NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTION, AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY,
BELGAUM, APPROVED BY AICTE & GOVT.OF KARNATAKA

COURSE PROJECT REPORT

on

COSMIC VOYAGER

Space Blog

Submitted in partial fulfilment of the requirement for the award of Degree of

Bachelor of Engineering

in

Computer Science and Engineering

Submitted by:

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CERTIFICATE

This is to certify that the Course Project titled "COSMIC VOYAGER – Space Blog" is an authentic work carried out by **Kumuda K (1NT18CS082), Ritika Subudhi (1NT18CS133)** and **Shreya A Hegde (1NT18CS153)** bonafide students of **Nitte Meenakshi Institute of Technology**, Bangalore in partial fulfilment for the award of the degree of ***Bachelor of Engineering*** in COMPUTER SCIENCE AND ENGINEERING of Visvesvaraya Technological University, Belagavi during the academic year ***2019-2020.***

Name and Signature of the Guide	**Name and Signature of the HOD**
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We hereby declare that

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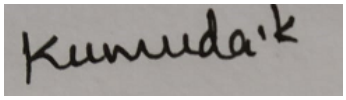
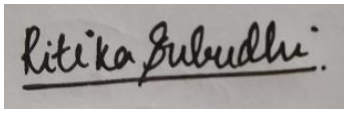
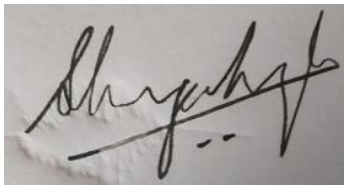
Kumuda K	1NT18CS082	
Ritika Subudhi	1NT18CS133	
Shreya A Hegde	1NT18CS153	

Date: 08/05/2020

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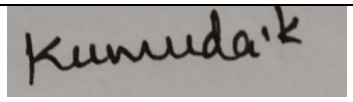
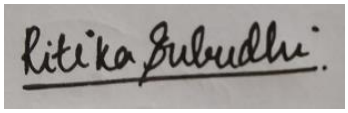
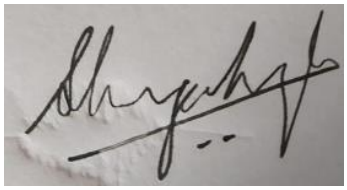
Kumuda K	1NT18CS082	
Ritika Subudhi	1NT18CS133	
Shreya A Hegde	1NT18CS153	

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ABSTRACT

The cosmos is the Universe. Using the word cosmos rather than the word universe implies viewing the universe as a complex and orderly system or entity; the opposite of chaos.

The cosmos, and our understanding of the reasons of its existence and significance, are studied in cosmology – a very broad discipline covering any scientific, religious or philosophical contemplation of the cosmos and its nature, or reasons for existing.

The philosopher Pythagoras first used the term cosmos for the order of the universe. The term became part of the modern language in the 19th century when geographer-polymath Alexander von Humboldt resurrected the use of the word from the ancient Greek, assigned to his five-volume treatise, Kosmos, which influenced the modern and somewhat holistic perception of the universe as one interacting entity.

Our blog aims to pique our reader's interest about our universe and make them want to learn more about the planet we live in, the other planets in our solar system, the galaxy that these planets are part of, more galaxies that surround us and about other mystifying things still being researched about in our universe, such as black holes.

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Chapter 1

INTRODUCTION

The universe is all of space and time and their contents, including planets, stars, galaxies and all other forms of matter and energy. While the spatial size of the entire universe is unknown, it is possible to measure the size of the observable universe, which is currently estimated to be 93 million light-years in diameter. In various multiverse hypotheses, a universe is one of many causally disconnected constituent parts of a larger multiverse, which itself comprises all of space and time and its contents; as a consequence, 'the universe' and 'the multiverse' are synonymous in such theories.

The earliest cosmological models of the universe were developed by ancient Greek and Indian philosophers and were geocentric, placing Earth at the centre. Over the centuries, more precise astronomical observations led Nicolaus Copernicus to develop the heliocentric model with the Sun at the centre of the Solar System. In developing the law of universal gravitation, Isaac Newton built upon Copernicus' work as well as Johannes Kepler's laws of planetary motion and observations by Tycho Brahe. Further, observational improvements led to the realization that the Sun is one of hundreds of billions of stars in the Milky Way, which is one of at least hundreds of billions of galaxies in the universe. Many of the stars in our galaxy have planets. At the largest scale, galaxies are distributed uniformly and the same in all directions, meaning that the universe has neither an edge nor a centre. At smaller scales, galaxies are distributed in clusters and superclusters which form immense filaments and voids in space, creating a vast foam-like structure. Discoveries in the early 20th century have suggested that the universe had a beginning and that space has been expanding since then, and is currently still expanding at an increasing rate.

