out.println("Invalid grid URL");
    } catch (Exception e) {
        System.out.println(e.getMessage());
    }
}

private void tearDown() {
    if (driver != null) {
        ((JavascriptExecutor) driver).executeScript("lambda-status=" + status);
        driver.quit(); //really important statement for preventing your test execution from a timeout.
    }
}
```

AUTOMATION TESTING



SCREENSHOT TESTING

Capture screenshots for multiple browsers & devices

Place your URL
https://www.youtube.com

Optional
Select Tunnel

 **CAPTURE**



0/25
0 0



List1 (0/25)

Basic Authentication

Login



Windows 10

94 93 92
91 90 89
88 87 86
[48 more...](#)

93 92 91
90 89 88
87 86 85
[53 more...](#)

80 79 78
77 76 75
74 73 72
[47 more...](#)

94 93 92
91 90 89
88 87 86
[10 more...](#)

11



Windows 8.1

94 93 92
91 90 89
88 87 86
[58 more...](#)

93 92 91
90 89 88
87 86 85
[69 more...](#)

80 79 78
77 76 75
74 73 72
[49 more...](#)

94 93 92
91 90 89
88 87 86
[6 more...](#)

11



Windows 8

94 93 92

93 92 91

80 79 78

94 93 92

10

SCREENSHOT TESTING

Test Details

Untitled/Screenshot Test/[TES1001911638205475800117](#)

Tester: dhruva S

Date: Nov 29, 2021

Start time: 10:34 PM

End time: 10:35 PM

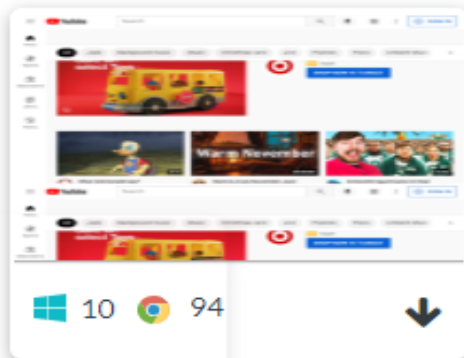
