



**Project report in partial fulfillment of the requirement for the award of the degree of  
Bachelor of Technology in CSE**

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## **CERTIFICATE**

This is to certify that the project titled **CodersZone** submitted by **Adrija Nag (University Roll No. 12021002001163)**, **Anubhab Pal (University Roll No. 12021002001190)**, **Anwesa Sinha (University Roll No. 12021002001154)**, **Arijit Dey (University Roll No. 12021002001177)**, **Asmita Sarkhel (University Roll No. 12021002001166)**, **Draksha (University Roll No. 12021002001182)**, **Pramit Roy (University Roll No. 12021002001252)**, **Samriddhi Dubey (University Roll No. 12021002001175)**, **Satyaki Dawn (University Roll No. 12021002001155)** and **Subhadip Das (University Roll No. 12021002001258)** students of **UNIVERSITY OF ENGINEERING & MANAGEMENT, KOLKATA**, in partial fulfillment of the requirement for the degree of Bachelor of Computer Science & Engineering, is a bonafide work carried out by them under the supervision and guidance of **Prof. Sudipto Kumar Mondal & Prof. Sukanya Roy** during the 3rd Semester of the academic session of 2021 - 2025. The content of this report has not been submitted to any other university or institute. I am glad to inform you that the work is entirely original and its performance is found to be quite satisfactory.

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Signature of Guide

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Signature of Head of the Department

**(Prof. (Dr.) Sukalyan Goswami)**

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Last but not the least, we would like to extend our warm regards to our families and peers who have kept supporting us and always had faith in our work.

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## **ABSTRACT**

### **INTRODUCTION :**

Technology has played an important role in improving and expanding education worldwide. Websites are a part of technology through which institutions and companies can easily and cheaply share and advertise their profiles with the rest of the world.

This website has been developed by the students of UEM Kolkata to help in a beneficial way to get access to educational codes, a user-friendly interface, and easy navigation, in order to get their ideas about the role and importance of a website for self-improvement and studies for further accomplishments.

Besides this, I distributed a survey (which addressed the role and importance of a website) among a group of people to have their input as well on the importance of the website.

After analyzing the provided data and statistics, I realized that almost all students, senior officials, and employees working in the corporate sector as well as interested fellows who have dedicated themselves to learning web development, and tech language and enhancing their coding skills should have a website which they can follow.

First of all, this is an attempt for the users to enhance their quick problem-solving skills and amplify their practical mindset. In addition, the website will provide the users with a better opportunity to update given materials. Also, it will be a safe gateway to enter the internet. Furthermore, some renowned universities have shown interest to attach study materials and modules on the website so that users can use, learn and download them whenever they want as per their needs.

**Keywords:** Educational website, usability, navigation, organization, simplicity

## LITERATURE SURVEY :

A literature survey is a piece of academic writing demonstrating knowledge and understanding of a specific topic placed in context.

We have also included a critical evaluation of our website and reviewed the whole process. It is used for educational purposes and has different features that aid learning.

This is a website that is used for designing effective programming language courses such as C, Python, and Java.

Features of the website that makes it suitable to be used include:

### 1. Usefulness:

This website is divided into two frames. The page is simple and contains information that can be easily accessed. The users can easily navigate from one part of the website to another since the links are all included on the home page. As the learning process progresses, the level advances. It gives the users an opportunity to learn from the simplest features to the more complicated ones step by step.[2.a] [2.b]

### 2. Ease of use:

The website is very easy to use. When a link is clicked on the left frame, it opens up on the right. The left frame remains visible at all times. This makes it easy for the users to cascade from one page to the other of the website without difficulty.[1.b]

### 3. Cost:

This website makes the learning process very easy since most of the resources that are required for the course are easily available. The website is also simple which makes the design work and the maintenance work very easy.[1.a]

### 4. Reliability:

This website is very reliable and legitimate as the information in the website is constantly updated so as to meet the constant change/advancement in technology.[3.a]

### 5. Teaching or learning outcomes:

Lessons taught and codes provided using this website are easy to understand and follow. The systematic way that is arranged makes it very easy for the users to understand.[3.b]

**PROBLEM STATEMENT :**

There have been several problems with transitioning to a fully online-based educational website. The report aims to describe the advantages and disadvantages of this transition, with interviews and case studies.

1. Internet Reliance:

That one flaw with the internet is that it is not everywhere yet. If your internet goes down or you happen to be in an area that has not been connected yet you will not be able to access this web page.

2. Security:

There is no denying that data provided by the user is less secure when it is in the cloud, especially when users from all over the world are accessing the same server hosted by a third party. Although there are ways to reduce your risk, email encryption and SSL enforcement for secure HTTPS access are just two examples.

