SIX MONTH TRAINING REPORT

ON

Django

SUBMITTED IN PARTIAL FULFILLMENT FOR AWARD OF DEGREE OF

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE & ENGINEERING

Submitted by

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Branch: B.Tech CSE 8th

PROJECT MADE: PRESAGE INSIGHTS PRIVATE LIMITED



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MALOUT INSTITUTE OF MANAGEMENT & INFORMATION TECHNOLOGY, MALOUT

COPY OF CERTIFICATE

Certificate



TO WHOMSOEVER IT MAY CONCERN

Date: 10-06-2022

This is to certify that Mr. Sharandeep Singh has completed his internship in Web Developer with Presage Insights Pvt. Ltd from 7th Feb 2022 to 10th June 2022.

During his internship he had done great contribution to the team and worked as developer with Mr. Kamalpreet Singh.

His conduct and behavior are satisfactory, and is sincere and hardworking.

We deeply thank him for his contributions and wish him good luck for future.

Sincerely.

Kamalpreet Singh

For PRESAGE INSIGHTS PYTLTD.

Director Presage Insights Pvt Ltd

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ACKNOWLEDGEMENT

Technology plays a huge role in our daily lives, from the simplest of apps to the most groundbreaking inventions. Every website of piece of software that we encounter has been built by a web developer. In this present world of competition there is a race of existence in which those are having will to come forward succeed. With this willing I joined my six month industrial training in the field of Django made a project of PRESAGE INSIGHTS PRIVATE LIMITED. First of all, I amSharandeep Singh would like to thank the supreme power the Almighty God who is obviously the one has always guided me to work on the right path of life.

I sincerely thank Mr.Kamapreet Sidhu and Mr.Atul Sharma, my instructor in my training, for guiding me at each phase of the training and for providing me with many opportunities to study and gain experience in the field of Web designing and development. His way of teaching and suggestions not only helped me to reach the successful completion of my project but also made me learn a lot about the world of web development.

I would also like to convey my gratitude towards Solitaire PRESAGE INSIGHTS PRIVATE LIMITED, Faridabad, and their team for giving me such an environment to study and enhance my professional skill in the conditions of lockdown where I not only get to learn a lot but also have a rewarding experience.

I also would like to thank my college staff for always standing with me.

I extend my warm gratitude and regards to everyone who contributed and helped me to complete my project.

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ORGANIZATION PROFILE

PRESAGE INSIGHTS PRIVATE LIMITED is a Private Company, who was incorporated 0 Year(s) 10 Month(s) 22 Day(s) ago on dated 23-Jul-2021. PRESAGE INSIGHTS PRIVATE LIMITED is classified as Non-govt company and is registered at Registrar of Companies located in RoC-Delhi. As regarding the financial status on the time of registration of PRESAGE INSIGHTS PRIVATE LIMITED Company its authorized share capital is Rs. 1000000 and its paid up capital is Rs. 100000.

As Per Registration of Company, It involves under in Business Activity Class / Subclass Code 31900, Main Activity of the said Company PRESAGE INSIGHTS PRIVATE LIMITED is:, Manufacture of other electrical equip ment n.e.c., It Comes Under Division MANUFACTURE OF ELECTRICAL MACHINERY AND APPARATUS N.E.C. and this come under scetion MANUFACTURING.

TRAINING DETAILS

1. HTML

Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by *tags*, written using angle brackets.

Tags such as **<img** /> and **<input** /> directly introduce content into the page. Other tags such as **>** surround and provide information about document text and may include other tags as sub elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behaviour and content of web pages. Inclusion of CSS defines the look and layout of content.

2. CSS

CSS is stand for Cascading style sheet. CSS is used to design HTML tags. CSS is a widely used language on web. HTML, CSS and JavaScript are used for web designing. It help the web designers to apply style can HTML tags.CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by Specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile

device. The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

PROJECT WORK

INTRODUCTION

I have done my trainting from PRESAGE INSIGHTS PRIVATE LIMITED. During training I have done work on company official website as a front-end developer. During this traing I have learn to many things, like how to work on django framework and how to work with django. In this website there are main 5 pages. Which contain HOME,Product,Services,Blogs and last one in Contact. In this website they basically show there projects and deals with there clients.