Base URL: <https://www.youtube.com>

Screenshots: 1

Download All .zip ↓

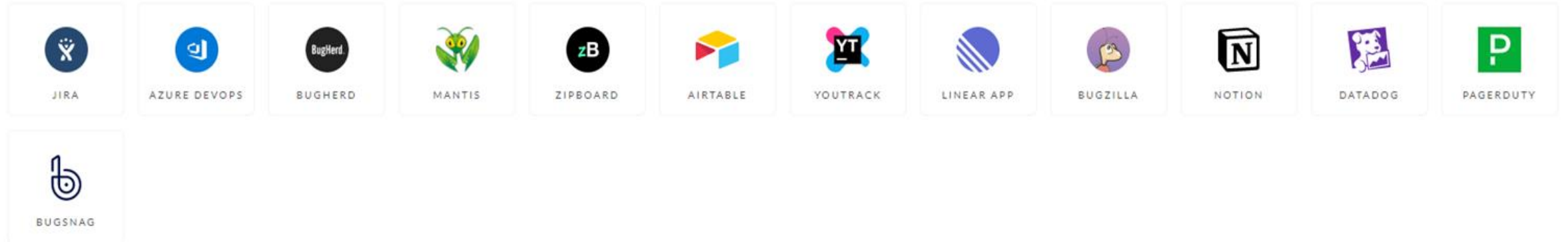
All

With Issues

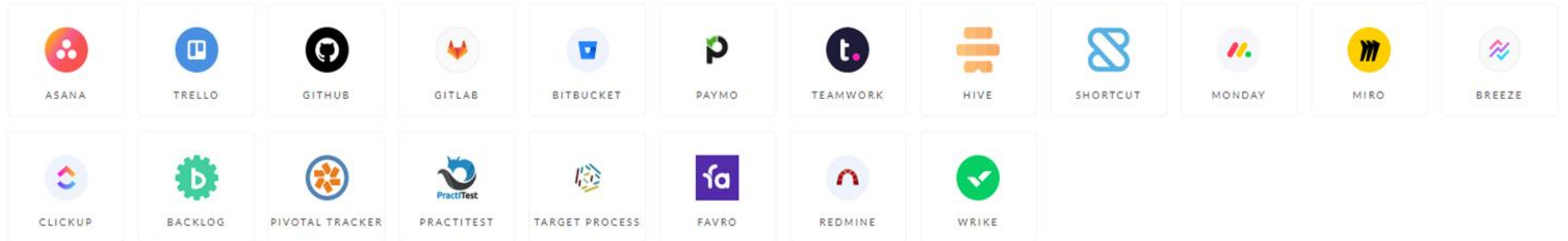


INTEGRATION TESTING

BUG TRACKER



PROJECT MANAGEMENT

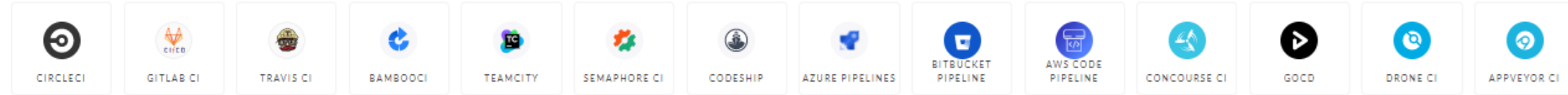


COMMUNICATION



INTEGRATION TESTING

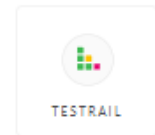
CI/CD TOOLS



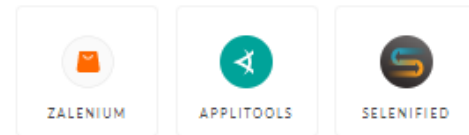
CODELESS AUTOMATION TOOLS



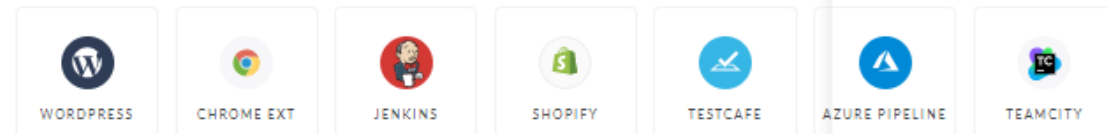
TEST REPORTING TOOLS



3RD PARTY TOOLS



PLUGINS AND EXTENSIONS



Pros and Cons

Pros

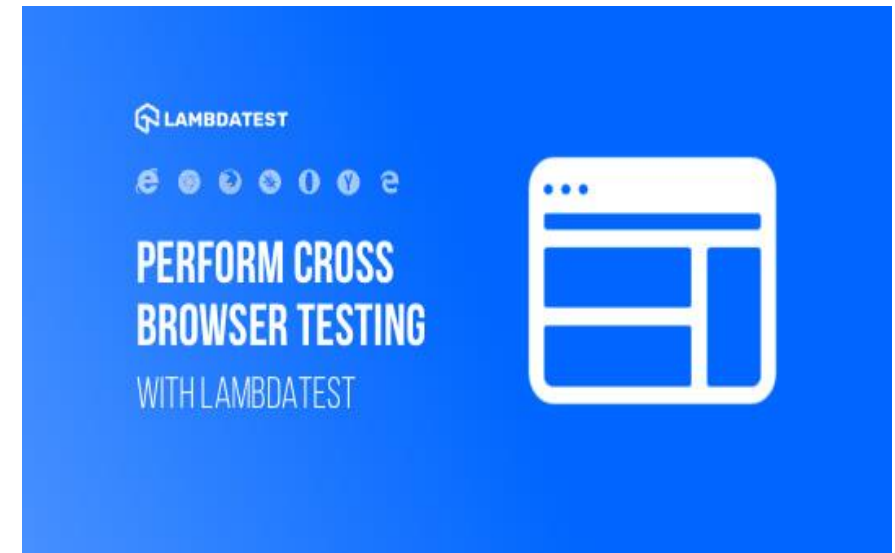
- Easy to use
- No additional installation is needed since it is a cloud-based cross browser testing platform
- Secure
- Reliable

Cons

- Not available for free
- No native app testing
- No real device (only emulators)

Conclusion

- ❑ It's not just about infrastructure, you get a whole range of complimentary features that will make your cross browser testing experience smoother and help you ship products faster.
- ❑ Also it is trusted By 500,000+ Users.
- ❑ With Lambda Test you can choose from a wide range of Windows and Mac operating systems, along with all legacy and latest browsers.





LAMBDATEST
CROSS BROWSER TESTING CLOUD

Thank You