From studying the movement of galaxies, it has been discovered that the universe contains much more matter than is accounted for by visible objects; stars, galaxies, nebulas and interstellar gas. Our blog, Cosmic Voyager, aims to make learning about these visible objects fun, interesting and interactive.

Chapter 2

LITERATURE SURVEY

Humans have always looked up into the night sky and dreamed about space. For centuries astronomers and many astrophysicists have worked together to solve the mysteries of space.

The advancement of technology has not only proved many theories but we have also successfully discovered many aspects in this voyage of mystery solving.

The cosmos is the universe. Using the word cosmos rather than the word universe implies viewing the universe as a complex and orderly system or entity; the opposite of chaos.
The **universe** (Latin: *universus*) is all of space and time and their contents, including planets, stars, galaxies, and all other forms of matter and energy.

The Cosmic Voyager Project is an attractive space blog which highlights topics such as Black Holes, Planets of our Solar System and Galaxies in the universe. The project also has an inbuilt enthralling Cosmic Voyager Quiz.

Although there are number of web-based applications which are, one way or the other similar to this website and related to Space Quiz, however, there are only a few that help in learning and contribute to the academic enhancement in a play way for students. Most Space Quizzes available online either have poor question quality or an unattractive page.

The website also has a feature to receive updates on facts periodically once the user registers through the website. A person can play the game any number of times she/he wishes to before saving their score.

Another feature of the Cosmic Voyager Quiz is that it shows the number of questions attempted and the score is updated in real time. Other feature regarding the quiz is similar to the usual quiz applications, i.e. it has only multiple-choice questions and once the player answers, the option selected is marked red if wrong and green if correct.

The fundamental idea behind our project is to create a product that would offer new aspects to learning and meets modern age technologies while it stays true to the facts.

Chapter 3

IMPLEMENTATION

Cosmic Voyager project has been implemented using the following technologies

3.1) HTML:

This stands for **Hyper Text Markup Language**, which is the most widely used language on Web to develop web pages. **HTML** was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995.

Originally, **HTML** was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers. Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

3.2) CSS:

Cascading Style Sheets (**CSS**) is a stylesheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.

3.3) JavaScript:

JavaScript ("JS" for short) is a full-fledged dynamic programming language that, when applied to an HTML document, can provide dynamic interactivity on websites.

It is a programming language that adds interactivity to your website (for example games, responses when buttons are pressed or data is entered in forms, dynamic styling, and animation etc).

3.4) Php:

The **PHP Hypertext Pre-processor (PHP)** is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web-based software applications.

3.5) MySQL:

MySQL is the most popular Open Source Relational SQL Database Management System. It is one of the best RDBMS being used for developing various web-based software applications.

3.6) Node.js:

Node.js is an open-source, cross-platform, JavaScript runtime environment that executes JavaScript code outside of a web browser. Node.js lets developers use JavaScript to write command line tools and for server-side scripting—running scripts server-side to produce dynamic web page content before the page is sent to the user's web browser.

