

**INSTITUTO TECNOLÓGICO Y DE ESTUDIOS SUPERIORES  
DE MONTERREY  
DEPARTAMENTO DE COMPUTACIÓN**



**TEST PLAN  
POR  
PROJECTO FINAL**

**GRUPO 5:**

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**DESARROLLO DE APLICACIONES WEB**

**TC-2026**

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## **Introduction**

The application implemented for the customer “Barber TEC” allows the barber shop owner to manage the appointments requested in the site, it shows the client information such as Name, phone number, email and date and time desired for the appointment.

With this information the barber can contact the client in case of a reschedule or confirm the request, also the application allows to add an appointment manually or delete one if necessary.

This test approach document describes the appropriate processes used to execute and manage the testing of our final project, the Barber TEC Webpage.

## **Purpose**

The purpose of this document is to identify all aspects that are needed to measure, also to collect the data required and the results for the test that were done to verify the functionality of the application.

## **Scope**

This document details the testing that the project team will perform for the final project. It defines the overall testing requirements and provides an integrated view of the project test activities. The document will define:

- What will be tested;
- How testing will be performed;
- What resources are needed, and when

### **In Scope**

The Barber TEC Webpage Test Plan defines the unit, integration, system, regression, and Client Acceptance testing approach. The test scope includes the following:

- Testing of all functional, application performance, security, and use cases requirements listed in the Use Case document.
- Quality requirements and fit metrics Barber TEC Webpage.
- End-to-end testing and testing of all systems interfaces that interact with the Barber TEC Webpage.

### **Out of scope**

The following are considered out of scope for Barber TEC Webpage system Test Plan and testing scope:

- Functional requirements testing for systems outside Barber TEC Webpage
- Testing of Business SOPs, disaster recovery, and Business Continuity Plan.
-

## Test Plan

The Test Plan is derived from the Test Approach, Requirements, Functional Specs, and detailed Design Specs. The Test Plan identifies the details of the test approach, identifying the associated test case areas within the specific product for this release cycle.

The purpose of the Test Plan document is to:

- Specify the approach that Testing will use to test the product and the deliverables.
- Break the product down into distinct areas and identify features of the product that are to be tested.
- Specify the procedures to be used for testing sign-off and product release.
- Indicate the tools used to test the product.
- Identify limitations and compatibilities, responsive page.