PURPOSE

The purpose of the competition of the to develop interests in subject areas of Sports, History and Politics. A quiz is a form of game or mind sport in which players attempt to answer questions correctly about a certain or variety of subjects. Quizzes can be used as a brief assessment in education and similar fields to measure growth in knowledge, abilities, or skills. Quizzing has been found in records from the ancient and medieval periods. If ancient Romans or Aboriginal peoples quizzed, they did not leave anything that shows it. The earliest known appearance of the word *quiz* in print, according to the *Oxford English Dictionary (OED)*, is surprisingly recent—1782—and the word then referred to an odd-looking person. The etymology of the word is unknown. The purpose of Quiz Management System is to to enhance the knowledge of the students. It contain the quiz that is related to everyone daily life just like Sports, History and Politics.

Advantages

Global market: Clearly, when you open a physical store, you will only be able to deliver your goods and services in a small geographic area. E-commerce will help you solve that problem. E-commerce helps you reach the market quickly, expanding the market to the maximum level compared to direct sales, so that products and services are easily introduced, purchased and sold through retailers. and online market.

Always open: In e-commerce, running an online business is much easier, it's always open 24h / 7/365. For businesses, it's a great opportunity to increase sales opportunities all the time.

Budget savings: Compared with traditional forms of commercial business, all costs when e-commerce business are reduced: the cost of renting booths, salespeople and management is much more economical. Naturally, when sellers save operating costs, they can offer more incentives and better discounts for their customers. At this time, the customer is the next beneficiary. Mutual benefit, isn't it great?

Inventory management: By using electronic tools to speed up the ordering, delivery, and payment processes, e-commerce businesses can save billions of operating costs and reduce amount of inventory.

Most accurate customer marketing: With access to customer data and the opportunity to track customers' buying habits, e-commerce businesses can quickly identify and mar- ket products and services. Service most suitable for consumers.

Work anywhere, buy anywhere: Running an e-commerce business allows you to not need to sit in the office, and buying does not force you to go to the supermarket. Every- thing the seller and the buyer needs is an internet-connected device and that's all.[2]

Challenges

Internet access required: When participating in the EC, to be able to buy and sell, you need a device connected to the internet. Currently, most people have internet access but, in many areas, it is still very limited.

Not enough to trust: Products and services that cannot be seen, touched, held or felt directly, are not allowed to try as a prudent buyer. Doubt in both buyers and sellers leads to many incomplete transactions, especially when they have dealt with untrusted part- ners before.

Limited payment methods: Currently, the most popular payment method in Vietnam when buying goods online is to receive and pay. Payment gateway in Vietnam is growing quite strong, but not reliable enough for users to use as the main payment method. Therefore, it also contributes to teething.

In addition, e-commerce business also faces many other challenges: technical, compet- itors, payment, etc.

1.1 MongoDB

MongoDB is an open source database; it is also the leading NoSQL (*) database cur- recently used by millions of people. It is written in one of the most popular programming languages today. In addition, MongoDB is cross-platform data that operates on the con-cepts of Collections and Documents, providing high performance with high availability and ease of expansion.[8]

(*) NoSQL is a source database format that does not use Transact-SQL to access infor- mation, this database was developed on JavaScript Framework on JSON data type. With its introduction, it has overcome the disadvantages of RDBMS relational data model to improve operating speed, functionality, model scalability, cache ...

Furthermore, MongoDB is a cross-platform database, performing on Collection and Doc-ument approach, it produces sharp production, huge availability, and effortless scalabil-ity.

