eProject: Aura Watches

Aura Watches User Guide

Supervisor.		
Batch.		
Group.	1	
Serial No.	Enrollment Number	Student Name
1.		
2.		
3.		
4.		

USER GUIDE

1. Welcome (<u>0. Welcome.html</u>)

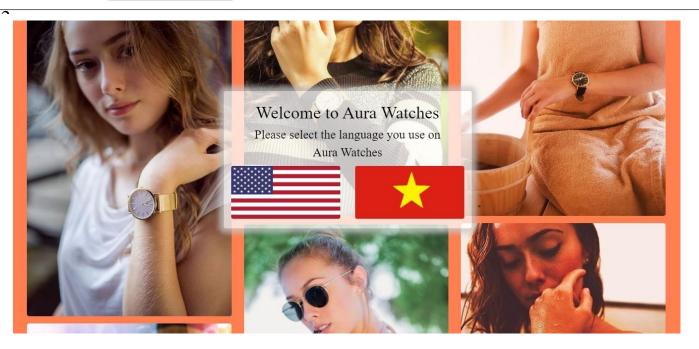


Figure 1: Welcome Page To Aura Watches

Used to select the language displayed on the website:

- ♣ When the user selects the American flag icon, the link to the Web page displays the English language.
- ♣ When the user selects the Vietnamese flag icon, the link to the Web page displays the Vietnamese language.

2. Layout Top



Figure 2: Upper Frame Interface

2.1.1 Language Section

When clicking the **Language** button, the system will lead to the page to select the language. (*O.Welcome.html*)

2.1.2 Login Section

When you click the **Sign In** button, the system will display the login window.

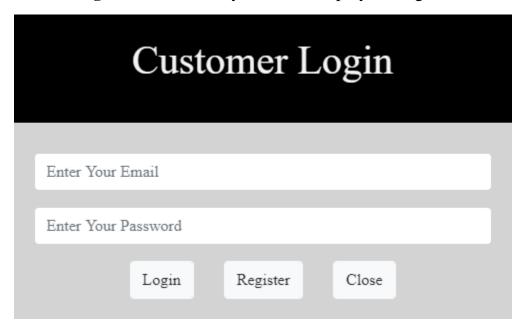


Figure 3: Login Window

Email:

- ✓ Start with a letter or number.
- ✓ End with a letter and number.
- ✓ Dots, hyphens, and underscores are allowed for email names but must comply with the following requirements:
 - Do not use in the start and end position.
 - Its previous and next position must be a alphanumeric character.
- ✓ The position immediately after the @ character can be a sequence of alphabetic characters or alphanumeric characters followed by one or more phrases that start with a dot and followed by a string of up to 4 letter characters.

Password:

- ✓ Start with a letter or number.
- ✓ End with a letter and number.
- ✓ Limited to 10 to 20 alphanumeric characters.

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When clicking the **Login** button, the system will check the data in the fields in turn and the error message dialog box will appear if an error is detected.

❖ You have entered the wrong email

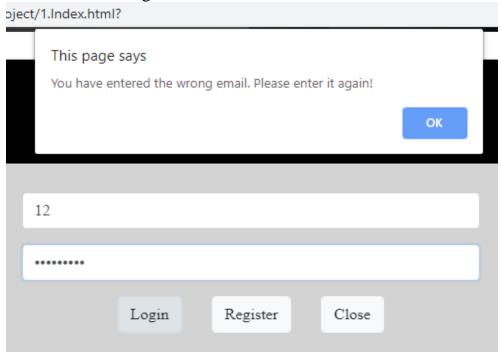


Figure 4: You Have Entered The Wrong Email

❖ You have entered the wrong password

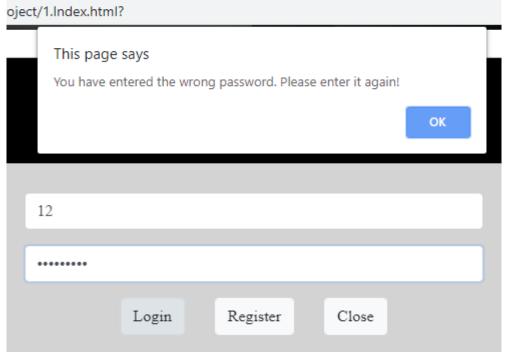


Figure 5:You Have Entered The Wrong Password

When the information in each case is valid, clicking the **Login** button will display a message confirming the information entered.