3. Reduced Speed:

A web page will probably be slower. The user needs to decide if a slight reduction in speed is worth the worldwide access.

4. Browser Support:

Unfortunately, users do not have access to one version of a browser because of the given choices. This means it has to make sure the web page is supported across various browsers and for various screen sizes.

**PROPOSED SOLUTION :**

This website which has been reviewed above contains educational information which can be used in a systematic way. It has procedures that can be used for studying different articles in different subparts that anyone can cover. The first block contains a lot of information about the basics and process of designing a programming session. The users should be familiarized with the use of the website resource. Once they have been familiarized with the use of the website, the learning process can then start. Some websites can be used for online learning by students in different parts of the world. Unlike the use of traditional learning methods, the use of the website increases flexibility in the learning process. Also, students do not need to travel to the classroom to learn since all the information needed can be easily obtained from the internet. This option also gives the users an opportunity to do other jobs and perform the learning process on their own time. This is because provided sessions are not restrictive. Anyone can access the website on their own time and get access to the information available. The use of these types of learning resources also makes the process of gaining knowledge much easier and cheaper as compared to traditional teaching methods.

All the possibilities of technology-enabled learning also create challenges we will face as we embrace the change necessary to realize its potential. With the proliferation of devices and applications, we should build all educators' understanding of and ability to serve as stewards of user data so that only those with lawful access to the data can access it. We also need to find new and creative ways to solve the problem of connectivity in learners' homes so that the learning process does not end when users leave for the day.

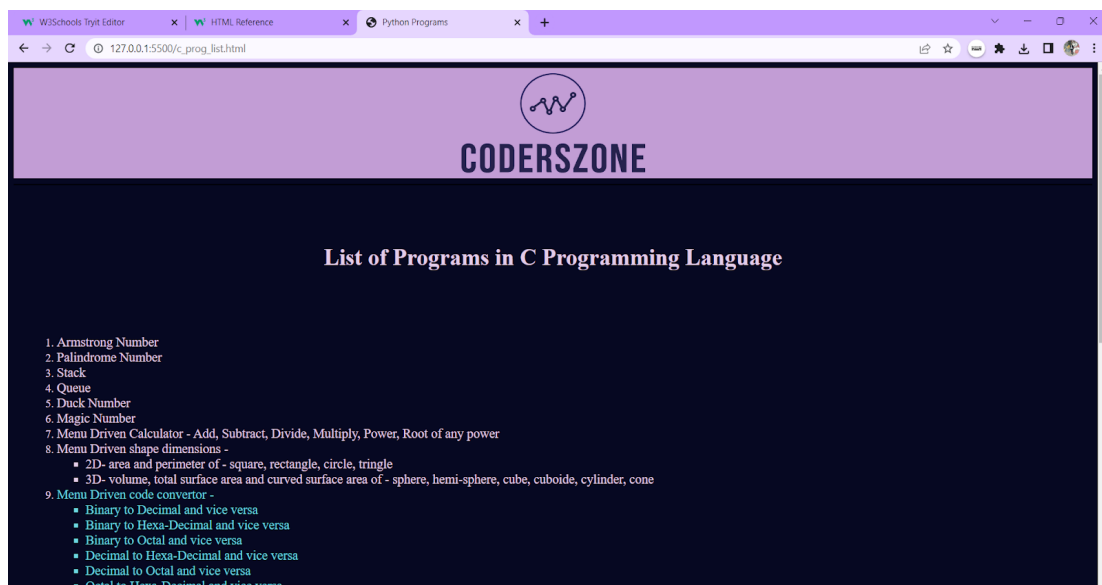


## EXPERIMENTAL SETUP AND RESULT ANALYSIS :

We have examined several descriptive statistics out of a mass of raw submissions and given suggestions. Our goal is to interpret both the accuracy and economy of statements and aspects of samples selected from the population. It should be clear that our primary focus is not on the samples themselves. Their value lies primarily in the light that they may shed on characteristics. We also took a conceptual tour of decision-making.