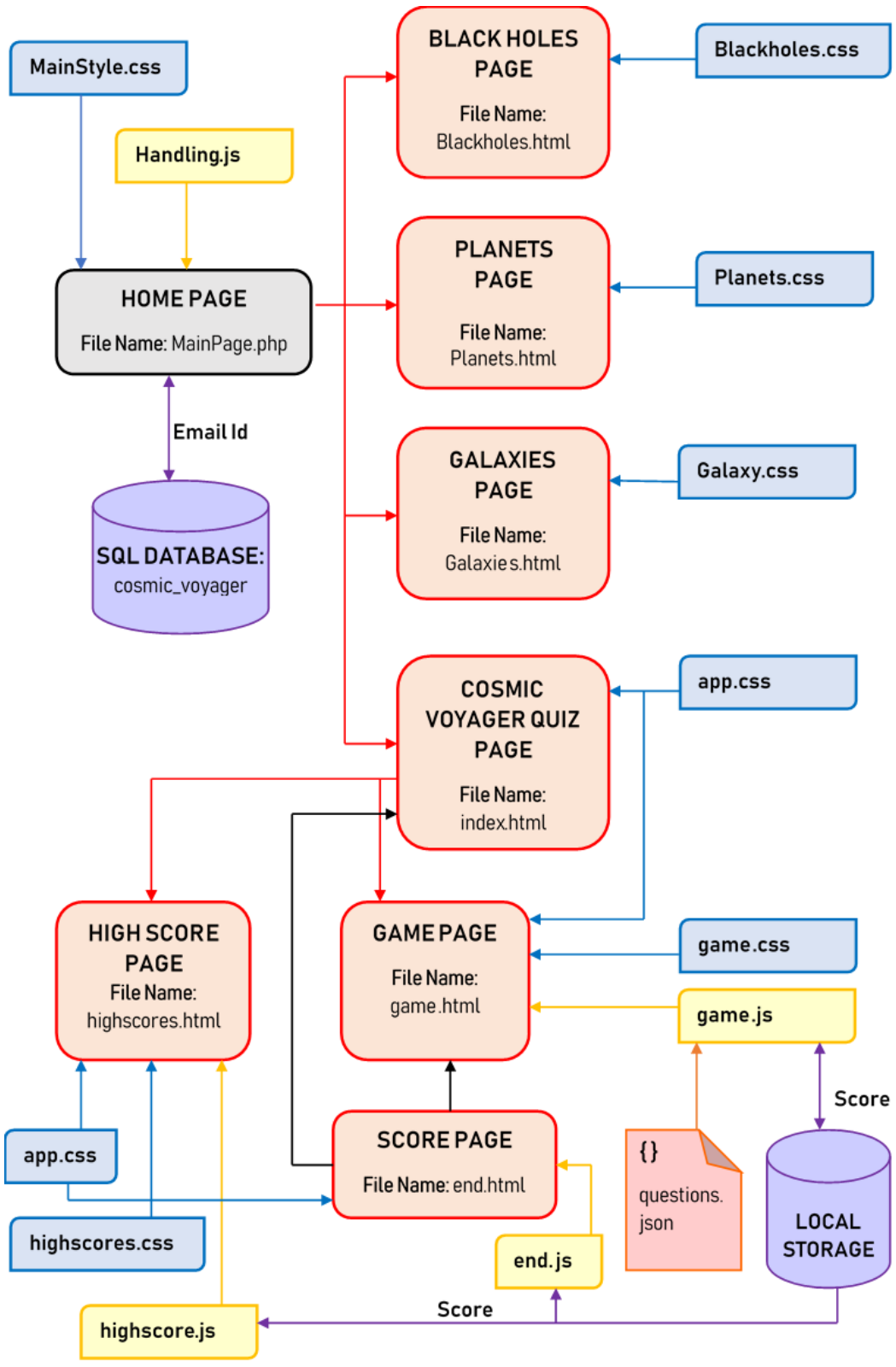
3.7) JSON:

JavaScript Object Notation is an open standard file format, and data interchange format, that uses human-readable text to store and transmit data objects consisting of attribute–value pairs and array data types (or any other serializable value). It is a very common data format, with a diverse range of applications, such as serving as a replacement for XML in AJAX systems.

JSON is a language-independent data format.