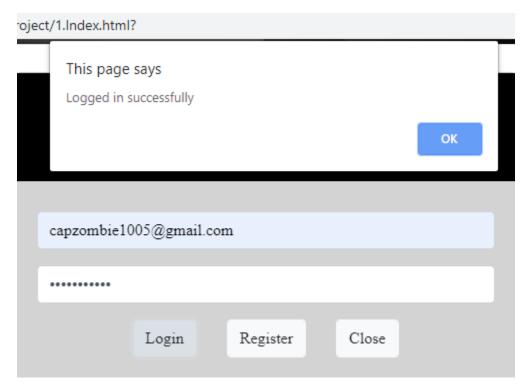


Figure 6: Logged In Successfully

When the **Register** button is clicked, the **Register** page interface is displayed (see description on the **Register** page).

When you click the **Close** button, the **Customer Login** window will close.

2.2 Menu Bar



Figure 7: Menu Bar

Used to load the remaining pages. The following is a list of those pages:

- **♣** Home Page (1.Index.html)
- ♣ Products Page (2.Products.html)
 - ❖ Product Line-Up 1: Quazts Clock (2.Products.html)
 - Quazts Clock 1 (Product-Q-1.html)
 - Quazts Clock 2 (<u>Product-Q-2.html</u>)
 - Quazts Clock 3 (<u>Product-Q-3.html</u>)

- Quazts Clock 4 (<u>Product-Q-4.html</u>)
- ❖ Product Line-Up 2: Eco-Drive Clock (2.Products.html)
 - Eco-Drive Clock 1 (<u>Product-W-1.html</u>)
 - Eco-Drive Clock 2 (<u>Product-W-2.html</u>)
 - Eco-Drive Clock 3 (Product-W-3.html)
 - Eco-Drive Clock 4 (Product-W-4.html)
- ❖ Product Line-Up 3: Automatic Clock (2.Products.html)
 - Automatic Clock 1 (Product-A-1.html)
 - Automatic Clock 2 (Product-A-2.html)
 - Automatic Clock 3 (Product-A-3.html)
 - Automatic Clock 4 (Product-A-4.html)
- **♣** Store Locator Page (4.Support.html)
- ♣ Register Page (5.Register.html)

Drop-down menu bar: The product tab of the **Menu** can be removed and contains submenus that lead to subpages. You can access these pages (main page or subpage) by clicking on its tab.



Figure 8: Dropdown Menu Products

3. Layout Bottom

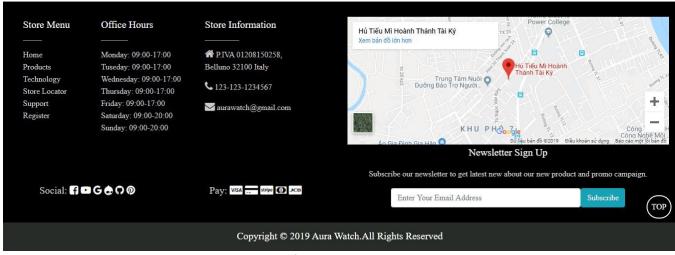


Figure 9: Layout Bottom

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Display information such as menu, operating time, store information, store location on Google Map, social networks, payment methods, support data input bar and send data button. The **Top** button is used to push to the top of the page when clicking.

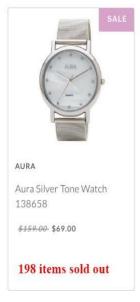
4. Home Page (1.Index.html))



Top Best Items Sold Out This Month









Happy Black Friday

Sale up to 75%



Aura Watch-K19

- Round watch in silver and yellow gold-tone finish featuring row of sparking crystals at bezel and silvery sunray dial
- Five-link stainless steel bracelet with fold-over clasp and double push-button safety
- 33 mm stainless steel case with mineral dial window
- Water resistant to 50 m (165 ft): In general, suitable for short periods of recreational swimming, but not diving or snorkeling



Aura Watch-K34

- Classic Business Casual Watch Design: business casual dress code design with Simple Time Mark, fine art plating case, elegant stainless Steel band stran
- Stainless steel watch:Stainless steel water proof case cover make it super durable,Stainless steel push button clasp make it easy to put on or take off
- Water Resistant To 50m (165ft: in General, Suitable for Short Periods Of Recreational Swimming, but not Diving or Snorkeling



Aura Watch-K25

- The dial includes applied indices, and custom molded hands.
- 37mm, 100 meter / 10 ATM, custom handmade acetate case, fixed handmade acetate bezel, hardened mineral crystal, triple gasket stainless steel crown, stainless steel screw down caseback and spring pin lugs.
- 20mm custom handmade acetate 3 link bracelet with stainless steel double locking clasp with micro adjust.

