FPT ACADEMY INTERNATIONAL

FPT – APTECH COMPUTER EDUCATION

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[Amazing Astronomy]

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4.	Trương Trung Dũng	Student1448979

Month 04 Year 2022

This is to certify that

Mr. **Nguyễn Gia Bảo**

Mr. **Trần Bình Nguyên Bách**

Mr. **Phan Thành Nhân**

Mr. **Trương Trung Dũng**

Have successfully Designed & Developed

AMAZING ASTRONOMY

Submitted by: **Ms. PHAM THI LANH**

Date Of Issue: April, 2022

Authorized Signature:

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Acknowledge

We recognize that the eProject is a progressive learning environment that closely replicates the traditional classroom and lab-based learning experiences for real-world implementation. It is an electronic, live platform that enables users to:

- Practice step-by-step using a laddered approach
- Develop larger, more robust applications
- Use specific utilities in user-designed applications
- Unify code for a comprehensive application using a single program
- Learn implementation of concepts progressively
- Enhance skills and value
- Work on real-life projects
- Create complex and useful applications using real-life scenarios
- Receive mentoring through email support.

We extend our gratitude to our professor and fellow students for their valuable support throughout the project. Despite making several mistakes, we look forward to additional opportunities to expand our knowledge in web development. We also express appreciation for the information and "demo" project provided by India APTECH, which gave us a realistic experience in this project. Having gained further experience, we are committed to continuing our learning to achieve greater success in the future.

Sincerely,Your Sincerely,

Team Group 06.

Synopsis

- The Objective of this program we aim is to give a sample project to work on real life projects. These applications help us build a larger, more robust application.

- The objective is not to teach us HTML/JavaScript but to provide us with a real life scenario and help us create basic applications using the tools.

- Hence, we can revise the chapters before we start with the project.

- This project The Objective of this program is to give a sample project to work on real life projects. These applications help you build a larger, more robust application.

- The objective is not to teach you the software but to provide you with a real-life scenario and help you create basic applications using the tools.

- You can revise the topics before you start with the project.

- This project is meant for students who have completed the module of HTML5.

- These programs should be done in the Lab sessions with assistance of the faculty if required.

- The website (in this project) is a tool that help the company to access the international market and gain more and more new customers.

- It is very essential that a student has a clear understanding of the subject.

REVIEW 1

Problem Definition

The problem at hand is to develop a user-friendly website that provides information about astronomy. The website should be designed to offer a seamless navigation experience to the users. It should contain brief details about the sun, moon, stars, and planets, which will be a source of wonder for many people.

The website should have an easy-to-use interface that provides important menu options in the top section of the webpage. The design of the website should be visually appealing and must have an attractive color combination.

To meet these requirements, a Single-Page-Application and responsive website should be created using HTML5, JSON, JavaScript and Geolocation technologies. The website should be compatible with all leading web browsers, including Chrome, Internet Explorer, and Firefox.

Overall, the problem statement aims to develop a website that will serve as a one-stop solution for people who are interested in astronomy. The website should be designed to provide a visually appealing and seamless user experience, making it easier for users to access information about astronomy.

Here are some problems need to be resolved:

1. User Interface Design: The website needs to be user-friendly with a clean and attractive layout, easy navigation, and the menu should be placed in a prominent location. The design should also be responsive, so it works well on different devices and screen sizes.

2. Functionality: The website needs to function properly and provide users with accurate information. This includes implementing Geolocation to provide location-specific information.

3. Compatibility: The website needs to be compatible with all major browsers, including Chrome, IE, and Firefox.

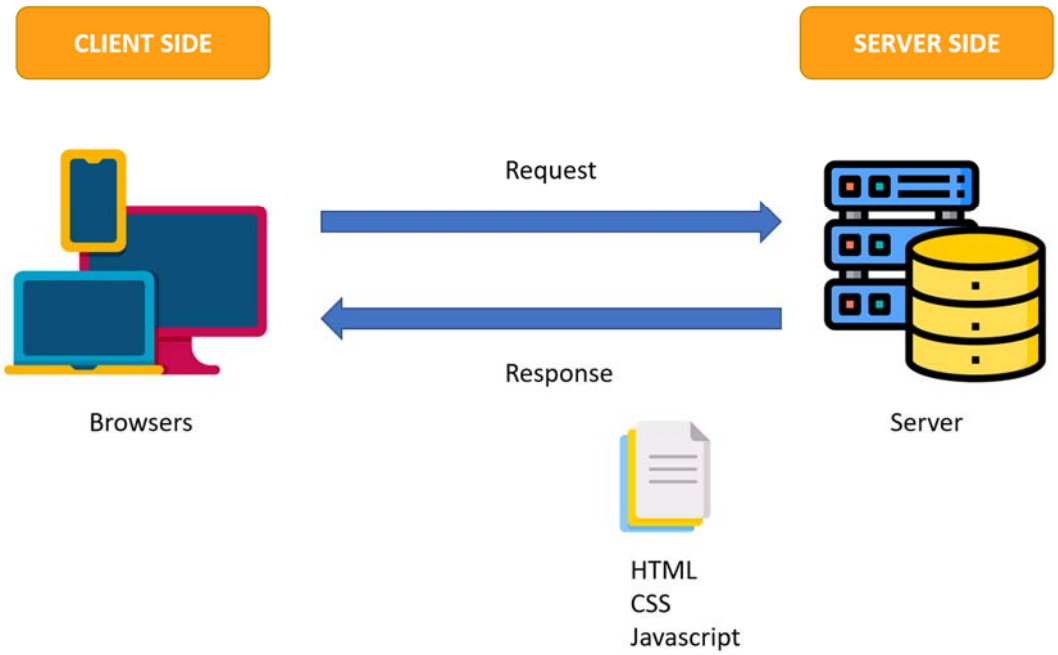
4. Performance: The website should be optimized for fast load times and smooth performance, even when accessing large amounts of data or interactive features.

5. Content Quality: The content of the website should be informative, accurate, and engaging for users. It should also be regularly updated to keep up with the latest information and discoveries in astronomy.