Chapter 4

FLOW DIAGRAM



Chapter 5

RESULTS

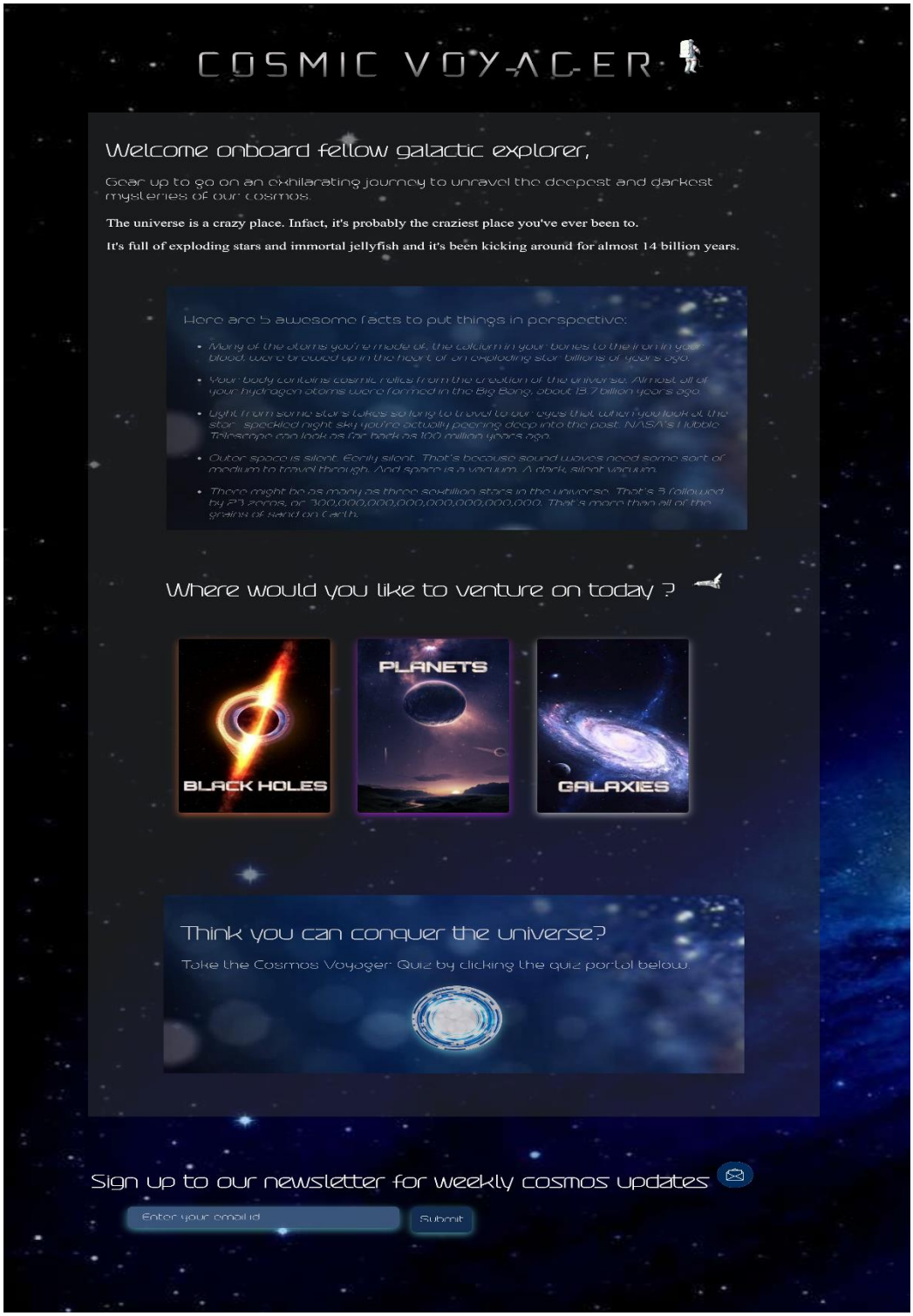