Autumn Collection



This Aura ladies gold-tone stainless steel dress watch featuring a metal strap, round gold-tone stainless steel case, round white dial with 3D raised flower centre and gold dots. Water resistant means this watch is splash-proof.



 $Be \ \ bold \ with this Aura \ black \ dress \ watch$ features a round black dial with a floral/leaf pattern centre with rose tone batons.



Bold and beautiful this stunning Aura gold tone stainless steel dress watch features a round white textured and patterned dial with an elegant metal band. A perfect watch for any occasion.

Do you like Manual Winding or Automatic Winding



New Shop in Diamond Time Let visit us



Figure 10: Home Page

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The interface of the Home page is shown as Figure: Product Page.

Top The Items Sold Out This Month: Shows the best-selling products for the month. When the user clicks on the product in this section, the product description page is displayed.

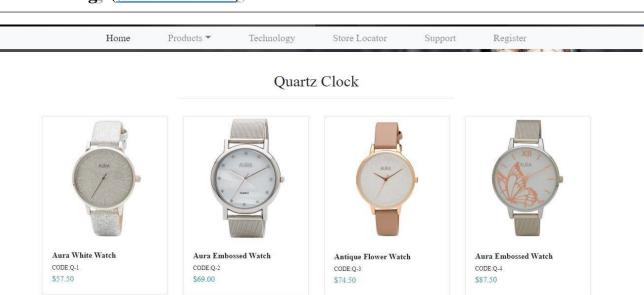
Happy Black Friday: Show products being discounted, product information. However, the items in this section must be booked in advance.

Autumn Collection: Display products in the fall collection.

Do You Like Manual Winding Or Automatic Winding: When the user clicks on the image in this section, the technology page will appear (see details on the Technology page).

New Shop In Diamond Time: When the user clicks on the image in this section, the support page will appear (see details in the Support page).

5. Products Page (2. Products.html)



Eco-Drive Clock









Automatic Clock











Figure 11: Products Page

The interface of the **Products** page is shown as *Figure: Products Page*, when the user clicks on the product, the product details page will appear.

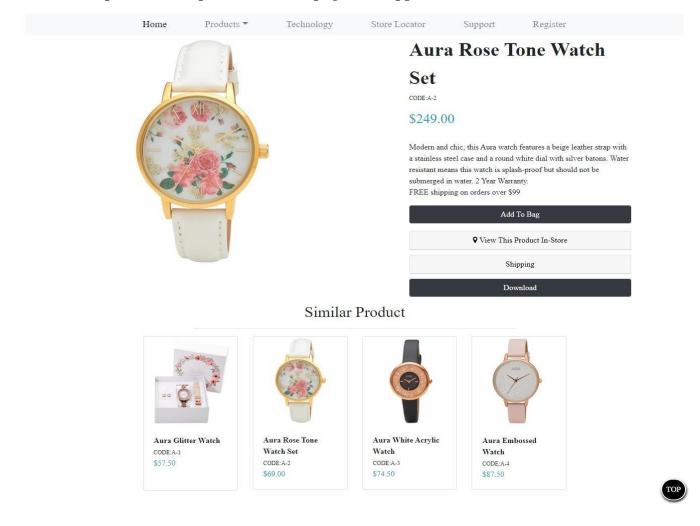


Figure 12: Product Line-Up

But the page details product lines:

- ❖ Product Line-Up 1: Quazts Clock (2.Products.html)
 - Quazts Clock 1 (<u>Product-Q-1.html</u>)
 - Quazts Clock 2 (Product-Q-2.html)
 - Quazts Clock 3 (Product-Q-3.html)
 - Quazts Clock 4 (Product-Q-4.html)
- ❖ Product Line-Up 2: Eco-Drive Clock (2.Products.html)
 - Eco-Drive Clock 1 (Product-W-1.html)
 - Eco-Drive Clock 2 (Product-W-2.html)
 - Eco-Drive Clock 3 (Product-W-3.html)
 - Eco-Drive Clock 4 (Product-W-4.html)
- ❖ Product Line-Up 3: Automatic Clock (2.Products.html)
 - Automatic Clock 1 (Product-A-1.html)
 - Automatic Clock 2 (Product-A-2.html)
 - Automatic Clock 3 (Product-A-3.html)
 - Automatic Clock 4 (Product-A-4.html)

Add To Bag

Figure 13: Add To Bag

When the user clicks the **View This Product In-Store** button, a container will be dropped as shown in *Figure: View This Product In-Store*

View This Product In-Store		
To arrange to view this product in-store, please fill out the form below. A Hoskings team member will be in touch within 1 day to confirm when the item will be ready to view.		
First Name*		
Last Name*		
Email*		
Phone*		
Additional Information		
Sutmit		

Figure 14: View This Product In-Store

First Name

- ✓ Do not leave blank.
- ✓ Do not include numbers, punctuation, hyphens, or any other special characters.
- ✓ Limited to 5 to 10 letter characters.