Commonly used terms in MongoDB:

- _id: Almost every document required this field. The _id field illustrates a excep- tional value in the MongoDB document. The _id field can also be interpreted as the primary key in the document. If you add a new document, MongoDB will au-tomatically generate a _id representing that document and be unique in the Mon-goDB database.
- Collection: A group of many documents in MongoDB. Collection can be inter- preted as a
 corresponding table in the RDBMS (Relational Database Manage- ment System) database.
 Collection resides in a single database. Collections do not have to define columns, rows or data
 types first.
- **Cursor:** This is a pointer to the outcome set of a query. The client can emphasize over a cursor to get the result.

Database: The location of the collections, similar to the RDMS database that contains the tables.
 Each Database has a separate file stored on physical memory. Some MongoDB owners may contain various databases.

• **Document:** A transcript belonging to a Collection. Documents, in turn, include name and value fields.

• **Field:** A name-value pair in a document. A document may not need all the fields. The fields are like columns in a relational database.

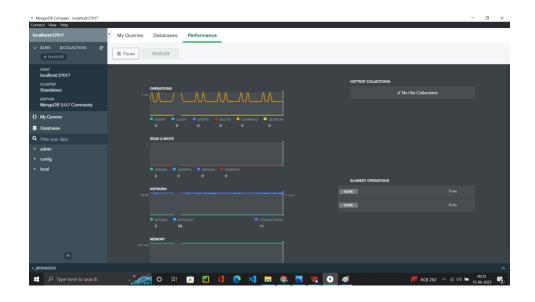
• **JSON:** Short for JavaScript Object Notation. Human readability is in the plain text format representing structured data. JSON currently supports a lot of program- ming languages.

• Index: Exclusive data structures used to save a small allocation of data sets for simple scanning. The index puts the value of a individual field or sets of fields, sorted by the value of these fields. Index effectively supports the analysis of que-ries. Without an index, MongoDB will have to scan all the documents of the set to choose the documents that pair the query. This scan is ineffective and requiresMongoDB to progress a vast amount of data.

MongoDB Atlas is MongoDB's cloud database launched in 2016 on AWS, Microsoft Az- ure and Google Cloud Platform.

The data in each Cluster in the Atlas is stored by Replication mechanism, with 3 nodes: 1 master (primary) and 2 slaves (secondary).

Figure 1. MongoDB Compass screenshot.



SCREENSHOTS

<u>Coding:</u> In installations and configurations of Quiz Management system stage, it needs to convert design specification of system to implementation and most of design specification is complex and very large to implement. By using iterative waterfall methodology, it provides to manage complexity of system by breaking every single pieces of activities into smaller tasks whenever each activity face invalidity occasion in developing of information system application.

In quiz management system it contain whole coding of the project is context.js file.

Coding is done by the coder or programmers who are independent people than the designer. The goal is not to reduce the effort and cost of the coding phase, but to cut to the cost of a later stage. The cost of testing and maintenance can be significantly reduced with efficient coding.

Goals of Coding

- 1. To translate the design of system into a computer language format: The coding
- is the process of transforming the design of a system into a computer language format,
- which can be executed by a computer and that perform tasks as specified by the design of operation during the design phase.
- **2. To reduce the cost of later phases:** The cost of testing and maintenance can be significantly reduced with efficient coding.
- **3. Making the program more readable:** Program should be easy to read and understand. It increases code understanding having readability and understandability as a clear objective of the coding activity can itself help in producing more maintainable software.
- **4.** Coding improves persistence: Just like learning something new, learning to code

is a challenging. When coding, you'll come across complicated problems, make mistakes along the way, and handling them can be frustrating. Coding will teach kids and teens the valuable skill of persistence when confronting such challenges.

Characteristics of Programming Language



Readability: A good high-level language will allow programs to be written in some methods that resemble a quite-English description of the underlying functions. The coding may be done in an essentially self-documenting way.

Portability: High-level languages, being virtually machine-independent, should be easy to develop portable software.

Generality: Most high-level languages allow the writing of a vast collection of programs, thus relieving the programmer of the need to develop into an expert in many diverse languages.

Brevity: Language should have the ability to implement the algorithm with less amount of code. Programs mean in high-level languages are often significantly shorter than their low level equivalents.