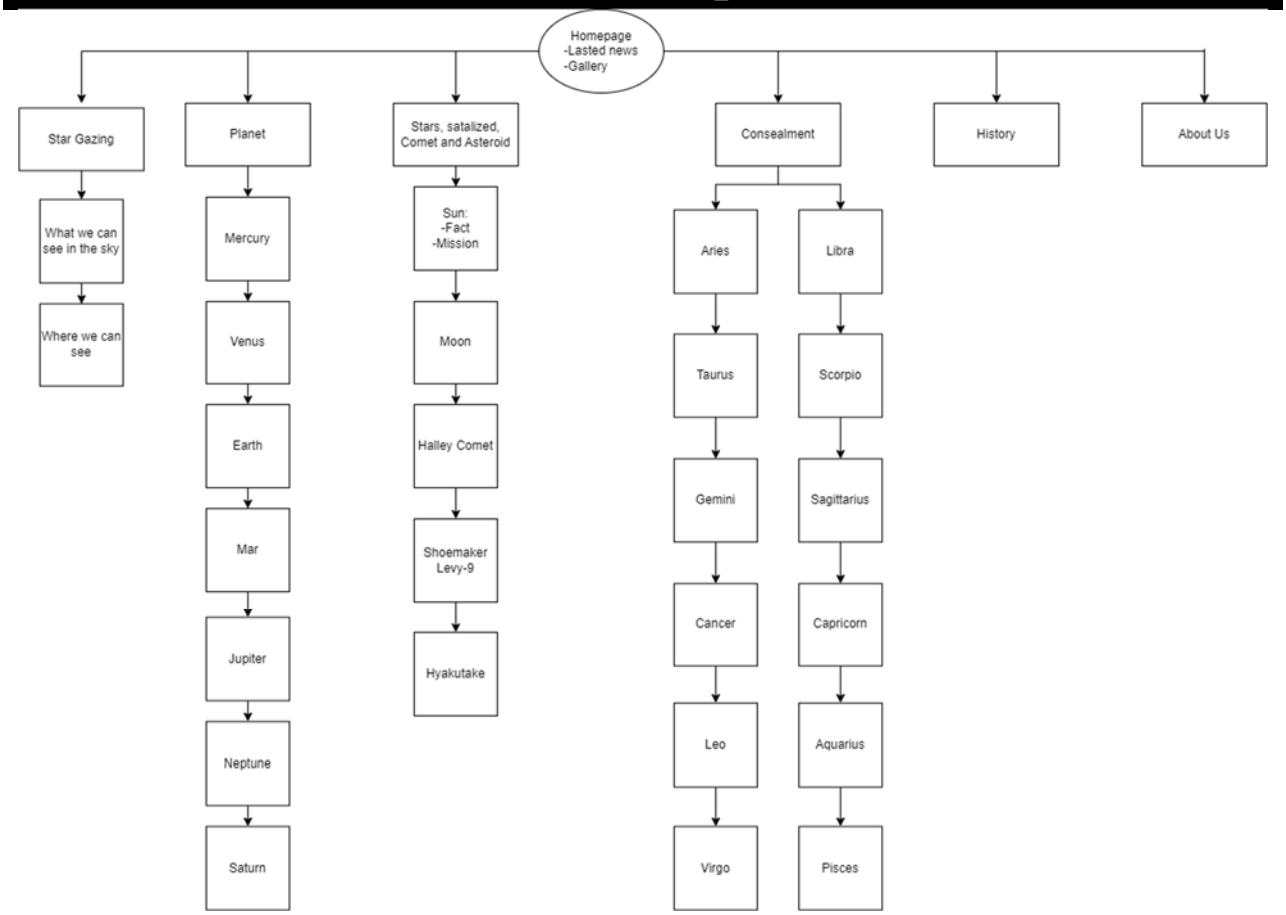
6. Security: The website should be secure and protect user data, including any personal or sensitive information collected through Geolocation.

7. Technical Expertise: The development team needs to have the technical expertise to develop a Single-Page-Application using HTML5, JSON, Angular JS, and JavaScript. They should also have experience working with Geolocation technology.

Architecture and Design of the project



Site map


Homepage
-Lasted news
-Gallery
Star Gazing
What we can see in the sky
Where we can see
Planet
Mercury
Venus
Earth
Mar
Jupiter
Neptune
Saturn
Stars, satalized, Comet and Asteroid
Sun:
-Fact
-Mission
Moon
Halley Comet
Shoemaker Levy-9
Hyakutake
Consealment
Aries
Taurus
Gemini
Cancer
Leo
Virgo
Libra
Scorpio
Sagittarius
Capricorn
Aquarius
Pisces
History
About Us

Website Design Layout

I. Homepage

Description: This is the homepage of Amazing Astronomy. The header is an important element of the homepage as it is the first thing users will see when they visit the site. It includes the logo used as a homepage button and number of visitors visit the page. The navigation bar will make it easy for users to explore the site and find the information they are looking for. In the navigation bar will have fade in fade out effect, the text also change color when hover on as well as clicking.

The main part of the homepage includes two sections, the latest news and galleries. The latest news section can include articles, blog posts, or other content that is relevant to the company's mission or industry. The galleries section can include images or videos that showcase the company's products, services, or events. These sections will help users to engage with the company and stay informed about its activities.

The footer of the homepage includes two sections. The first section provides information about the Sky Gazing company, such as its address, phone number, and email address. This information will help users to contact the company if they have any questions or concerns. The second section is a scrolling ticker that displays the day, time, and user location. This feature can be helpful for users who want to stay up-to-date on current events or time-sensitive information.

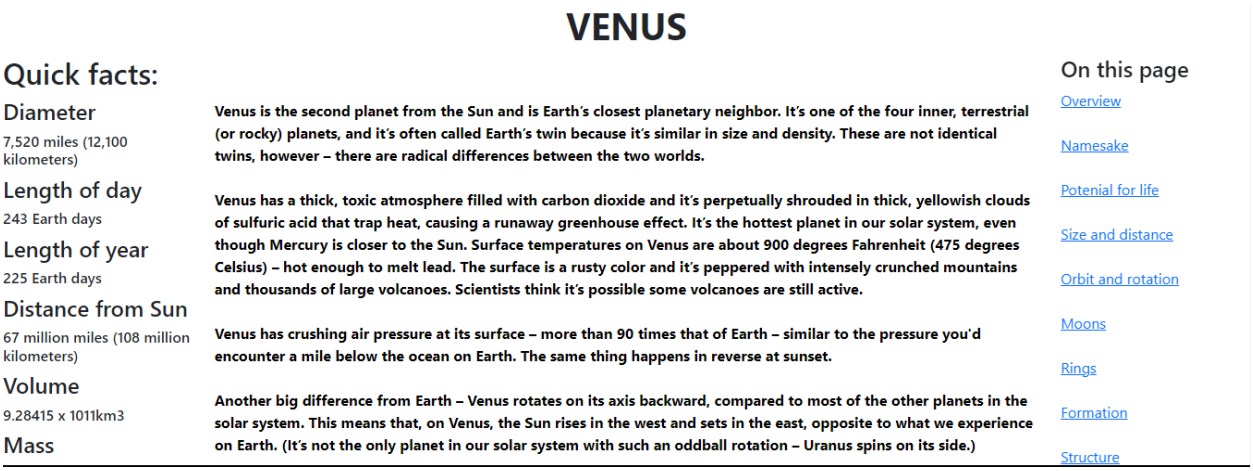
II. Star Gazing

Description:

The first page is dedicated to what users can see in the sky. This section can include information about constellations, planets, and other celestial objects that are visible to the naked eye. This information can be a great motivator for users to explore further and learn more about astronomy and the night sky.

The second page is dedicated to where users can find the best places to practice star gazing. This section include information about local parks, nature reserves, and other areas that are free from light pollution and offer clear views of the night sky.

III. Planet



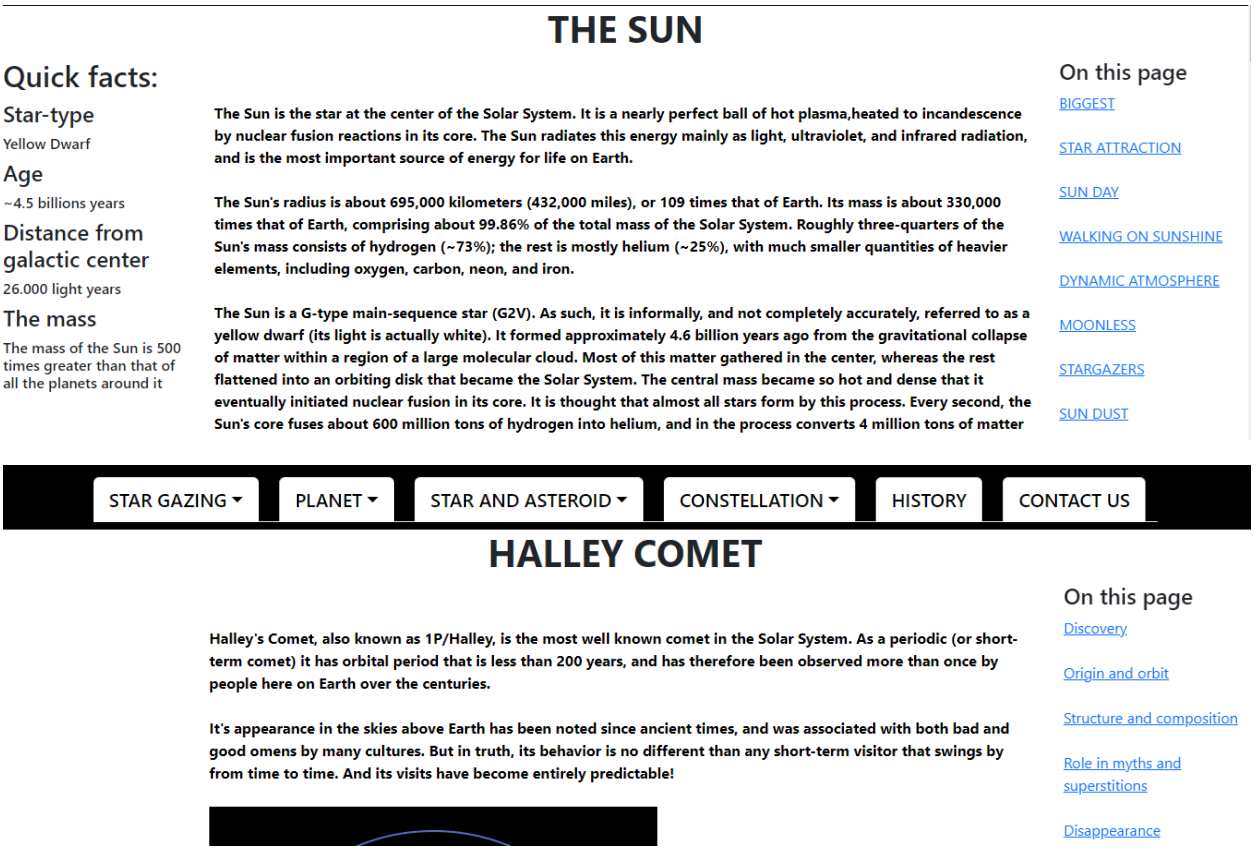
Description: When the user clicks on the planet button they can see a category of planet in the solar system,

The page for each planet is divided into three parts. The first part is the quick fact, which gives the user a brief overview of the planet's key characteristics, such as its distance from the sun, size, and composition. This information is presented in a concise and easily digestible format, allowing users to quickly get a sense of what the planet is like.

The second part of the page is the main part, which provides users with detailed information about the planet. This section can include information about the planet's history, geology, atmosphere, moons, and any other relevant details. It's important to present this information in a clear and organized way, so that users can easily find the information they're looking for.

Finally, there is a menu that allows users to navigate quickly to the part of the part that they are most interested in. This is an important feature because it helps users to find the information they need quickly and easily, without having to scroll through the entire page.