Last Name

- ✓ Do not leave blank.
- ✓ Do not include numbers, punctuation, hyphens, or any other special characters.
- ✓ Limited to 5 to 10 letter characters.

Email:

- ✓ Start with a letter or number.
- ✓ End with a letter and number.
- ✓ Dots, hyphens, and underscores are allowed for email names but must comply with the following requirements:
 - Do not use in the start and end position.
 - Its previous and next position must be a alphanumeric character.
- ✓ The position immediately after the @ character can be a sequence of alphabetic characters or alphanumeric characters followed by one or more phrases that start with a dot and followed by a string of up to 4 letter characters.

Phone:

- ✓ Do not leave blank.
- ✓ Do not include numbers, punctuation, hyphens, or any other special characters.
- ✓ Limited to 10 to 12 numeric characters.

Additional Information

- ✓ Can enter any character.
- ✓ Limit 1000 characters.

When clicking the **Submit** button, the system will check the data in the fields in turn and the error message dialog box will appear if an error is detected.

Enter the wrong first name

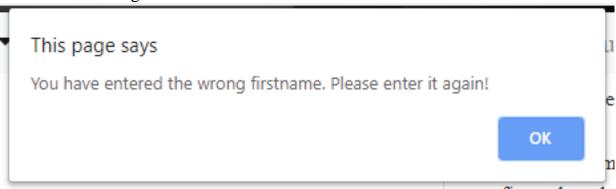


Figure 15: You Have Entered The Wrong First Name

Enter the wrong last name



Figure 16: You Have Entered The Wrong Last Name

❖ You have entered the wrong email



Figure 17: You Have Enter The Wrong Email

❖ You have entered the wrong phone structure

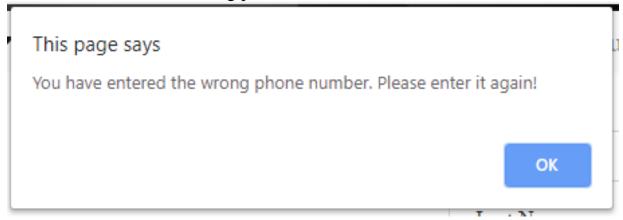


Figure 18: You Have Entered The Wrong Phone Number

When the information in each case is valid, clicking the **Add To Bag** button will display a message confirming the added information.



Figure 19: Submit Successful Information

When the user clicks the **Shipping** button, a container will be dropped as shown in *Figure: Shipping*. This box contains all necessary information about customers' orders, shipping forms, promotions, ...

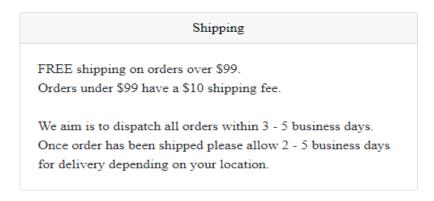


Figure 20: Shipping

When the user clicks the **Download** button (*Figure: Download*), a Word file containing information and price will automatically download to the user's computer as file.rar.

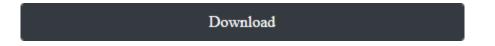


Figure 21: Download

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Technology

Store Locator

Support

Register

Atomic Clock



Introducing the Atomic clock

An atomic clock is a clock device that uses a hyperfine transition frequency in the microwave, or electron transition frequency in the optical, or ultraviolet region of the electromagnetic spectrum of atoms as a frequency standard for its timekeeping element. Atomic clocks are the most accurate time and frequency standards known, and are used as primary standards for international time distribution services, to control the wave frequency of television broadcasts, and in global navigation satellite systems such as GPS.

The principle of operation of an atomic clock is based on atomic physics; it measures the electromagnetic signal that electrons in atoms emit when they change energy levels. Early atomic clocks were based on masers at room temperature. Since 2004, more accurate atomic clocks first cool the atoms to near absolute zero temperature by slowing them with lasers and probing them in atomic fountains in a microwave-filled cavity. An example of this is the NIST-F1 atomic clock, one of the national primary time and frequency standards of the United States.