Fig. Main Page

Fig. Blackholes.html

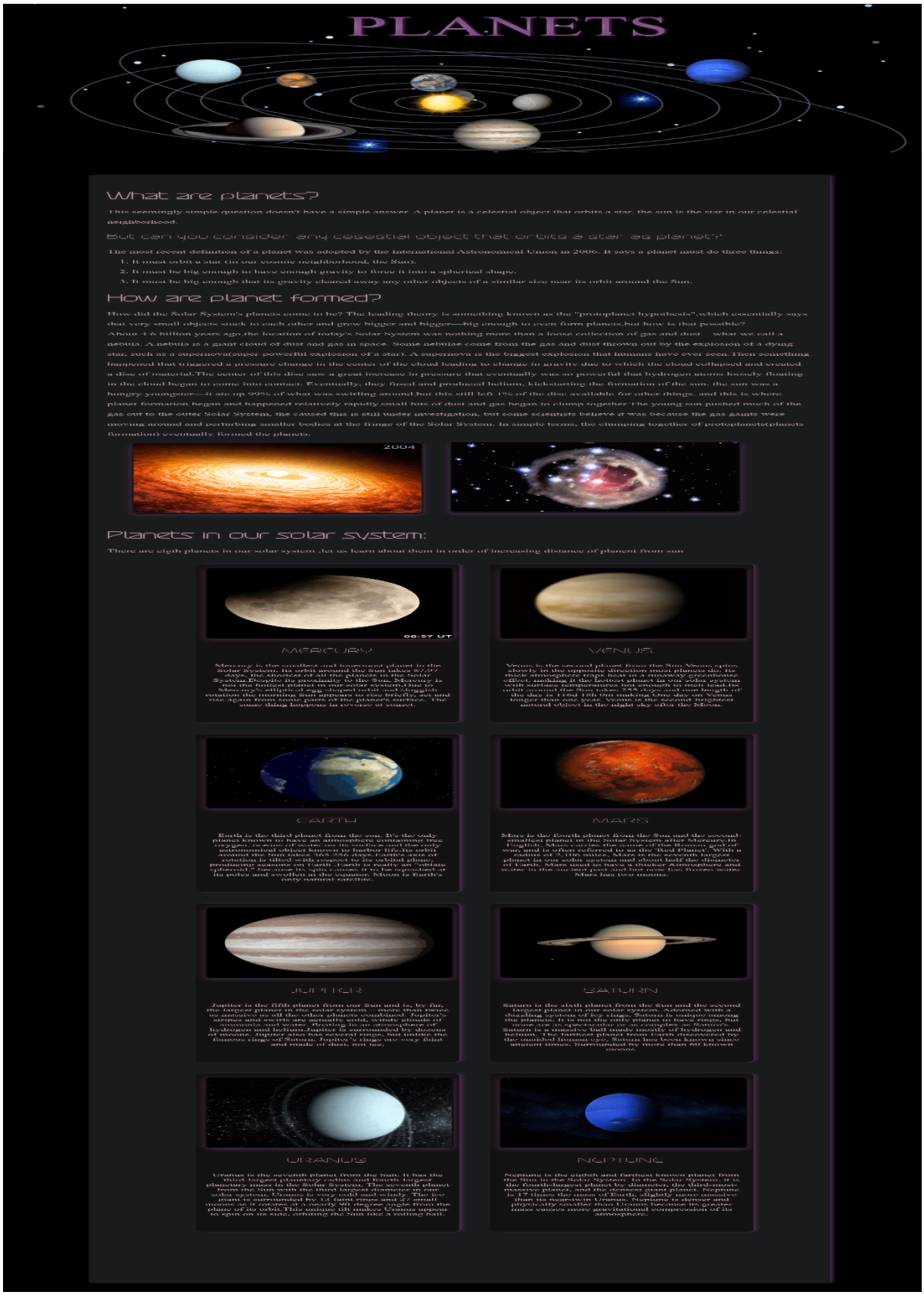


Fig. Planets.html