Error checking: A programmer is likely to make many errors in the development of a computer program. Many high-level languages invoke a lot of bugs checking both at compile time and run-time.

Cost: The ultimate cost of a programming language is a task of many of its characteristics.

Open the project:

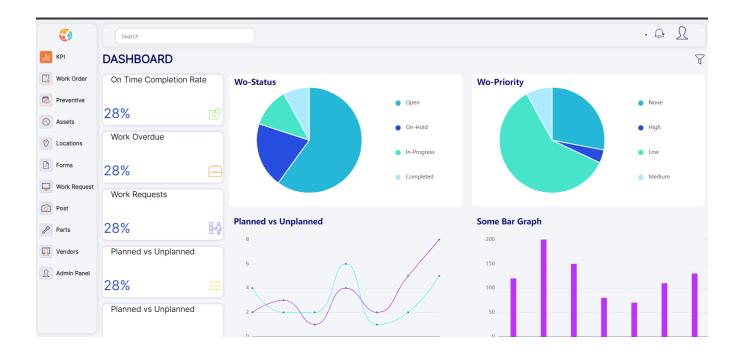
```
Help
                       context.js - 23-quiz - Visual Studio Code
                JS context.is X
JS index.js
                                # index.css
final > src > JS context.js > [∅] API_ENDPOINT
       import axios from 'axios'
       import React, { useState, useContext, useEffect } from 'react'
     const table = {
       sports: 21,
        history: 23,
         politics: 24,
       const API_ENDPOINT = 'https://opentdb.com/api.php?'
 10
       const tempUrl =
         'https://opentdb.com/api.php?amount=10&category=21&difficulty=easy&type=multiple'
       const AppContext = React.createContext()
       const AppProvider = ({ children }) => {
         const [waiting, setWaiting] = useState(true)
         const [loading, setLoading] = useState(false)
         const [questions, setQuestions] = useState([])
         const [index, setIndex] = useState(0)
         const [correct, setCorrect] = useState(0)
         const [error, setError] = useState(false)
         const [quiz, setQuiz] = useState({
           amount: 10,
           category: 'sports',
           difficulty: 'easy',
         })
         const [isModalOpen, setIsModalOpen] = useState(false)
                                                                Ln 10, Col 42 Spaces: 2 UTF-8 LF {} JavaS
```

```
inal Help
                             context.js - 23-quiz - Visual Studio Code
                      JS context.js X
     JS index.js
                                      # index.css
     final > src > JS context.js > [∅] API_ENDPOINT
              const fetchQuestions = async (url) => {
                 setLoading(true)
                setWaiting(false)
                 const response = await axios(url).catch((err) => console.log(err))
                if (response) {
                   const data = response.data.results
                   if (data.length > 0) {
                     setQuestions(data)
                     setLoading(false)
                     setWaiting(false)
      40
                     setError(false)
                   } else {
                     setWaiting(true)
                     setError(true)
                 } else {
                   setWaiting(true)
      50
              const nextQuestion = () => {
                 setIndex((oldIndex) => {
                   const index = oldIndex + 1
                   if (index > questions.length - 1) {
      54
                     openModal()
                     return 0
                   } else {
                     return index
                                                                       Ln 10, Col 42 Spaces: 2 UTF-8
```