The accuracy of an atomic clock depends on two factors: the first is temperature of the sample atoms—colder atoms move much more slowly, allowing longer probe times, the second is the frequency and intrinsic linewidth of the electronic or hyperfine transition. Higher frequencies and narrow lines increase the precision.

National standards agencies in many countries maintain a network of atomic clocks which are intercompared and kept synchronized to an accuracy of 10–9 seconds per day (approximately 1 part in 1014). These clocks collectively define a continuous and stable time scale, the International Atomic Time (TAD). For civil time, another time scale is disseminated, Coordinated Universal Time (UTC). UTC is derived from TAI, but has added leap seconds from UT1, to account for variations in the rotation of the Earth with respect to the solar time.



Quartz Clock



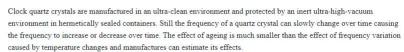
Introducing the Quartz Clock

A quartz clock is a clock that uses an electronic oscillator that is regulated by a quartz crystal to keep time. This crystal oscillator creates a signal with very precise frequency, so that quartz clocks are at least an order of magnitude more accurate than mechanical clocks. Generally, some form of digital logic counts the cycles of this signal and provides a numeric time display, usually in units of hours, minutes, and seconds.

The world's first quartz clock was built in 1927 by Warren Marrison and J. W. Horton at Bell Telephone Laboratories. The world's first quartz watch, however, was unveiled by Seiko as the Astron in December 1969. Since the 1980s, when the advent of solid-state digital electronics allowed them to be made compact and inexpensive, quartz timekeepers have become the world's most widely used timekeeping technology, used in most clocks and watches as well as computers and other appliances that keep time.



Quartz crystal ageing



Generally, the ageing effect eventually decreases the frequency. Factors that can cause a small frequency drift over time are stress relief in the mounting structure, loss of hermetic seal, contaminations contained in the crystal lattice, moisture absorption, changes in or on the quartz crystal, severe shock and vibrations effects, exposure to very high temperatures. Crystal aging tends to be logarithmic meaning the maximum rate of change of frequency occurs immediately after manufacture and decays thereafter.



Most of the aging will occur within the first year of the crystals service life. Crystals do eventually stop aging (asymptotically), but it can take many years. Movement manufacturers can pre-age crystals before assembling them into clock movements. To promote accelerated ageing the crystals are exposed to high temperatures.

If a crystal is pre-aged, the manufacturer can measure its ageing rates (strictly, the coefficients in the ageing formula) and have a microcontroller calculate out the corrections over time. The initial calibration of a movement will stay accurate longer if the crystals are pre-aged. The advantage would end after subsequent regulation which will, reset any cumulative aging error to zero. A reason more expensive movements tend to be more accurate is that the crystals are pre-aged longer and selected for better ageing performance. Sometimes individual crystals after pre-ageing are hand selected for high-accuracy movement performance.

The piezoelectric properties of quartz were discovered by Jacques and Pierre Curie in 1880. The first quartz crystal oscillator was built by Walter G. Cady in 1921. In 1923, D. W. Dye at the National Physical Laboratory in the UK and Warren Marrison at Bell Telephone Laboratories produced sequences of precision time signals with quartz oscillators. In 1927, the first quartz clock was built by Warren Marrison and J. W. Horton at Bell Telephone Laboratories.

The world's first prototype analog quartz wristwatches were revealed in 1967: the Beta 1 revealed by the Centre Electronique Horloger (CEH) in Neuchâtel Switzerland, and the prototype of the Astron revealed by Seiko in Japan (Seiko had been working on quartz clocks since 1958).

In December 1969, Seiko produced the world's first commercial quartz wristwatch, the Seiko-Quartz Astron 35SQ which is now honored with IEEE Milestone. [28] The Astron had a quartz oscillator with a frequency of 8192 Hz and was accurate to 0.2 seconds per day, 5 seconds per month, or 1 minute per year. The Astron was released less than a year prior to the introduction of the Swiss Beta 21, which was developed by 16 Swiss Watch manufacturers and used by Rolex, Patek and Omega in their electroquartz models. The inherent accuracy and low cost of production has resulted in the proliferation of quartz clocks and watches since that time. By the 1980s, quartz technology had taken over applications such as kitchen timers, alarm clocks, bank vault time locks, and time fuzes on munitions, from earlier mechanical balance wheel movements, an upheaval known in watchmaking as the quartz crisis.