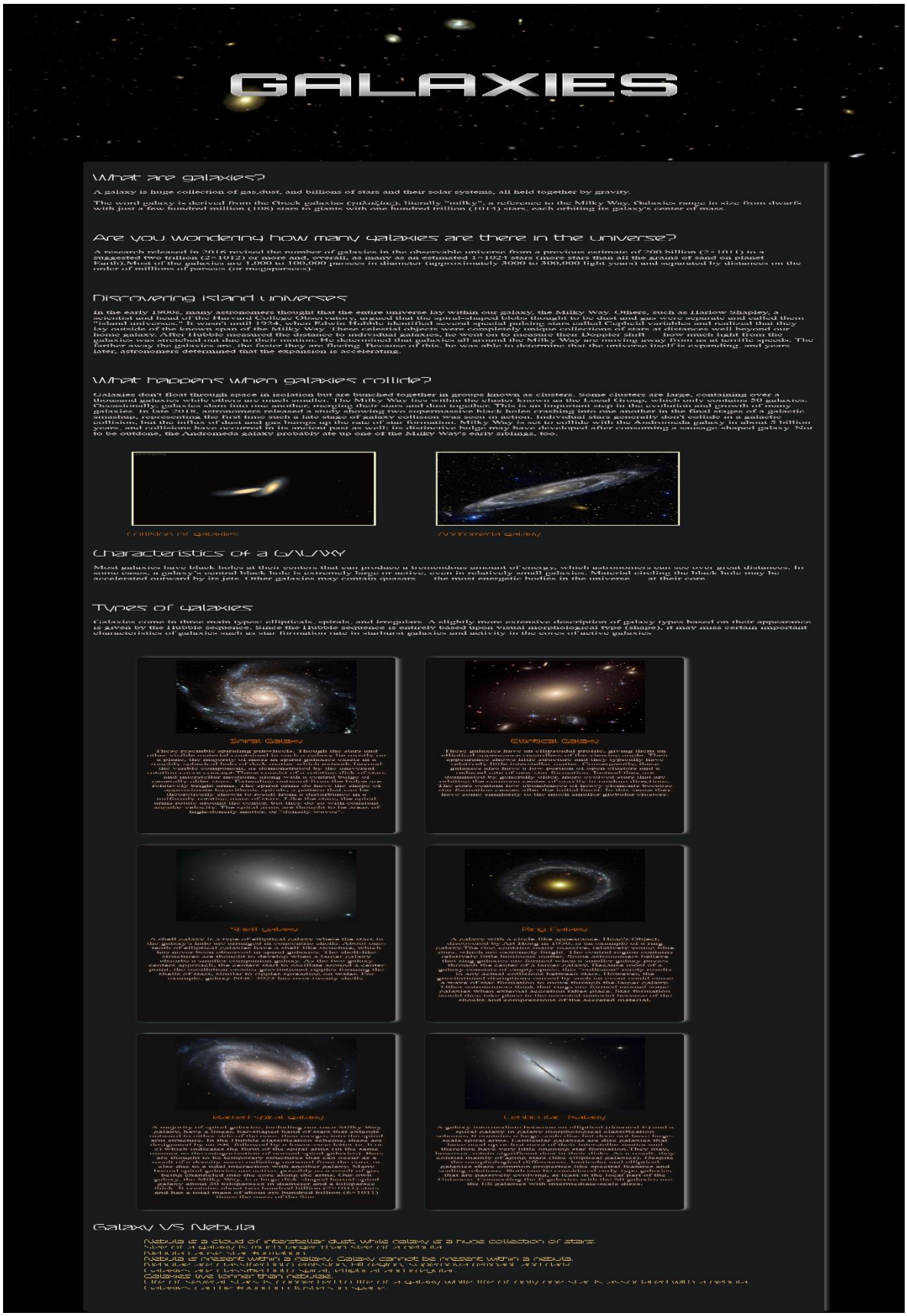


Fig. Galaxies.html

Fig. Home page of quiz.