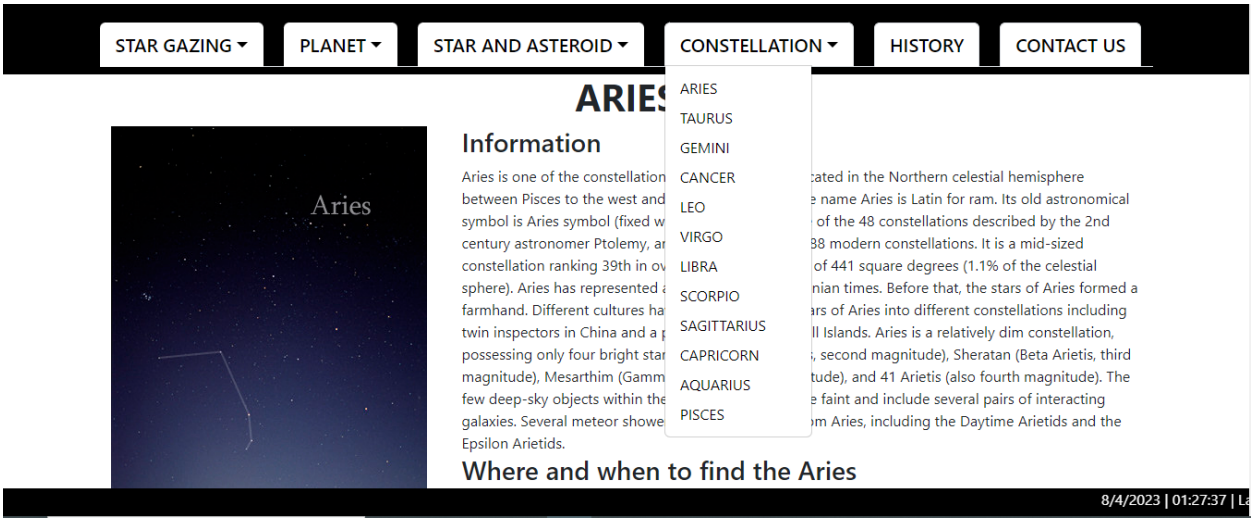
IV. Star and Asteroid



Description: In this section we will include stars and asteroid. First of all, we plan to start with the Sun, the only star in the solar system, and follow with information about the Moon in the same style as the planet section

For asteroids, it is understandable that there is less information available, so focusing on the main information and providing a menu for users to navigate to specific areas of interest is a great approach.

V. Constellation

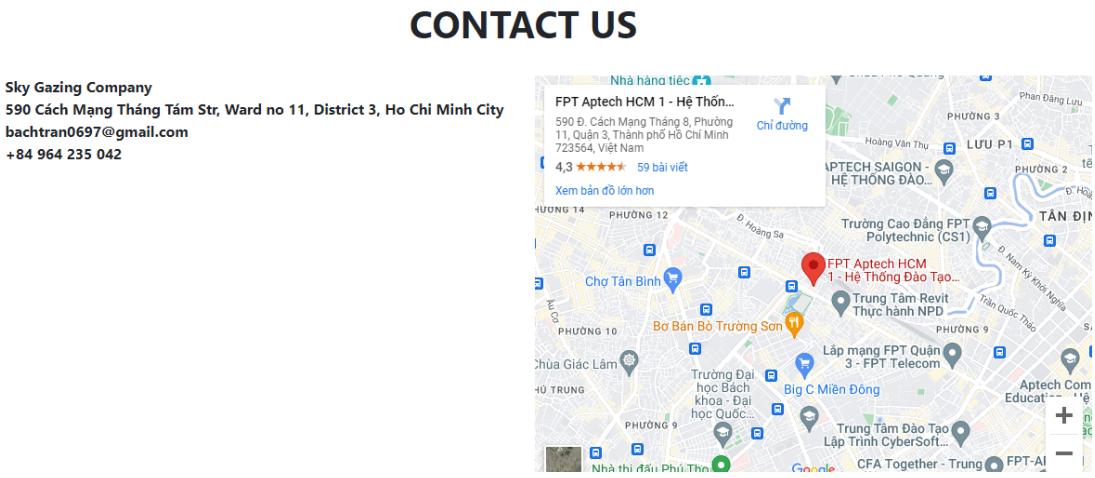


The Constellation page is an exciting feature of Sky Gazing Company's website that allows users to explore and learn about the different constellations visible in the night sky. The constellation page will provide users with detailed information on different constellations, including their history, mythology, and scientific significance. Users can click on a list of constellations to find the ones that interest them most.

VI. History

Description: The history section in the website, which providing a timeline of the universe's history is a fantastic way to give users a sense of the scale and complexity of the cosmos.

VII. Contact Us



Description: If users click on the Contact tag in the navigation bar, they will be taken to a page where they can find detailed information on how to contact Sky Gazing Company. The first part of the page will include a map that shows the location of the company. The map will be interactive, allowing users to zoom in and out and view the location in different ways.

Beside the map, users will find a detailed description of the company's location, including the street address, city, state, and ZIP code. This information will be useful for users who want to visit the company in person, as well as for those who need to send mail or packages.

Task Sheet

Project Ref No.	Project Title – Ask Me Mobile	Activity Plan Prepared by	Date of preparation of Activity Plan			
Task			Actual Start Date	Actual Days	Teammate Names	Status
Brainstorming ideas for layouts and Project Object		Bách, Nhân, Dũng, Bảo	11/03/2023	1 days	Bách, Nhân, Dũng, Bảo	Completed
Draw site maps and architecture design		Bách, Nhân	11/03/2023	1 days	Bách, Nhân	Completed
Wire framing general page layout		Bách	13/03/2022	3 days	Bách	Completed
Collect static assets (pictures, mp4, documentation,…)		Bách, Nhân, Dũng, Bảo	13/03/2022	5 days	Bách, Nhân, Dũng, Bảo	Completed