Quartz timepieces have dominated the wristwatch and clock market since the 1980s. Because of the high Q factor and low t emperature coefficient of the quartz crystal, they are more accurate than the best mechanical timepieces, and the elimination of all moving parts makes them more rugged and eliminates the need for periodic maintenance.

Commercial analog and digital wall clocks became available in 2014 that utilize a double oven quartz oscillator, accurate to 0.2 ppb. These clocks are factory-synchronized with the atomic time standard and typically do not require any further time adjustments for the life of the clock.

The next 3 decades saw the development of quartz clocks as precision time standards in laboratory settings; the bulky delicate counting electronics, built with vacuum tubes, limited their use elsewhere. In 1932 a quartz clock was able to measure tiny variations in the rotation rate of the Earth over periods as short as a few weeks. In Japan in 1932, Issac Koga developed a crystal cut that gave an oscillation frequency with greatly reduced temperature dependence. The National Bureau of Standards (now NIST) based the time standard of the US on quartz clocks between the 1930s and the 1960s, after which it transitioned to atomic clocks. The wider use of quartz clock technology had to await the development of cheap semiconductor digital logic in the 1960s. The revised 14th edition of Encyclopaedia Britannica stated that quartz clocks would probably never be affordable enough to be used domestically.

Eco-Drive Clock



Introducing the Eco-Drive Clock

Eco-Drive watches are watches that operate on the energy derived from the light of any light source. The watch uses extremely sensitive panels on the dial that absorb light energy converted into electricity and a charging device. The battery is completely mercury-free, which is an environmentally friendly solution.

History Of Eco-Drive Watch Technology

By about 1970, battery-powered quartz watches dominated the Japanese watch market and became the most popular watch line today. And at the same time the energy crisis began, it was this same reason that Citizen started looking for an alternative energy source for watches.

In 1976, Citizen launched the Cryston Solar Cell watch, the first product to use light energy to operate, with a photovoltaic cell placed on the dial to store light energy into the battery.

In 1980, Citizen watch engineers successfully developed a light-powered watch that could store up to 200 hours of power. When the battery is fully charged, photovoltaic cells can use stored light to generate electricity.

In 1995, the watch called Eco-Drive was officially born, marking a golden milestone in the history of Citizen brand. Since then, the name and logo Eco-Drive are recognized worldwide

The Best Things Of An Eco-Drive Watch

- Break through with the use of light energy, helping users not to worry about running out of battery, running out of energy wherever you are (possibly in outer space).
- When the Eco-Drive is fully charged (the watch can be charged with any light source), the watch can work for 6 months or even 5 years (some models) if not exposed to sunlight. shining.
- The Eco-Drive movement is light and thin, with a thickness of just 4.2mm. This is the foundation for elegant and sophisticated design.
- Eco-Drive Citizen watches have never been blurred between thousands of models today and can hardly be outdated.



Figure 22: Layout Technology

When the user clicks **Technology** on the **Menu bar**, the interface of **Technology** page will appear as *Figure: Technology Page Interface*

Technology page includes 3 parts: **Quartz Clock, Eco-Drive Clock, Automatic Clock**. Each section gives a brief overview of the watches.

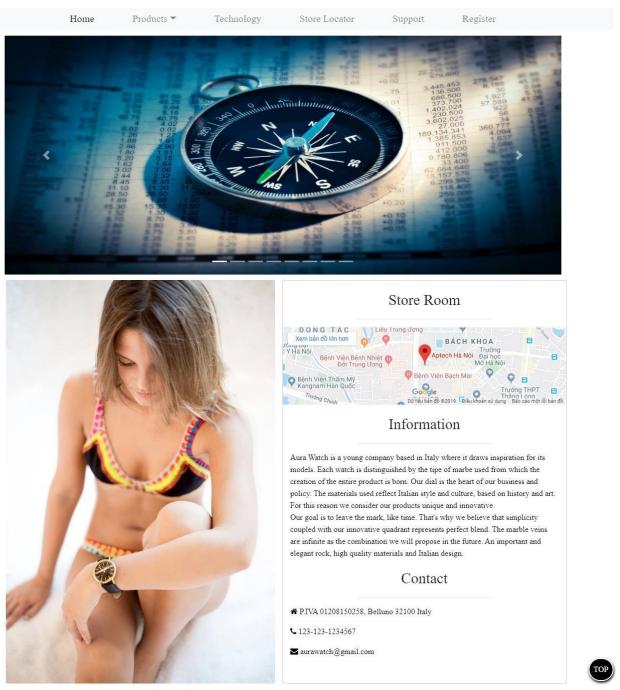


Figure 23: Technology Page Interface

When the user clicks on **Store Locator** on the **Menu Bar**, the interface of the **Store Locator** page will appear as shown in *Figure: Layout Technology*. This page contains store details.