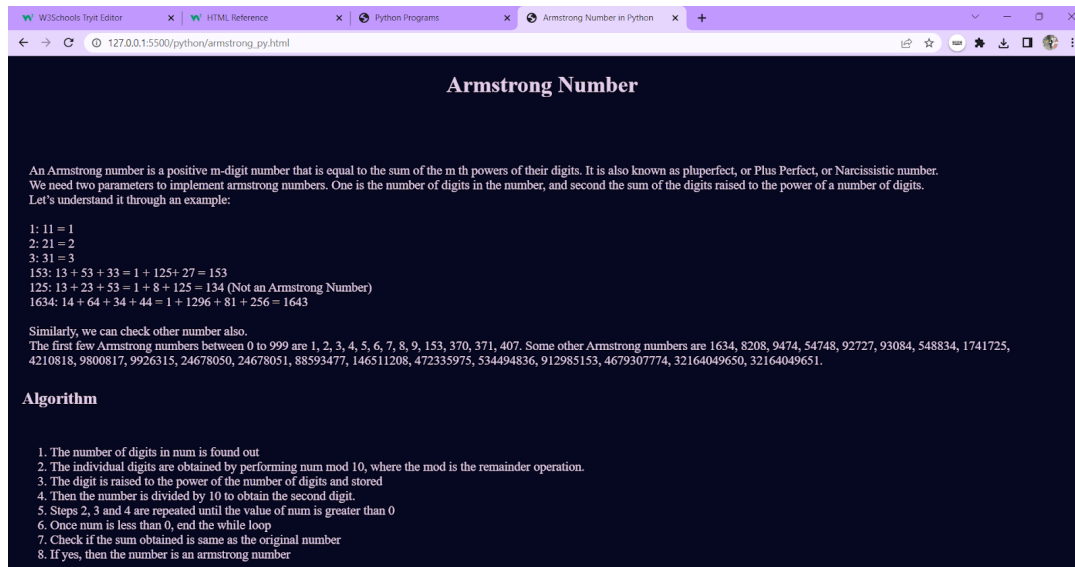


Eventually, it will be easier to understand how the users are learning and getting benefited, and how they have performed in each area of their requirements. It will also be helpful to provide management information as well as to identify areas of strength and weakness of the users.

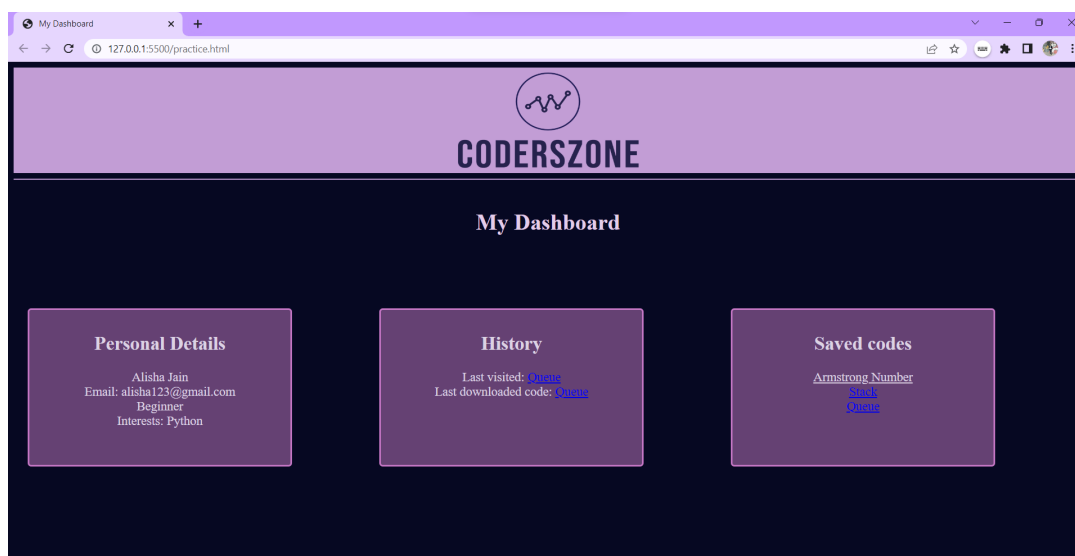


We have initiated a few suitable solutions to improve the website, which are listed below:

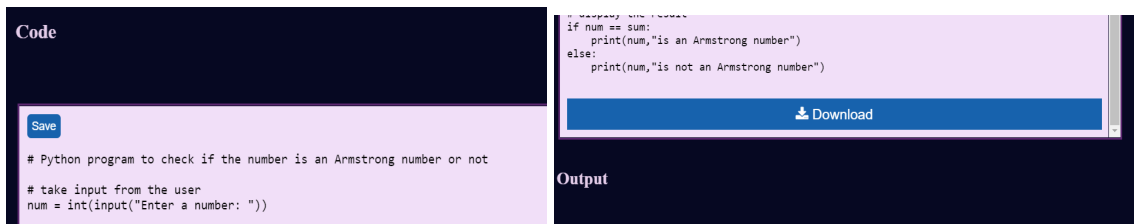
1. The users will be able to access the website and create a personalized account to code and for further accumulation of data and statistics. After registering, they have an account with the providers of the website. Once a user registers, they are given the required login details. The user can then use the details to login into the system and access the learning resources which are available on the website.