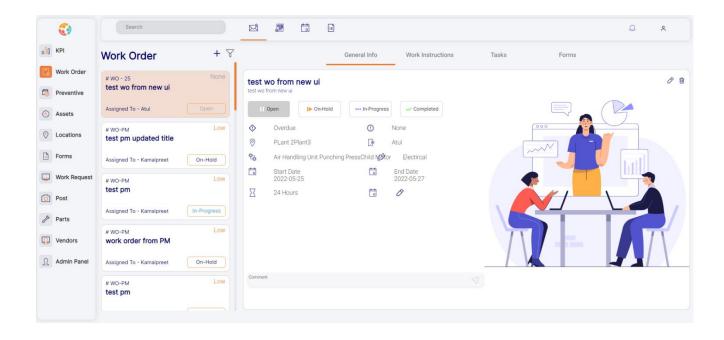
```
Help
                         context.js - 23-quiz - Visual Studio Code
JS index.js
                  JS context.js
                             ×
                                    # index.css
final > src > JS context.js > [6] API_ENDPOINT
 89
          return (
 90
 91
            <AppContext.Provider</pre>
 92
               value={{
                 waiting,
 93
                 loading,
 94
 95
                 questions,
 96
                 index,
 97
                 correct,
 98
                 error,
 99
                 isModalOpen,
100
                 nextQuestion,
                 checkAnswer,
101
102
                 closeModal,
103
                 quiz,
104
                 handleChange,
                 handleSubmit,
105
106
              }}
107
              {children}
108
            </AppContext.Provider>
109
110
111
        // make sure use
112
113
        export const useGlobalContext = () => {
114
          return useContext(AppContext)
115
        }
116
        export { AppContext, AppProvider }
117
118
```

The Output Is:

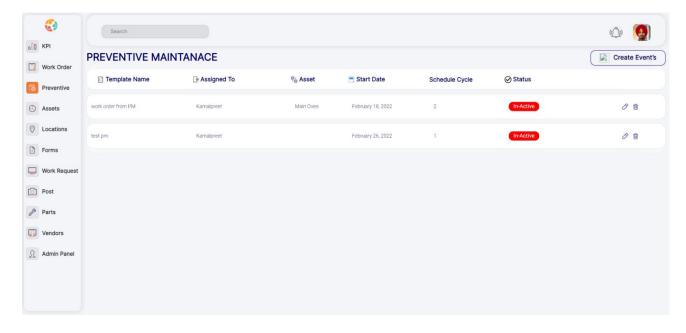
Home Page



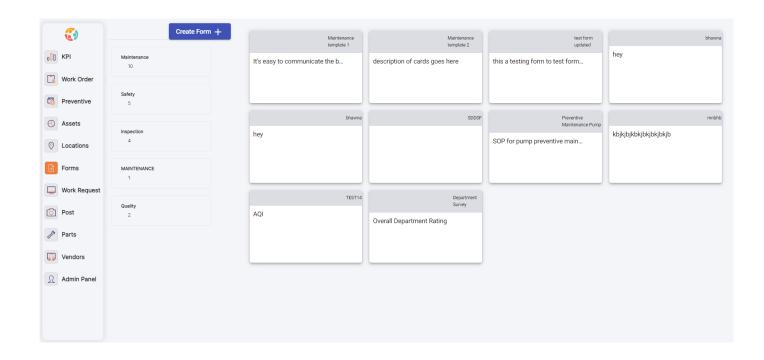
Work Order



Preventive Maintanace



Forms



Testing

System Testing

Testing: Integration each part modules of system plays major role in Online Hotel Booking system to reach complete system during Integration phase and tested to check if all pieces of activities coordinate between each other and the system as a whole behaves as per the specifications. We will use the test cases and test logs to test the project correctness and efficiency. The process of verification and validation checks all products, services, system meets requirements and acceptable by the user that makes the system to be less flaws and lower risk. In computer hardware and software development testing in used at key checkpoints in overall process to determine whether objectives are being met.

Executing a program with the intent of finding errors is called testing. Testing is vital to the success of any system. Testing is done at different stages within the development phase. System testing makes a logical assumption that if all parts of the system are correct, the goals will be achieved successfully. Inadequate testing or no testing at all leads to errors that may come up after a long time when correction would be extremely implementation. The testing of the system was done on both artificial and live data. In order to test data test cases are developed.