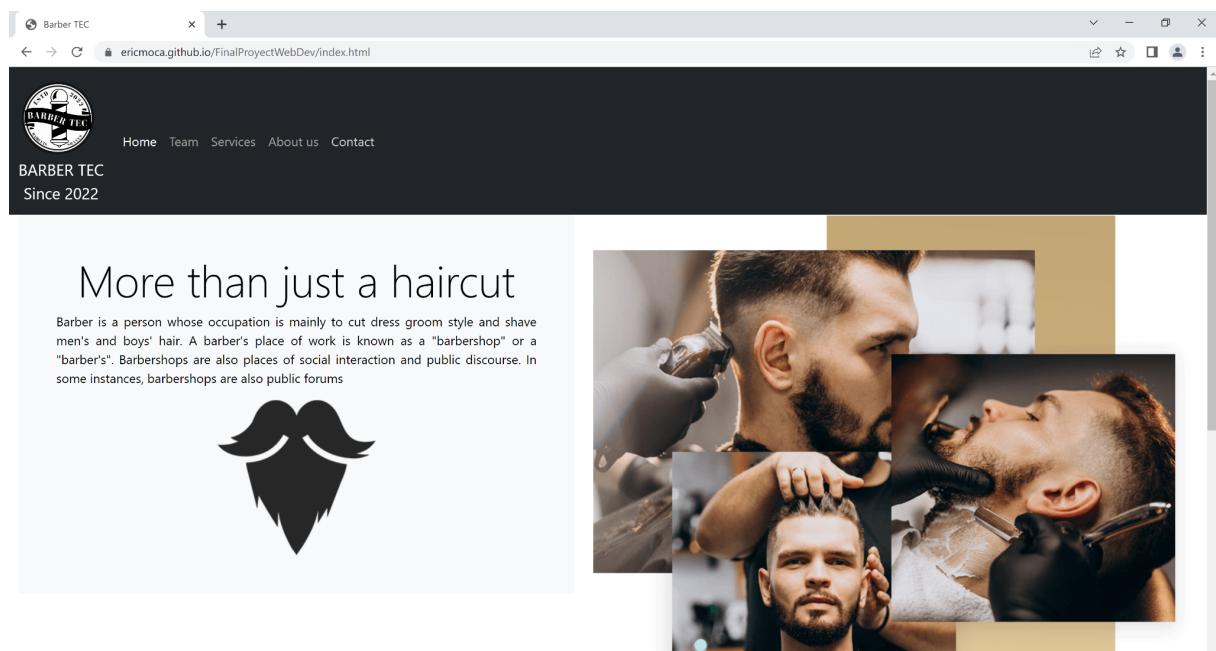
## Testing Types

### GUI Testing

Test Objective:	Homepage Barber TEC
Technique:	HTTP Request
Completion Criteria:	Zoom at 100%
Special Considerations:	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/> or <https://barbertec.herokuapp.com/index.html>

Output:



The screenshot shows a web browser displaying the homepage of Barber TEC. The URL in the address bar is [ericmoca.github.io/FinalProjectWebDev/index.html](https://ericmoca.github.io/FinalProjectWebDev/index.html). The page has a dark header with the Barber TEC logo, a navigation menu (Home, Team, Services, About us, Contact), and a "BARBER TEC Since 2022" tagline. Below the header, there's a section with the text "More than just a haircut" and a paragraph about the history of barbershops. To the right of this text is a collage of four images showing different grooming services: a man getting a haircut, a man getting a shave, a man's face being shaved, and a man's hair being styled.

The screenshot shows a web browser window with the title 'Barber TEC' and the URL 'ericmoca.github.io/FinalProjectWebDev/index.html'. The page has a dark header with the logo 'BARBER TEC Since 2022', a navigation menu with links 'Home', 'Team', 'Services', 'About us', and 'Contact', and a main content area featuring a large image of a man's face and shoulders. Below the image is the text 'To know more about our team' and a black button labeled 'Click Here'. At the bottom of the page is a dark footer bar with the copyright notice '© 2022 Copyright: BARBER TEC'.

Test Objective:	Press Button "Click Here" on View "Home"
Technique:	
Completion Criteria:	Zoom at 100%
Special Considerations:	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/> or <https://barbertec.herokuapp.com/index.html>

Output:

The screenshot shows a web browser window with the title 'Barber TEC' and the URL 'ericmoca.github.io/FinalProjectWebDev/team.html'. The page has a dark header with the logo 'BARBER TEC Since 2022', a navigation menu with links 'Home', 'Team', 'Services', 'About us', and 'Contact', and a main content area titled 'Our Barbers' containing three portrait photos of men with different styles of beards and mustaches. Below the photos is a quote: "'The difference between a good service and a perfect service is in the barber who attends you.'".

<b>Test Objective:</b>	Team Page Barber TEC
<b>Technique:</b>	HTTP Request
<b>Completion Criteria:</b>	Zoom at 100%
<b>Special Considerations:</b>	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/team.html>

Output:

The screenshot shows a web browser displaying the 'Team' page of the Barber TEC website. The header includes the Barber TEC logo, navigation links for Home, Team, Services, About us, and Contact, and the text 'BARBER TEC Since 2022'. Below the header, a section titled 'Our Barbers' contains a quote: "The difference between a good service and a perfect service is in the barber who attends you." Three portrait photos of barbers are displayed in a row.

The screenshot shows the same website as above, but with more detailed content for each barber. The profiles for Gabriel, Victor, and Axel are shown in separate boxes, each with a photo, name, bio, and job title. The bio for Gabriel mentions his knowledge of trends and ability to offer alternative haircuts. The bio for Victor highlights his friendliness and enjoyment of conversation. The bio for Axel emphasizes his versatility and pride in his work.