8. Support (Page (55.Support.html))

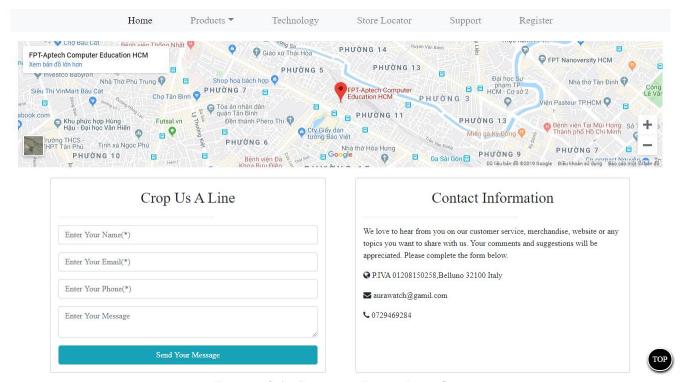


Figure 24: Support Page Interface

When the user clicks **Support** on the **Menu bar**, the interface of **Support** page will appear as *Figure: Support Page Interface*. This page contains store details.

The fields in the **Crop Us Line** section are entered with the following requirements:

Enter Your Name

- ✓ Do not leave blank.
- ✓ Do not include numbers, punctuation, hyphens, or any other special characters.
- ✓ Limited to 5 to 10 letter characters.

Enter Your Email

- ✓ Start with a letter or number.
- ✓ End with a letter and number.
- ✓ Dots, hyphens, and underscores are allowed for email names but must comply with the following requirements:
 - Do not use in the start and end position.
 - Its previous and next position must be a alphanumeric character.
- ✓ The position immediately after the @ character can be a sequence of alphabetic characters or alphanumeric characters followed by one or more phrases that start with a dot and followed by a string of up to 4 letter characters.

Enter Your Phone

- ✓ Do not leave blank.
- ✓ Do not include numbers, punctuation, hyphens, or any other special characters.
- ✓ Limited to 10 to 12 numeric characters.

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When clicking the **Submit** button, the system will check the data in the fields in turn and the error message dialog box will appear if an error is detected.

❖ You have entered the wrong name



Figure 25: You Have Entered The Wrong Name

❖ You have entered the wrong email

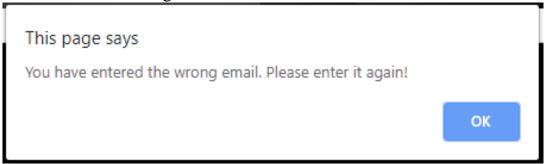


Figure 26: You Have Entered The Wrong Email

❖ You have entered the wrong phone

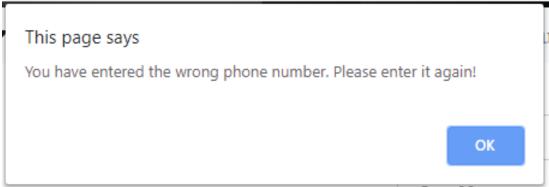


Figure 27: You Have Entered The Wrong Phone Number

When the information in each case is valid, clicking the **Send Your Message** button will display a message confirming the information has been sent.



Figure 28: Submit Successful Information

The **Contact Information** section contains store information.

9. Register Page (6. Register.html))

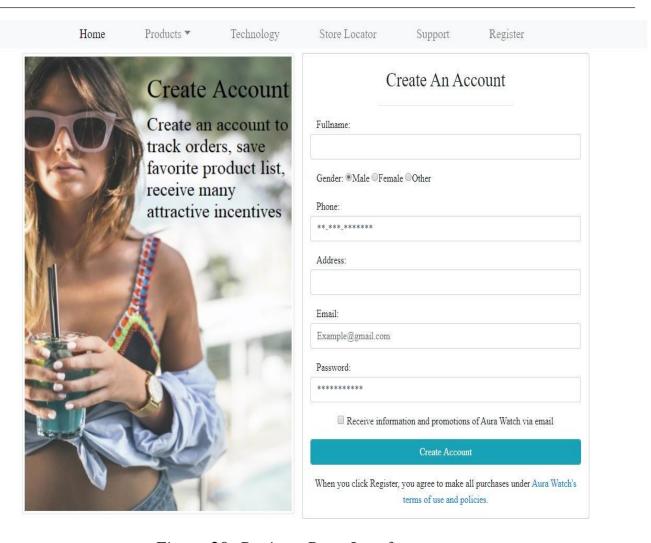


Figure 29: Register Page Interface

When the user clicks **Register** on the **Menu bar**, the interface of the **Register** page will appear as shown in *Figure: Register Page Interface*. This page contains store details. The fields in the **Create An Account** section are entered with the following requirements:

Full Name

- ✓ Do not leave blank.
- ✓ Do not include numbers, punctuation, hyphens, or any other special characters.
- ✓ Limited to 5 to 10 letter characters.