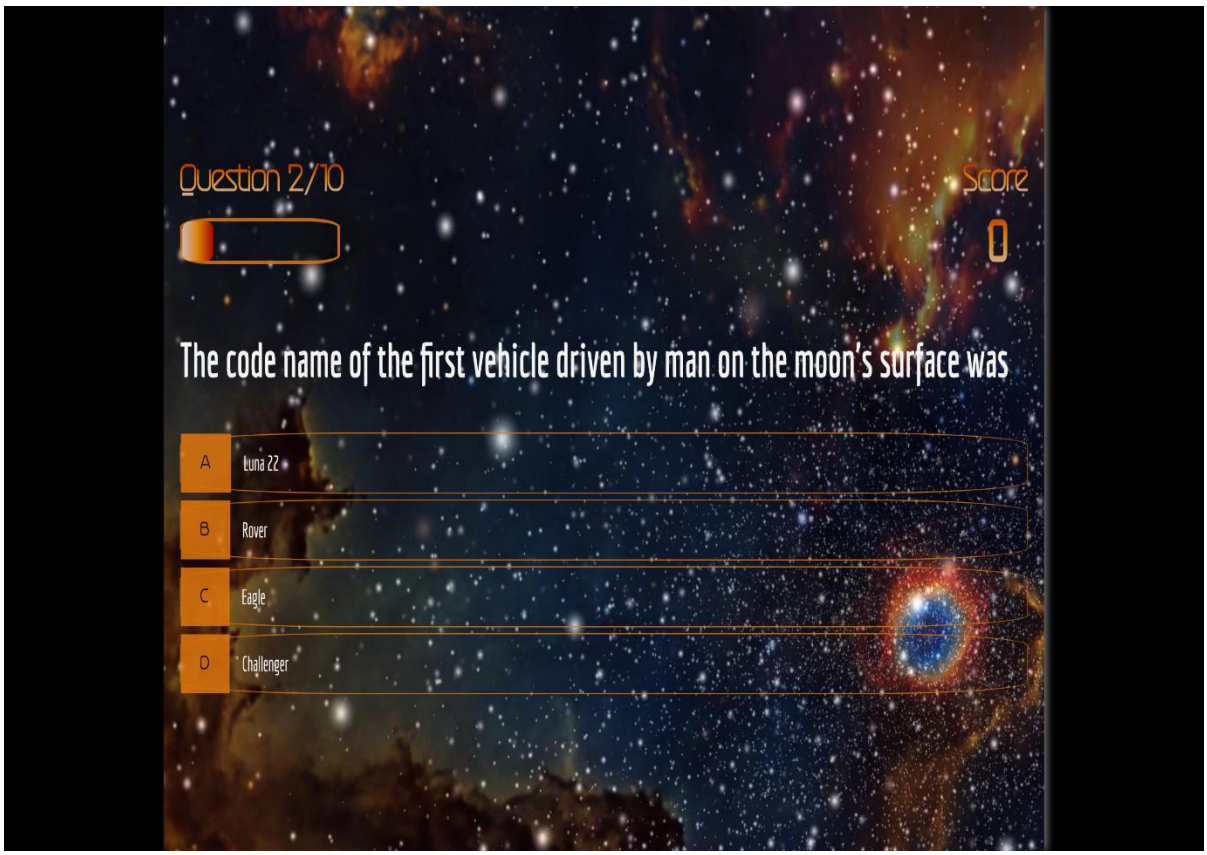


Fig. Sample Question in quiz.

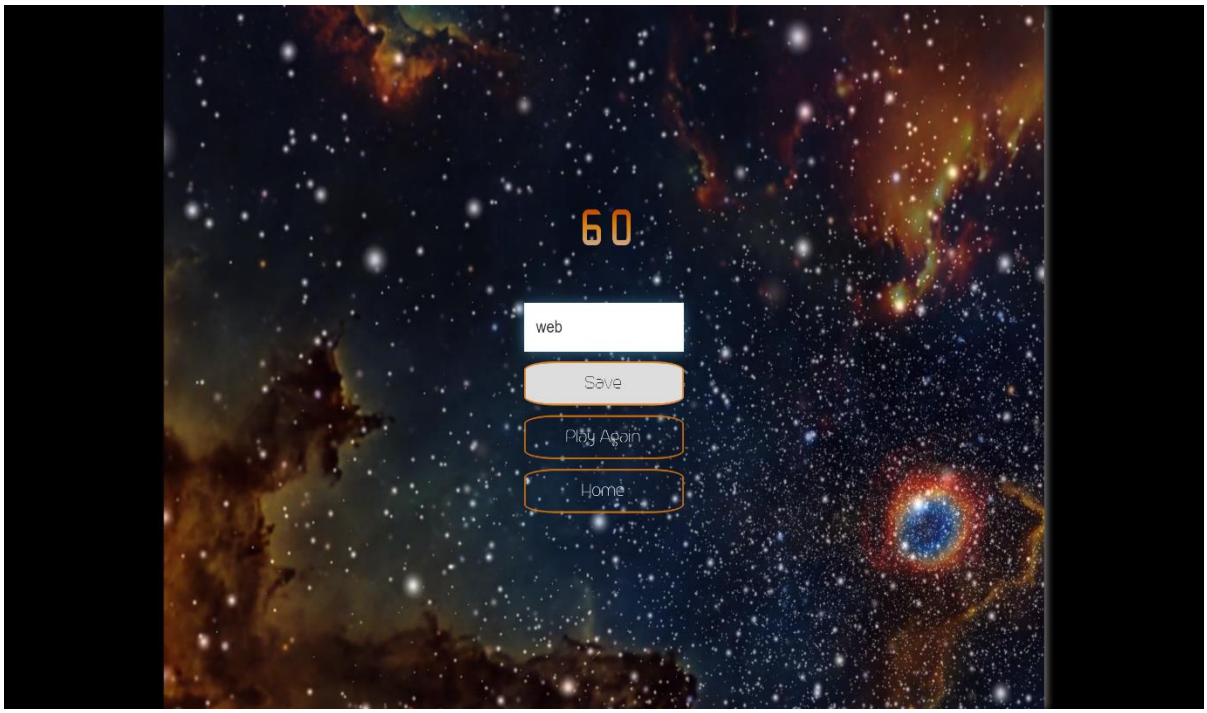


Fig. To save the score by entering the username.