<b>Test Objective:</b>	Service Page Barber TEC
<b>Technique:</b>	HTTP Request
<b>Completion Criteria:</b>	Zoom at 80%
<b>Special Considerations:</b>	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/services.html>

Output:

The screenshot shows a web browser window for 'Barber TEC' with the URL 'ercmcoca.github.io/FinalProjectWebDev/services.html'. The page has a dark header with the logo 'BARBER TEC Since 2022'. Below the header is a section titled 'Our Services' containing three cards:

- Haircut**: Icons of scissors and a comb. Price table:
 

Adult	\$ 350 MXN
Student	\$ 300 MXN
Youth	\$ 250 MXN
Children	\$ 200 MXN
- Beard**: Icon of a mustache and a straight razor. Price table:
 

Adult	\$ 250 MXN
Student	\$ 200 MXN
- Haircut and Beard**: Icon of a person's head with a beard. Price table:
 

Adult	\$ 550 MXN
Student	\$ 450 MXN

The screenshot shows a web browser window for 'Barber TEC' with the URL 'ercmcoca.github.io/FinalProjectWebDev/services.html'. The page has a dark header with the logo 'BARBER TEC Since 2022'. Below the header is a section containing three cards:

- Mustache**: Icon of a mustache and a straight razor. Price table:
 

Adult	\$ 200 MXN
Student	\$ 150 MXN
- Shave**: Icon of a straight razor. Price table:
 

Adult	\$ 150 MXN
Student	\$ 100 MXN
- Hair Wash**: Icon of a person getting a hair wash. Price table:
 

Adult	\$ 150 MXN
Student	\$ 125 MXN
Youth	\$ 100 MXN
Children	\$ 75 MXN

Test Objective:	About Us Page Barber TEC
Technique:	HTTP Request
Completion Criteria:	Zoom at 100%
Special Considerations:	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/aboutus.html>

Output:

Test Objective:	Press Button "Team" on View "About us"
Technique:	
Completion Criteria:	Zoom at 100%
Special Considerations:	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/aboutus.html>

Output:

<b>Test Objective:</b>	Contact Page Barber TEC
<b>Technique:</b>	HTTP Request
<b>Completion Criteria:</b>	Zoom at 90%
<b>Special Considerations:</b>	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/contact.html>

Output:

The screenshot shows a web browser window with the URL <https://ercmc.github.io/FinalProjectWebDev/contact.html>. The page has a dark header with the Barber TEC logo, navigation links (Home, Team, Services, About us, Contact), and a "BARBER TEC Since 2022" banner. Below the header is a large map of Monterrey, Mexico, with various landmarks and streets labeled. To the right of the map is a section titled "Where to find Barber TEC and how to contact us". It includes a table for "Barber TEC" with address and phone number, and a "SERVICE HOURS" table for the week.

DAY	SERVICE HOURS
MONDAY	CLOSED
TUESDAY	10AM – 8PM
WEDNESDAY	10AM – 8PM
THURSDAY	10AM – 9PM
FRIDAY	10AM – 9PM
SATURDAY	10AM – 9PM
SUNDAY	12PM – 6PM

The screenshot shows a web browser window with the same URL as the previous screenshot. The page layout is identical, featuring the Barber TEC header, navigation, and banner. Below the map, there is a new section titled "Schedule your appointment". This section contains a form with fields for "Nombre Completo" (John Doe), "Numero Telefónico" (123456789), "Correo Electrónico" (test@barbertec.mx), "Día de la Cita" (06.06.2022), "Hora de la Cita" (22:00), and a "Enviar" button.

Test Objective:	Zoom (1x Click on Plus) in Google Maps “Contact” view
Technique:	
Completion Criteria:	Zoom at 90%
Special Considerations:	Google Chrome Browser

Input: <https://barbertec.herokuapp.com/contact.html>

Output:

The screenshot shows the Barber TEC website. At the top left is the Barber TEC logo. Below it is a navigation bar with links: Home, Team, Services, About us, and Contact. A banner below the navigation bar reads "Where to find Barber TEC and how to contact us". To the left is a map of the campus area, labeled "Instituto Tecnológico y de Estudios Superiores..." and showing various buildings like Rectoría, Aulas 2, 3, 6, 7, Gimnasio.Tec, Auditorio Luis Elizor del Tecnológico, and Centro Deportivo Borregos. To the right of the map is contact information for Barber TEC, including address (Av. Eugenio Garza Sada 2501 Sur Col. Tecnológico), phone number (81 1234 5678), email (barbertec@info.mx), and service hours (Monday: Closed, Tuesday-Friday: 10AM-9PM). Below the contact info is a table of service hours.