REVIEW 2

WEBSITE USER INTERFACE

I. Homepage

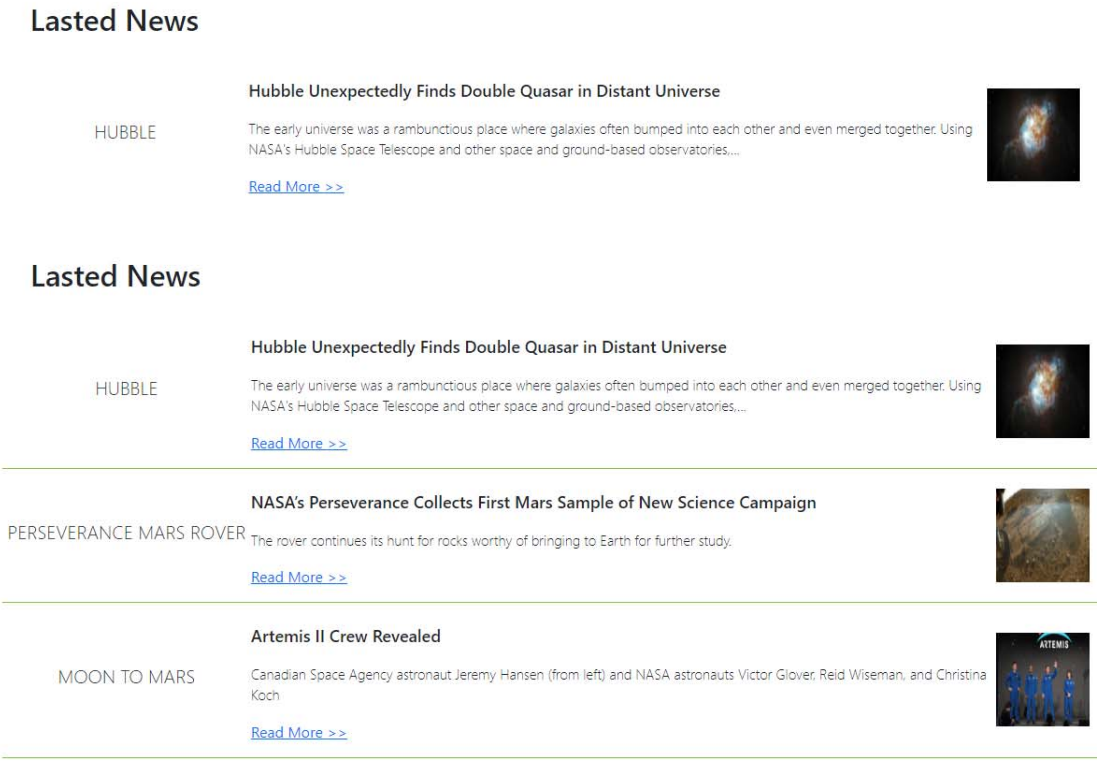
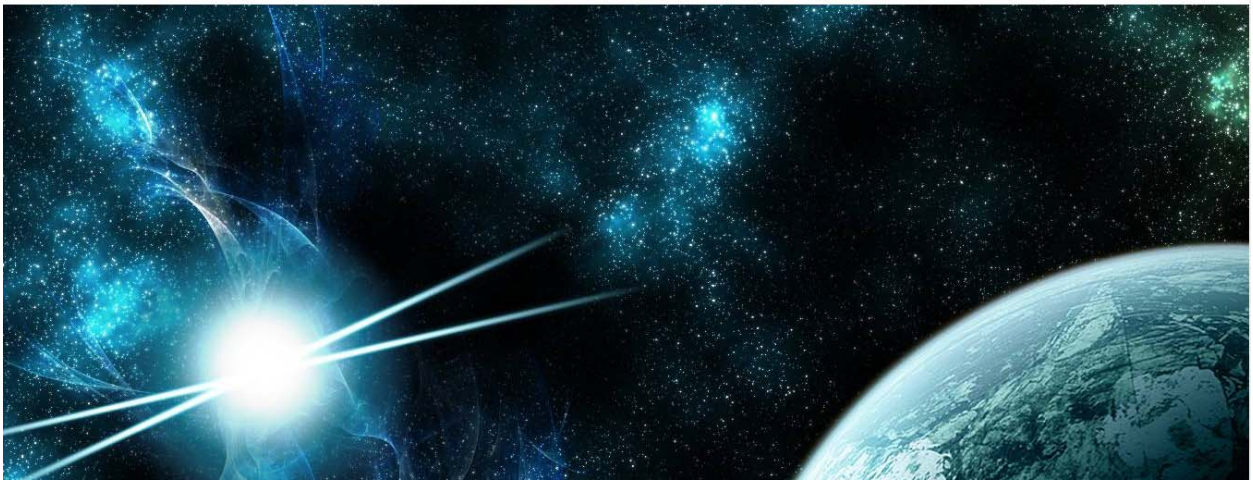
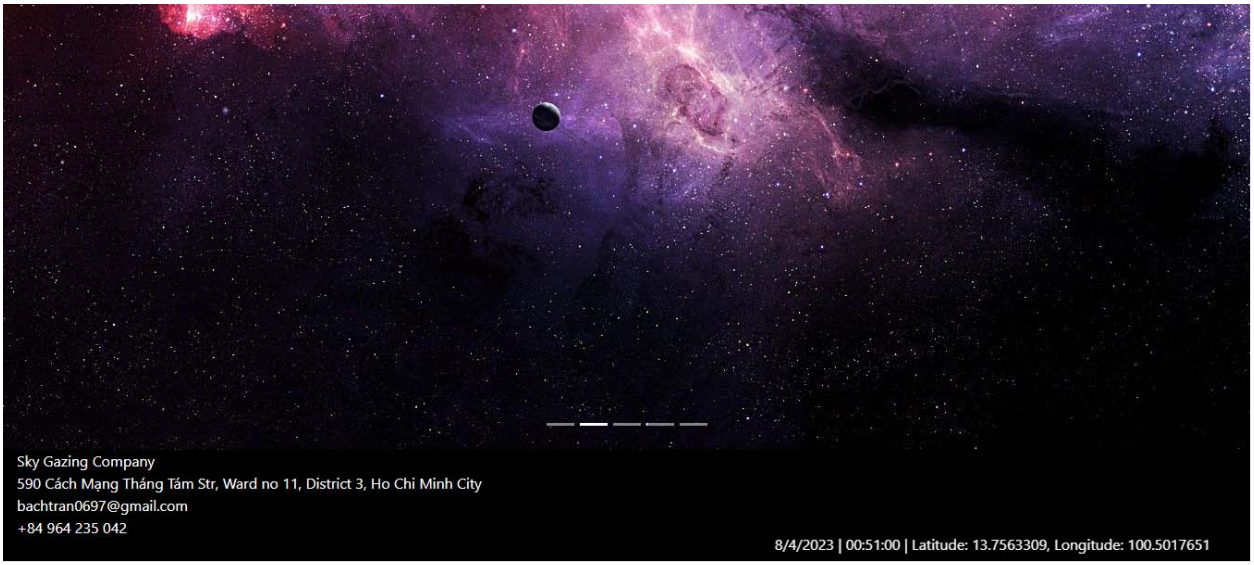


Image Galleries





II. Star Gazing

Amazing Astronomy

Number of visitors: 914

STAR GAZING | PLANET | STAR AND ASTEROID | CONSTELLATION | HISTORY | CONTACT US

BEST PLACE FOR GAZING
WHAT WE CAN SEE

THREE PLACE FOR STARGAZING

1. The Atacama Desert, Chile

8/4/2023 | 00:52:29 | Latitude: 10.8406654, Longitude: 106.6515889

Northern Chile's stark Atacama Desert is the driest place on Earth, if you exclude the North and South Poles. It receives mere millimeters of rain during any given year, with the driest sections receiving even less than a millimeter.