Gender

✓ Click on the appropriate box.

Phone

- ✓ Do not leave blank.
- ✓ Do not include numbers, punctuation, hyphens, or any other special characters.
- ✓ Limited to 10 to 12 numeric characters.

Address

- ✓ Can enter any character.
- ✓ Limit 100 characters.

Email

- ✓ Start with a letter or number.
- ✓ End with a letter and number.
- ✓ Dots, hyphens, and underscores are allowed for email names but must comply with the following requirements:
 - Do not use in the start and end position.
 - Its previous and next position must be a alphanumeric character.
- ✓ The position immediately after the @ character can be a sequence of alphabetic characters or alphanumeric characters followed by one or more phrases that start with a dot and followed by a string of up to 4 letter characters.

Password

- ✓ Start with a letter or number.
- ✓ End with a letter and number.
- ✓ Limited to 10 to 20 alphanumeric characters.

When clicking the **Create Account** button, the system will check the data in the fields in turn and the error message dialog box will appear if an error is detected. Enter the wrong full name structure

❖ You have entered the wrong fullname

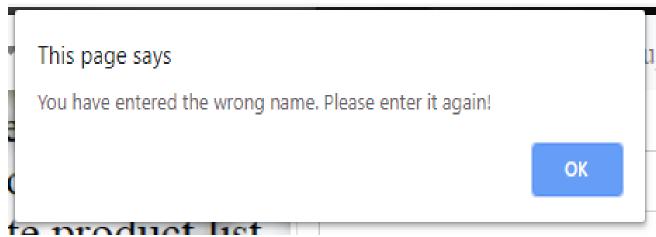


Figure 30: You Have Entered The Wrong Fullname

❖ You have entered the wrong phone number

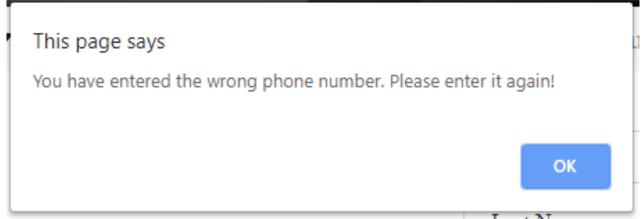


Figure 31: You Have Entered The Wrong Phone Number

❖ You have entered the wrong email

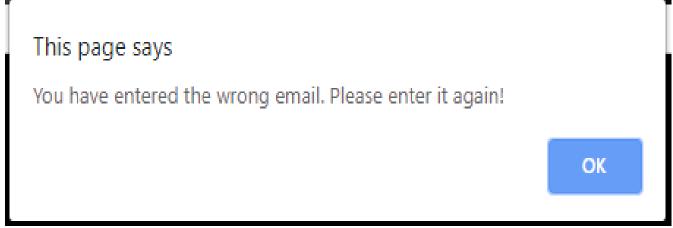


Figure 33: You Have Entered The Wrong Email

❖ You have entered the wrong password

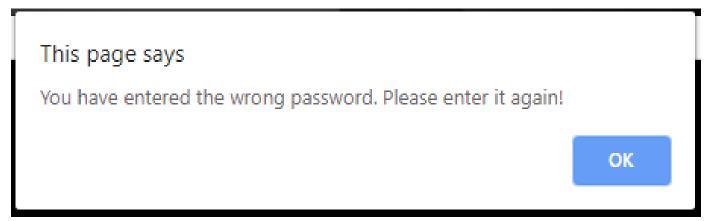


Figure 34: You Have Entered The Wrong Password

When the information in each case is valid, click the **Create Account** button, the system will display a confirmation of successful account creation.



Figure 35: Create Account Success

After entering data into the above fields, users click on the Receive Information And Promotions Of Aura Watch Via Email button to receive customer care information from the store

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Thank You For Reading The Documentation. Please Follow The Instructions Above !!