DAY	SERVICE HOURS
MONDAY	CLOSED
TUESDAY	10AM – 8PM
WEDNESDAY	10AM – 8PM
THURSDAY	10AM – 9PM
FRIDAY	10AM – 9PM

## Functional Testing

Test Objective:	Add Contact Form on Database
Technique:	HTTP Post
Completion Criteria:	
Special Considerations:	Google Chrome Browser

Input: Send filled out Contact Form on <https://barbertec.herokuapp.com/contact.html>

The screenshot shows the Barber TEC website with the "Schedule your appointment" form. The form has fields for "Agenda una cita": Nombre Completo (Rony Collao), Correo Electronico (et12coro@gmail.com), Numero Telefónico (1234567890), and Fecha de la Cita (06.06.2022). There are also fields for "Hora de la Cita" (17:00) and a "Enviar" button.

Output Webpage:



BARBER TEC  
Since 2022

Home Team Services About us Contact

**Request an appointment**

**Your Submission has been successfully sent**  
Wait until our team members contact you.

Output API: Open the API over this link and look for your sent request in the table  
<https://admin4barbertec.herokuapp.com/>

## Node.js MySQL CRUD Application

Sample Data						Add
Full name	phone	email	date	time	Action	
John Doe	123456789	test@barbertec.mx	2022-06-06	17:00	<button>Delete</button>	

Test Objective:	Add Contact Form without Name
Technique:	HTTP Post
Completion Criteria:	
Special Considerations:	Google Chrome Browser

Input: Send filled out Contact Form on <https://barbertec.herokuapp.com/contact.html>

Output Webpage:



BARBER TEC  
Since 2022

Home Team Services About us Contact

**Request an appointment**

Complete Name

e-mail  Please fill in this field.

Telephone Number (10 Digits)

Appointment Day  dd/mm/yyyy

Appointment Hour  --:--

Test Objective:	Add Contact Form with invalid Phone number
Technique:	HTTP Post
Completion Criteria:	
Special Considerations:	Google Chrome Browser

Input: Send filled out Contact Form on <https://barbertec.herokuapp.com/contact.html>

Output Webpage:

Only Numbers are possible to type in.

Test Objective:	Add Contact Form with invalid Time
Technique:	HTTP Post
Completion Criteria:	
Special Considerations:	

Input: Send filled out Contact Form on <https://barbertec.herokuapp.com/contact.html>

Output Webpage:

The screenshot shows a contact form with the following fields:  
Complete Name: Test  
Telephone Number (10 Digits): 123456789  
e-mail: test@tec.mx  
Appointment Day: 10/06/2022  
Appointment Hour: 22:00  
Send Request

Test Objective:	Add Contact Form with invalid E-Mail Adress
Technique:	HTTP Post
Completion Criteria:	
Special Considerations:	

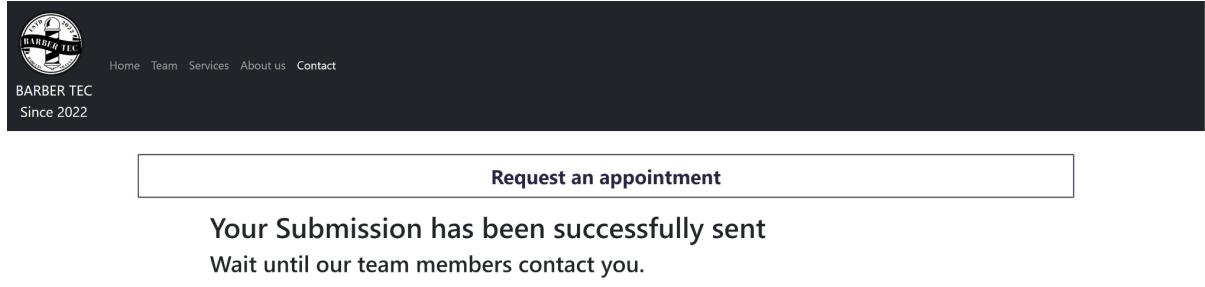
Input: Send filled out Contact Form on <https://barbertec.herokuapp.com/contact.html>

Output Webpage:

The screenshot shows a contact form with the following fields:  
Complete Name: Test  
Telephone Number (10 Digits): 123456789  
e-mail: testtec.mx  
Appointment Day: 10/06/2022  
Appointment Hour: 22:00  
Send Request