But while the dry conditions in this barren landscape aren't particularly compatible with plant and animal life, they're optimal for stargazing thanks to the parallel presence of a high altitude, few clouds, and near-zero radio interference or light pollution.

The Atacama Desert's near-perfect visibility provides crystal-clear views of the most famous constellations of the Southern Hemisphere sky — including the Tarantula Nebula, the Fornax Cluster of galaxies, the Southern Cross, and even the Large Magellanic Cloud, a satellite galaxy of the Milky Way.

For these reasons, many consider Chile's Atacama Desert to be the best place in the world to stargaze. Astro-tourists from around the world flock to this

64, Longitude: 106.6515889

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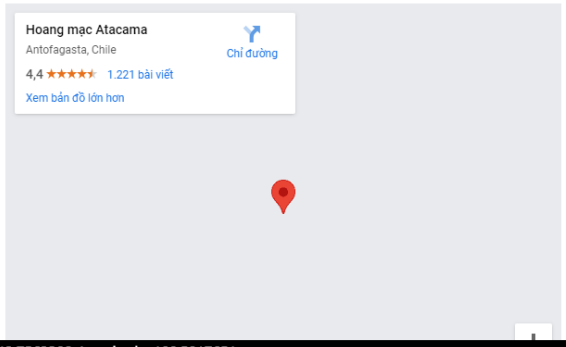
For these reasons, many consider Chile's Atacama Desert to be the best place in the world to stargaze. Astro-tourists from around the world flock to this bucket-list astronomy destination, so numerous local outfitters provide tours and some local hotels even offer personal stargazing experiences.



4:50 | Latitude: 13.7563309, Longitude: 100.5017651

III. Planet

MECURY

Quick facts:

Day

About 59 Earth days (to complete one rotation on its axis)

Solar Day

About 176 Earth days (one full day-night cycle)

Year

88 Earth days

Radius

1,516 miles | 2,439.7 kilometers

Planet Type

Terrestrial

The smallest planet in our solar system and nearest to the Sun, Mercury is only slightly larger than Earth's Moon.

From the surface of Mercury, the Sun would appear more than three times as large as it does when viewed from Earth, and the sunlight would be as much as seven times brighter. Despite its proximity to the Sun, Mercury is not the hottest planet in our solar system – that title belongs to nearby Venus, thanks to its dense atmosphere.

Because of Mercury's elliptical – egg-shaped – orbit, and sluggish rotation, the Sun appears to rise briefly, set, and rise again from some parts of the planet's surface. The same thing happens in reverse at sunset.

On this page

Overview
Namesake
Potenial for life
Size and distance
Orbit and rotation
Moons
Rings
Formation
Structure

88 Earth days

Radius

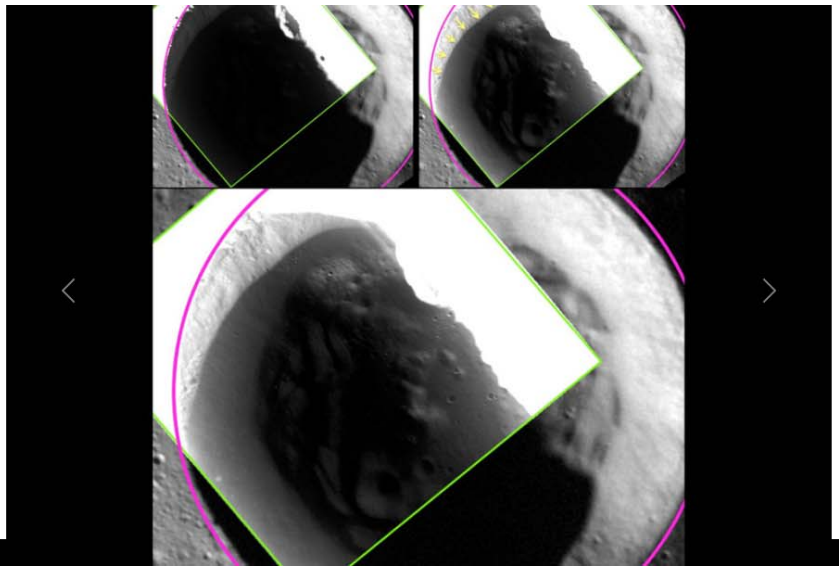
1,516 miles | 2,439.7 kilometers

Planet Type

Terrestrial

Moons

0



Moons

Rings

Formation

Structure

Surface

Atmosphere

Magnetosphere

ude: 106.6515496

IV. Star, Asteroid

STAR GAZING | PLANET | STAR AND ASTEROID | CONSTELLATION | HISTORY | CONTACT US

THE SUN

Quick facts:

Star-type

Yellow Dwarf

Age

~4.5 billions years

Distance from galactic center

26.000 light years

The mass

The mass of the Sun is 500 times greater than that of all the planets around it

The Sun is the star at the center of the Solar System. It is a nearly perfect ball of hot plasma,heated to incandescence by nuclear fusion reactions in its core. The Sun radiates this energy mainly as light, ultraviolet, and infrared radiation, and is the most important source of energy for life on Earth.

The Sun's radius is about 695,000 kilometers (432,000 miles), or 109 times that of Earth. Its mass is about 330,000 times that of Earth, comprising about 99.86% of the total mass of the Solar System. Roughly three-quarters of the Sun's mass consists of hydrogen (~73%); the rest is mostly helium (~25%), with much smaller quantities of heavier elements, including oxygen, carbon, neon, and iron.