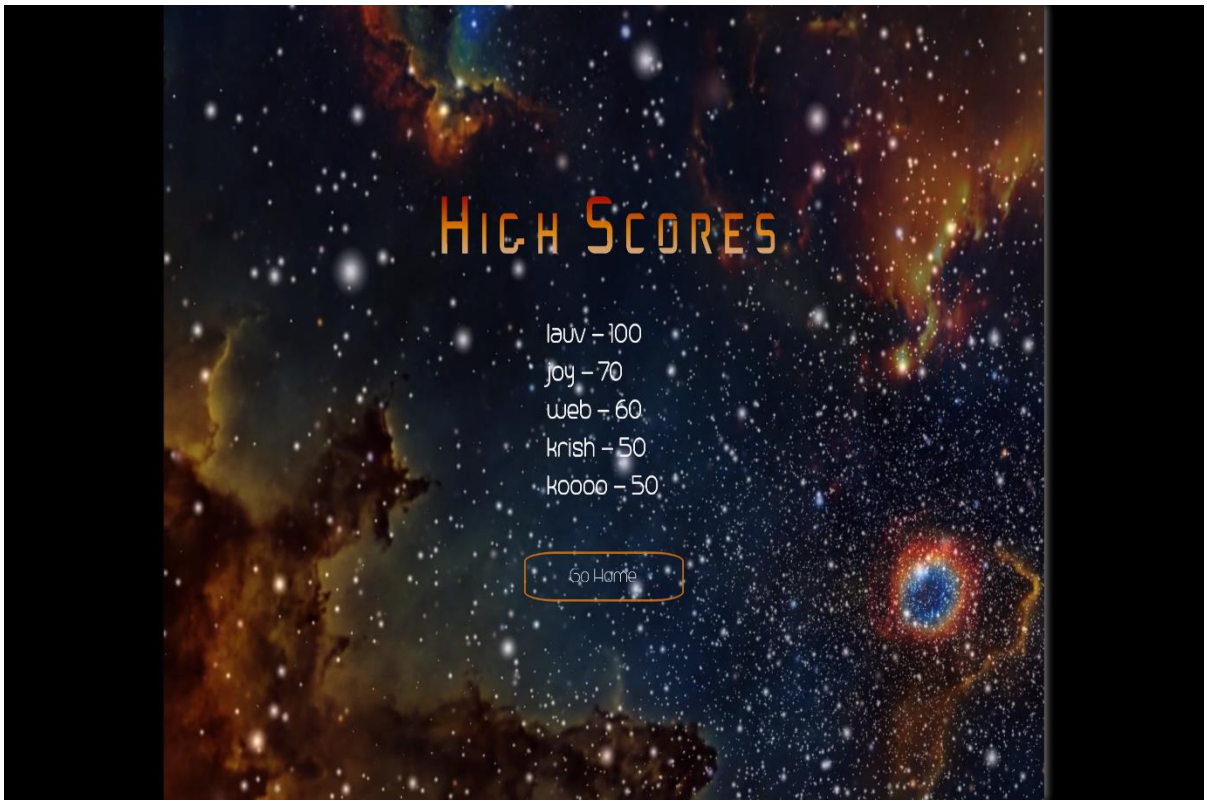


Fig. Displaying scores of the top 5 scores.

```
mysql> use cosmic_voyager;
Database changed
mysql> desc newsletter_list;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| email | varchar(50) | NO   | PRI | NULL    |       |
+-------+-------------+------+-----+---------+-------+
1 row in set (1.27 sec)
```

Fig. Table newsletter_list to store email-id.

Chapter 6

CONCLUSION

Cosmic Voyager project is about making learning more interesting and effective. As humans, we are always curious about how this universe including black-holes, planets, galaxies and many other forms of energy and matter were formed. This cosmic Voyager website gives information regarding how the universe, black-holes, planets and galaxies were formed with attractive Graphics Interchange Format(gif)'s and the website allows users to register with an email-id to get updates on new interesting facts about the universe and to play a quiz based on the universe, making learning interesting, effective and fun.

Chapter 7

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2. M. Dietel, P. J Deital, A.B. Goldberg, Internet & World Wide Web How to Program- 5th Edition, Pearson Education, 2009

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7. https://howto-wordpress-tips.com/css-text-color-gradient-tutorial/?cn-reloaded=1
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