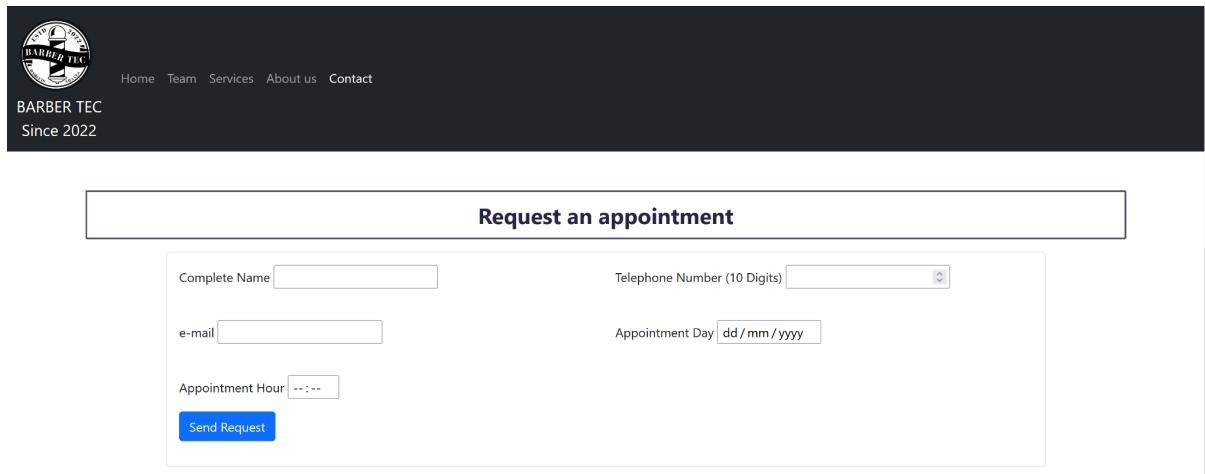
Test Objective:	Refresh Contact Form after sent Post
Technique:	HTTP Request
Completion Criteria:	Complete Submission of a Form
Special Considerations:	Reload Webpage

Input: Open the link <https://barbertec.herokuapp.com/contact.html>



The screenshot shows a dark-themed website for 'BARBER TEC'. At the top left is a circular logo with a stylized 'B' and 'T' inside. To its right are navigation links: Home, Team, Services, About us, and Contact. Below the navigation, it says 'BARBER TEC' and 'Since 2022'. In the center, there's a large button labeled 'Request an appointment'. Below the button, a success message reads: 'Your Submission has been successfully sent' and 'Wait until our team members contact you.'

Output:



The screenshot shows the same dark-themed website for 'BARBER TEC'. The navigation bar and 'Since 2022' text are visible at the top. Below the navigation, there's a large 'Request an appointment' button. Underneath the button is a form with fields for 'Complete Name' (with an input field), 'e-mail' (with an input field), 'Telephone Number (10 Digits)' (with an input field and a small info icon), 'Appointment Day' (with an input field for 'dd/mm/yyyy'), and 'Appointment Hour' (with a dropdown menu showing '-- : --'). A blue 'Send Request' button is located at the bottom left of the form.