The Sun is a G-type main-sequence star (G2V). As such, it is informally, and not completely accurately, referred to as a yellow dwarf (its light is actually white). It formed approximately 4.6 billion years ago from the gravitational collapse of matter within a region of a large molecular cloud. Most of this matter gathered in the center, whereas the rest flattened into an orbiting disk that became the Solar System. The central mass became so hot and dense that it eventually initiated nuclear fusion in its core. It is thought that almost all stars form by this process. Every second, the Sun's core fuses about 600 million tons of hydrogen into helium, and in the process converts 4 million tons of matter into energy. This energy, which can take between 10,000 and 170,000 years to escape the core, is the source of the

On this page

BIGGEST

STAR ATTRACTION

SUN DAY

WALKING ON SUNSHINE

DYNAMIC ATMOSPHERE

MOONLESS

STARGAZERS

SUN DUST

SOURCE OF LIFE

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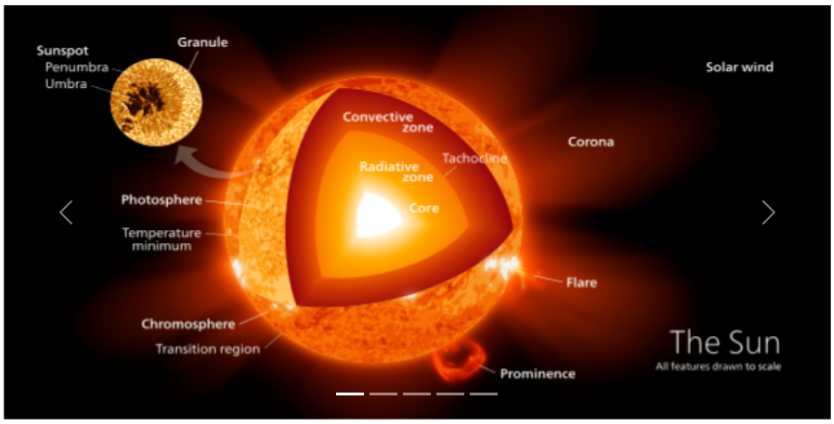
century interpretation of the Sun's observed movement as actual movement.



BIGGEST

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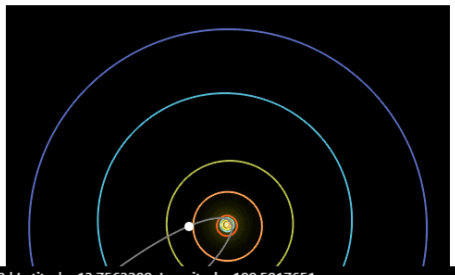
HALLEY COMET

On this page

Discovery
Origin and orbit
Structure and composition
Role in myths and superstitions
Disappearance

Halley's Comet, also known as 1P/Halley, is the most well known comet in the Solar System. As a periodic (or short-term comet) it has orbital period that is less than 200 years, and has therefore been observed more than once by people here on Earth over the centuries.

It's appearance in the skies above Earth has been noted since ancient times, and was associated with both bad and good omens by many cultures. But in truth, its behavior is no different than any short-term visitor that swings by from time to time. And its visits have become entirely predictable!



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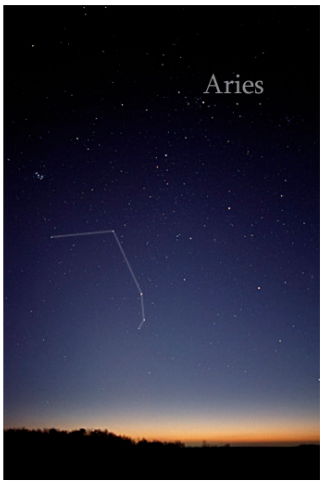
V. Constellation

ARIES



Aries on the Sky

Information

Aries is one of the constellations of the zodiac. It is located in the Northern celestial hemisphere between Pisces to the west and Taurus to the east. The name Aries is Latin for ram. Its old astronomical symbol is Aries symbol (fixed width).svg (♈). It is one of the 48 constellations described by the 2nd century astronomer Ptolemy, and remains one of the 88 modern constellations. It is a mid-sized constellation ranking 39th in overall size, with an area of 441 square degrees (1.1% of the celestial sphere). Aries has represented a ram since late Babylonian times. Before that, the stars of Aries formed a farmhand. Different cultures have incorporated the stars of Aries into different constellations including twin inspectors in China and a porpoise in the Marshall Islands. Aries is a relatively dim constellation, possessing only four bright stars: Hamal (Alpha Arietis, second magnitude), Sheratan (Beta Arietis, third magnitude), Mesarthim (Gamma Arietis, fourth magnitude), and 41 Arietis (also fourth magnitude). The few deep-sky objects within the constellation are quite faint and include several pairs of interacting galaxies. Several meteor showers appear to radiate from Aries, including the Daytime Arietids and the Epsilon Arietids.

Where and when to find the Aries

Aries is visible from March to February. The best time to view it is during the month of December when it crosses the meridian.Between March 20 and April 21 Aries completely hides behind the Sun. In astrology, during this period it is said that the Sun is in the house of Aries. The constellation is visible between the latitudes of +90° to -60°. That means you can see it from Argentina, and all the way to the North Pole. The only place on Earth where Aries is not visible at any point of the year in Antarctica.

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How it formed

Aries is one of the twelve zodiac signs and is believed to have been formed by the ancient Babylonians who were some of the first people to study the stars and constellations. As they observed the movement of the Sun and tracked its orbit through the sky, they identified twelve signs that corresponded to the positions of the stars and planets.

Fun fact !

Aries is the first astrological sign in the zodiac and is represented by the ram. Aries are known for their strong will, leadership qualities, and enthusiastic nature. They are often described as adventurous and confident individuals. Some famous Aries include Lady Gaga, Emma Watson, and Robert Downey Jr

Aries figure

Sky Gazing Company
590 Cách Mạng Tháng Tám Str, Ward no 11, District 3, Ho Chi Minh City
bachtran0697@gmail.com
+84 964 235 042

00.5017651

VI. History

HISTORY

On this page

Origin of the Universe

Big-Bang Theory

Stellar Evolution

Origin of the Solar System: The Nebular Hypothesis

Planet Arrangement and Segregation

Origin of Earth's Crust

Origin of the Moon

Origin of Earth's Water

Archean Eon

Origin of the Continents

Origin of the Universe

The universe appears to have an infinite number of galaxies and solar systems and our solar system occupies a small section of this vast entirety. The origins of the universe and solar system set the context for conceptualizing the Earth's origin and early history.

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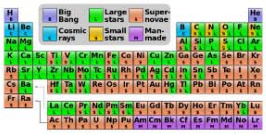
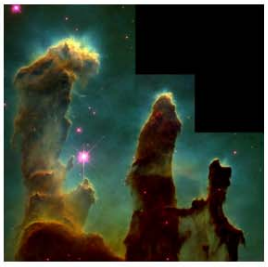
Stellar Evolution



Astronomers think the big bang created lighter elements, mostly hydrogen and smaller amounts of elements helium, lithium, and beryllium. Another process must be responsible for creating the other 90 heavier elements. The current model of stellar evolution explains the origins of these heavier elements.