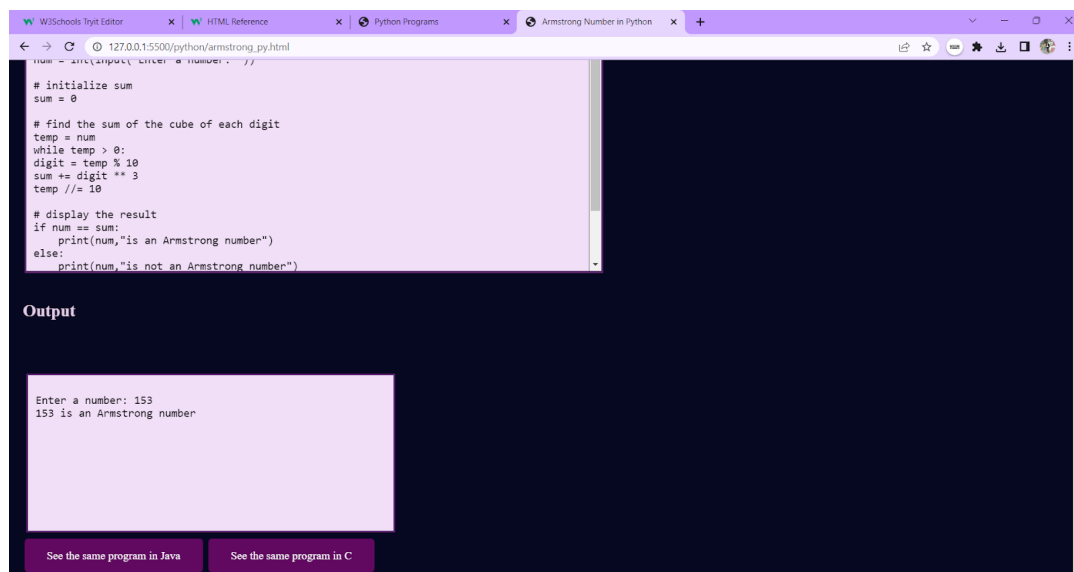
2. A dashboard will be created and provided to each user after they log in through and start compiling. When planning for the lessons, users should be categorized into different groups depending on their learning capabilities . More training time should be allocated to users who are less sharp so that they grasp what is being taught and what the learning resources are all about.



3. The users can search and load programs, as well as verify, execute and recompile them according to one's certain needs.



4. The use of this technology is very effective as it contains a lot of information that can be used in the learning process. The users will be able to access all the information and this makes the use of these resources a very good method for imparting knowledge. For further research and analytics, the users can download the codes and save them in respective extensions.



## CONCLUSION & FUTURE SCOPE :

This website has been created with the help of HTML and CSS. The main motto of the website is to help students in getting the solution to one particular question but in three different languages: C, Java, and Python. The UI has been designed so that students can find the solutions very easily.



Our website also has the very helpful feature of saving and downloading a particular code for the user's future reference. The saved codes are then shown on the profile dashboard of the user. Our download feature lets you download the code in the specific language's extension (i.e. .c for C program files, .java for Java files, and .py for Python files).

As the user sign up to our website, they can design their dashboard and grow referrals with the help of our website. This feature was added to our website after a thorough survey conducted on 100 students, of which 95% requested a space where they can save their reference materials.

Based on a survey taken, we decided to bring more updates in the upcoming days. We can introduce many new and improved features that can be revolutionary in the field of online education. The target of this website is always to be more effective in the field of education and help students in their self-study outside the classroom. In the due time frame provided to us, we came up with the idea that can be revolutionized in the upcoming days, as online education is the fastest-growing platform. What we drafted and presented is the basic structure of a project that has a lot of potential in the coming days.

**BIBLIOGRAPHY :**

The list of the documentation we used to get information for this report :

1. For developing a website we went through a few source links.
  - a. [Wix - To create a website](#)
  - b. [Search-hq.com - "make website with html and css"](#)
2. For learning and scripting, some renowned Youtube channels helped us.
  - a.  Learn HTML Advanced
  - b.  CSS Tutorial - Zero to Hero (Complete Course)
3. For better architecture and design thinking ideas, we got help from a few web pages.
  - a. [GeeksForGeeks Practice - Data Structures and Algorithms](#)
  - b. [tutorialspoint.com](#)