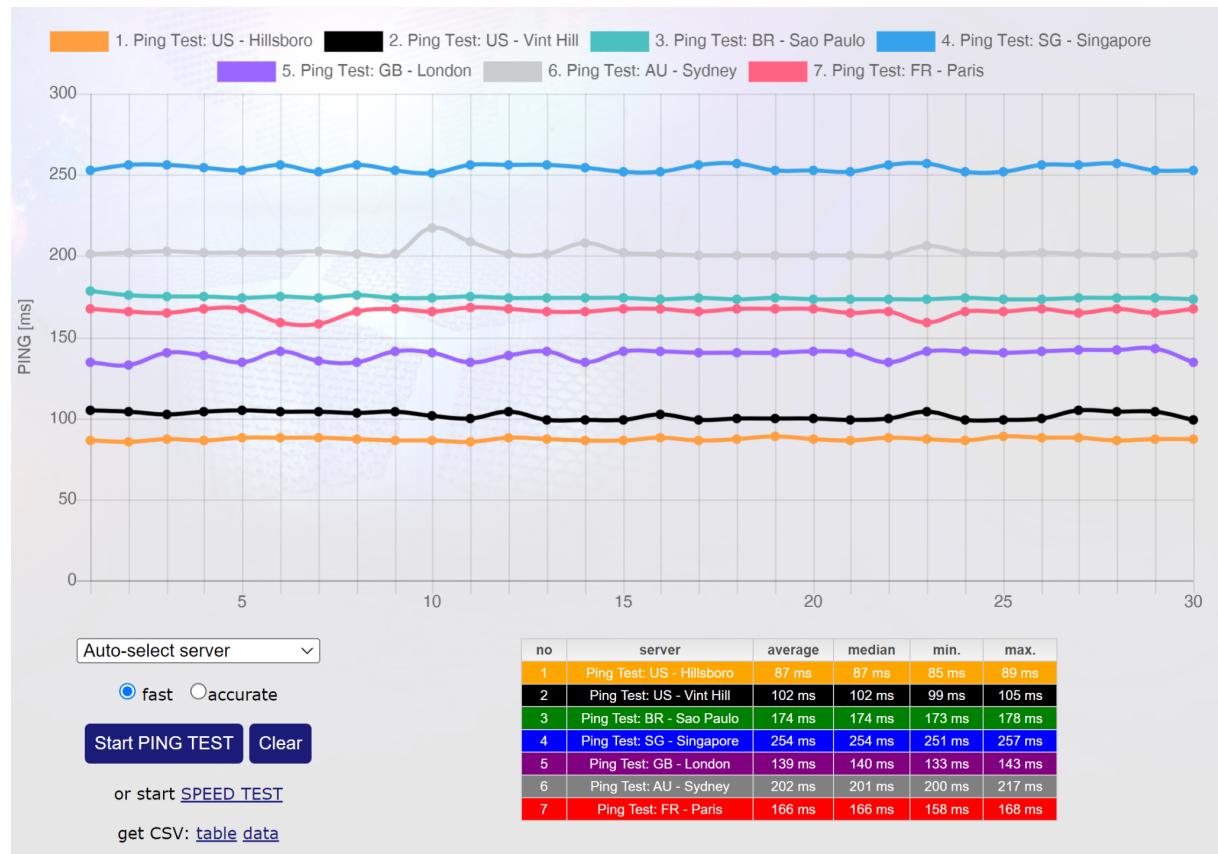
## Performance Testing

Performance Profiling:

Test Objective:	Ping Test
Technique:	HTTP Request
Completion Criteria:	Internet Connection available
Special Considerations:	Click Ping test Button

Input: <http://ping-test.net/>

Output:

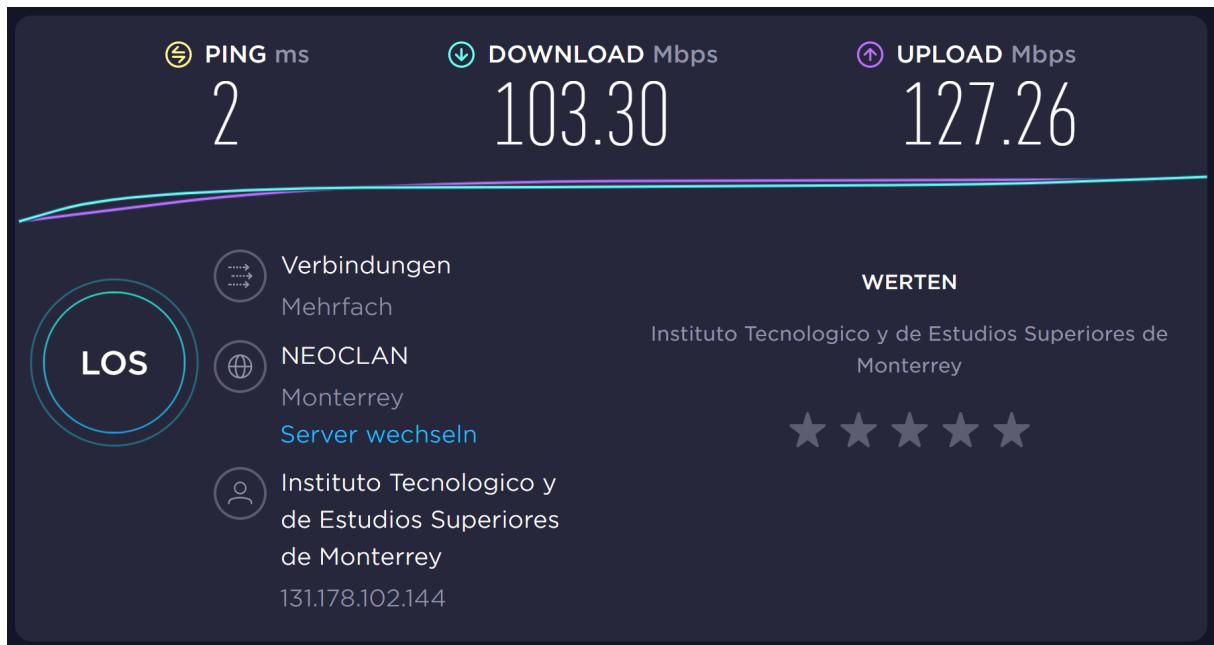


Load Testing:

Test Objective:	Speed Test
Technique:	HTTP Request
Completion Criteria:	Internet Connection available
Special Considerations:	Click Go Button

Input: <https://www.speedtest.net>

Output:



## Browser Testing

Test Objective:	Google Chrome
Technique:	HTTP Request
Completion Criteria:	Every test of the GUI testing
Special Considerations:	Zoom at 100%

Works perfectly.

Test Objective:	Safari
Technique:	HTTP Request
Completion Criteria:	Every test of the GUI testing
Special Considerations:	Zoom at 100%

The form in the contact view doesn't work properly. The condition for only allowing numeric input doesn't work, it's also possible to enter letters.

Test Objective:	Firefox
Technique:	HTTP Request
Completion Criteria:	Every test of the GUI testing
Special Considerations:	Zoom at 100%

Same problem as with the Safari browser.

Test Objective:	Google Chrome on Smartphone
Technique:	HTTP Request
Completion Criteria:	Every test of the GUI testing
Special Considerations:	Zoom at 100%

Works perfectly.

Additional Concerns:

We didn't put a condition for selecting past days, time or already token requests with the same Date and Time in concern. This must be fixed if we had it set as a requirement and for the actual use of the homepage.

## Environmental Needs

### Hardware

Include the minimum hardware requirements that will be used to test the Application.

Testing will have access control to one or more application/database servers separate from any used by non-test members of the project team. Testing will also have access control to an adequate number of variously configured PC workstations to assure testing a range from the minimum to the recommended client hardware configurations listed in the project's Requirements, Functional Specification, and Design Specification documents.

Machine	Configuration
Server	Heroku JawsDB MySQL
Client	none

### Software

In addition to the application and any other customer-specified software, the following list of software should be considered a minimum:

- Windows 10 or iOS 14.
- MySQL Workbench 8.0.20
- Nod.js 16.6.1
- npm 8.8.027
- Visual Studio Code 1.67.2

Machine	OS	Browser	Software Required for testing
Server	Heroku	JawsDB MySQL	API Database Barber TEC
Client	Windows/ iOS	Google Chrome/ Safari	Barber TEC Webpage

## Severity List

Severity ID	Severity	Severity Description
1	Critical	The module/product crashes or the bug causes non-recoverable conditions. System crashes, GP Faults, database or file corruption, potential data loss, and the program hangs requiring reboot are all examples of a Sev. 1 bug.
2	High	Major system components unusable due to failure or incorrect functionality. Sev. 2 bugs cause serious problems such as a lack of functionality, or insufficient or unclear error messages that can have a major impact on the user, prevents other areas of the app from being tested, etc. Sev. 2 bugs can have a workaround, but the workaround is inconvenient or difficult.
3	Medium	Incorrect functionality of component or process. There is a simple workaround for the bug if it is Sev. 3.
4	Minor	Documentation errors or signed off severity 3 bugs.

## Priority List

Priority	Priority Level	Priority Description
5	Must Fix	This bug must be fixed immediately; the product cannot ship with this bug.
4	Should Fix	This bug must be fixed immediately; the product cannot ship with this bug.
3	Fix When Have Time	The problem should be fixed within the time available. If the bug does not delay the shipping date, then fix it.
2	Low Priority	It is not important (at this time) that these bugs be addressed. Fix these bugs after all other bugs have been fixed.
1	Trivial	Enhancements/ Good to have features incorporated- just are out of the current scope.

## Conclusion

This document contains the test plan of the Barber TEC web page, here it shows the testing of all the views designed for the web page, as the tests to validate their functionality with the connection to the database when receiving information from a customer to make a request for an appointment.