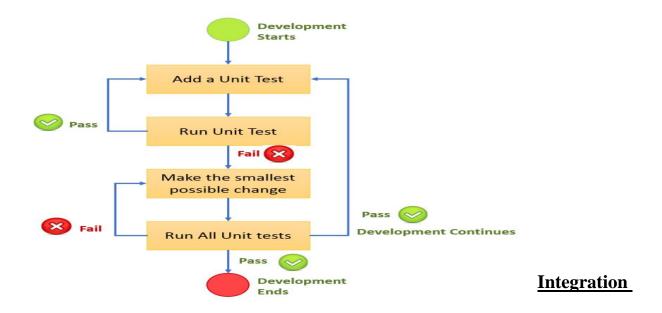
Following are the various methods that are employed for testing

Unit Testing

In unit testing the module is tested independently. It is done to test that the module does satisfy the functional specification. This is done to check syntax and logical errors in programs. At the time of preparation of technical specifications, unit test data was also prepared. The coding for that program was considered after verifying its output against this test data.

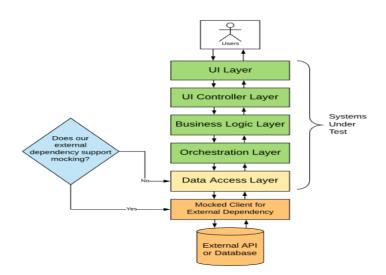
Following are the unit testing methods:

- In Conditional Testing, the logical conditions that are given in the module were checked to see whether they satisfy the functionality of the module. This is done by using the test data was prepared.
- In Loop Testing, different loops in the module like nested loops were tested using the data. Attempts to execute the loops to their maximum range are done.



Testing

In Integration testing whole system was checked when all the individual modules were integrated together in order to test whether the system is performing as according to the requirements specified. Interface errors if any were corrected. Test data was prepared was fed into the system to check whether the system fails to detects an error



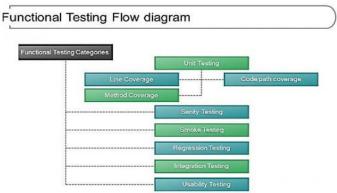
Functional

This is done for each module/sub module of

the system. Functional testing serves as a means of validating whether the functionality of the system confers the original user requirement i.e., does the module do what it was supposed to

do? Separate schedules were made for functional testing. It involves preparation of test data, writing of test cases, testing for conformance to test cases and preparation of bugs' listing for non-conformities.

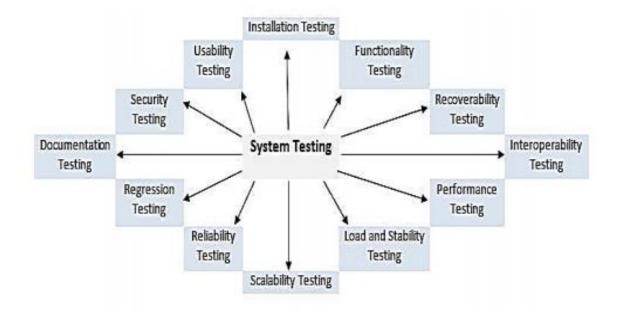
Testing



<u>System</u> <u>Testing</u>

System testing is done when the entire system has been fully integrated. The purpose of the system testing is to test how the different modules interact with each other and whether the entire system provides the functionality that was expected. System testing consists of the following steps:

- Program Testing
- System Testing
- System Documentation



In each case, validating base requirements is a critical assessment. Just as important, exploratory testing helps a tester or testing team uncover hard-to-predict scenarios and situations that can lead to software errors. Even a simple application can be subject to a large number and variety of tests. A test management plan helps to

prioritize which types of testing provide the most value – given available time and resources. Testing effectiveness is optimized by running the fewest number of tests to find the largest number of defects.			

CONCLUSION

Web services technology, although very much in its nascent stage, is all set to hit the mainstream enterprise computing.

Security concerns are taking challenging dimensions in this Web services-driven world. The basic concepts of enterprise security, although very relevant, are not directly applicable to Web services because of complex application-to-application interactions.

Standards and technologies are in the process of evolving; but the overall growth and development has been slowed down because of the difficulty in realizing vendor-neutral/platform-independent XML security standards.

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