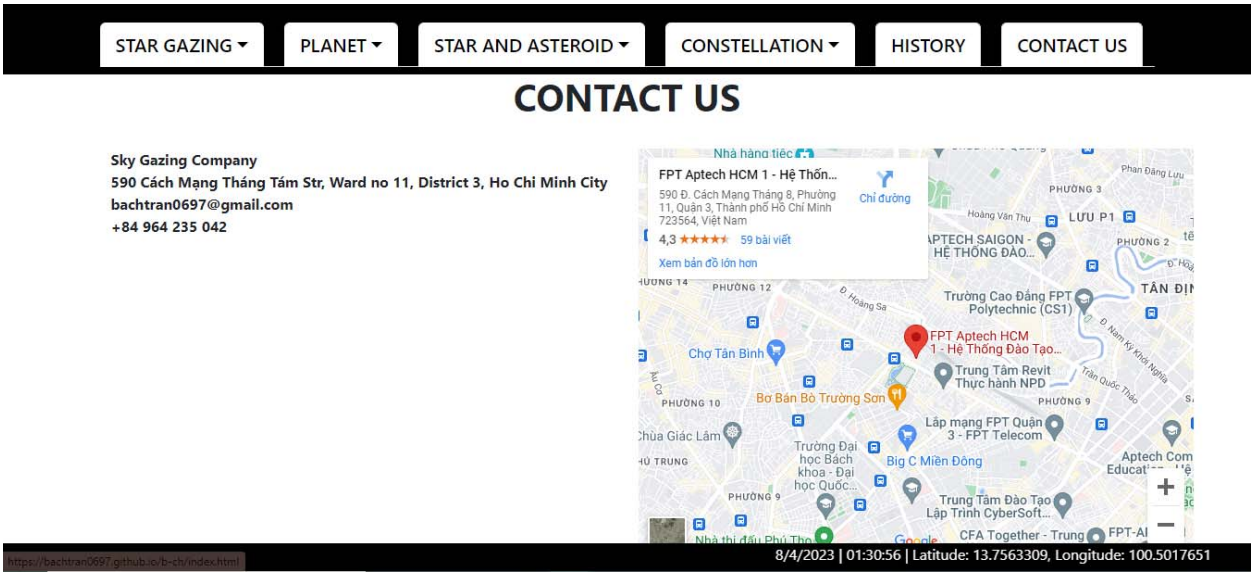
BIRTH OF A STAR

Stars start their lives as elements floating in cold, spinning clouds of gas and dust known as nebulas. Gravitational attraction or perhaps a nearby stellar explosion causes the elements to condense and spin into disk shape. In the center of this disk shape a new star is born under the force of gravity. The spinning whirlpool concentrates material in the center, and the increasing gravitational forces collect even more mass. Eventually, the immensely concentrated mass of material reaches a critical point of such intense heat and pressure it initiates fusion.



8/4/2023 | 01:13:34 | Latitude: 13.7563309, Longitude: 100.5017651

VII. Contact Us



Task Sheet

Project Ref No. / Task	Project Title – Ask Me Mobile	Activity Plan Prepared by	Date of preparation of Activity Plan			
			Actual Start Date	Actual Days	Teammate Names	Status
Brainstorming ideas for layouts and Project Object		Bách, Nhân, Dũng, Bảo	11/03/2023	1 days	Bách, Nhân, Dũng, Bảo	Completed
Draw site maps and architecture design		Bách, Nhân, Dũng, Bảo	11/03/2023	1 days	Bách, Nhân, Dũng, Bảo	Completed
Wire framing general page layout		Bách	13/03/2023	3 days	Bách	Completed
Collect static assets (pictures, mp4, documentation,…)		Bách, Nhân, Dũng, Bảo	13/03/2023	8 days	Bách, Nhân, Dũng, Bảo	Completed
Design & Build Homepage		Bách, Nhân	17/03/2023	9 days	Bách, Nhân	Completed
Design & Build Star Gazing		Bách	17/03/2023	14 days	Bách	Completed
Design & Build Planet		Nhân	17/03/2023	14 days	Nhân	Completed
Design & Build Star and Asteroid		Bách, Dũng	20/03/2023	14 days	Bách, Dũng	Completed
Design & Build Constellation		Bách, Bảo	20/03/2023	14 days	Bách, Bảo	Completed
Design & Build History		Bách, Dũng	20/03/2023	14 days	Bách, Dũng	Completed
Design & Build Contact		Bách	20/03/2023	14 days	Bách	Completed
Javascript		Bách	17/03/2023	5 days	Bách	Completed
Write Project Report		Bách	09/04/2023	2 days	Bách	Completed

Testing document

Sr.No	Features Tested	Remarks
1	Are all the users able to view the images and links?	OK
2	Have all the views, modules and controllers been properly integrated and is the site function as a single page application?	OK
3	Are the GUI content devoid of spelling mistakes?	OK
4	Is the application user-friendly?	OK
5	Is the Website launching correctly in all popular browsers?	OK
6	Do all text links lead to the appropriate website?	OK
7	Do all image links lead to the appropriate website?	OK
8	Are all the images and links clearly visible on the page?	OK
9	Does the Web page work properly in all the tested browsers?	OK
10	Does the Web page take too long to be loaded fully?	OK
11	Is the navigation sequences correct through all the Web pages on the site?	OK
12	Is the JavaScript code working as expected in all click	OK

Final checklist

Sr.No	Features Tested	Remarks
1	Are all the users able to view the images and links?	OK
2	Have all the views, modules and controllers been properly integrated and is the site function as a single page application?	OK
3	Are the GUI content devoid of spelling mistakes?	OK
4	Is the application user-friendly?	OK
5	Is the Website launching correctly in all popular browsers?	OK
6	Do all text links lead to the appropriate website?	OK
7	Do all image links lead to the appropriate website?	OK
8	Are all the images and links clearly visible on the page?	OK
9	Does the Web page work properly in all the tested browsers?	OK
10	Does the Web page take too long to be loaded fully?	OK
11	Is the navigation sequences correct through all the Web pages on the site?	OK
12	Is the JavaScript code working as expected in all click	OK