

**A Project**

on

STUDENT CODE-IN: AN OPEN SOURCE PLATFORM

*Submitted in partial fulfillment of the  
requirement for the award of the degree*

*of*

**B-Tech(CSE)**



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OCTOBER,2021**



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**CANDIDATE'S DECLARATION**

I/We hereby certify that the work which is being presented in the thesis/project/dissertation, entitled “**Student Code-in , an open source platform**” in partial fulfillment of the requirements for the award of the **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING** submitted in the School of Computing Science and Engineering of Galgotias University, Greater Noida, is an original work carried out during the period of **JULY-2021 to DECEMBER-2021**, under the supervision of **Dr. Avneesh Kumar**, Department of Computer Science and Engineering/Computer Application and Information and Science, of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the thesis/project/dissertation has not been submitted by me/us for the award of any other degree of this or any other places.

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This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

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**CERTIFICATE**

The Final Thesis/Project/ Dissertation Viva-Voce examination of **18SCSE1010631 – Akanksha Raghav ,18SCSE1010293 – Archit Tyagi** has been held on \_\_\_\_\_ and his/her work is recommended for the award of **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING**

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Date:

Place: Greater Noida

## Abstract

Open source projects rely on collaboration of members from all around the world using web technologies like GitHub and Gerrit. This mixture of people with a wide range of backgrounds including minorities like women, ethnic minorities, and people with disabilities may increase the risk of offensive and destroying behaviours in the community, potentially leading affected project members to leave towards a more welcoming and friendly environment. To counter these effects, open source projects increasingly are turning to codes of conduct, in an attempt to promote their expectations and standards of ethical behaviour. In this first of its kind empirical study of codes of conduct in open source software projects, we investigated the role, scope and influence of codes of conduct through a mixture of quantitative and qualitative analysis, supported by interviews with practitioners. We found that the top codes of conduct are adopted by hundreds to thousands of projects, while all of them share 5 common dimensions

The main problem was that students did not get industry experience and were unable to work on a real-life project or contribute to open-source, What they need to do to crack the Google Summer of Code or the Google Season of Docs.

The solution we introduce to the students, we started a collaboration with a few organizations and some start-ups.

**Student code-in is a global program focused on introducing students to open source software development. Students work on a 10-week programming project with an open-source organization during their break from a post-secondary academic program.**

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# CHAPTER-1

## Introduction

Study of existing systems

The existing system is google summer of code,

google season of docs, Outreachy, Girlsscript summer of code

Rails summer of code and Girlscript summer of code. GSoc is fully for beginners and helps newbies in open-source

Identification of problem

The main problem was that students did not get industry experience and were unable to work on a real-life project or contribute to open-source,

What they need to do to crack the Google Summer of Code or the Google Season of Docs.

Most of these projects needs some technical knowledge or some experience regarding the project or the tech stacks used. If a person is complete newbie he or she is not able to get selected in these kind of projects.

Project proposal

- STUDENT CODE-IN is founded with a vision to promote all-round information to those keen students who are here in the globe finding a way for their obstacle.
- At STUDENT CODE-IN we have strived to a system that supports and encourages you with varied quality of experiences offered by expert mentors.
- It is our firm belief that as a part of STUDENT CODE-IN you will get an array of opportunities to develop your skills in numerous ways.
- We assure you that this platform gives you a touch of redefined excellence, vision, and wings to your dreams of being a developer.

In turn, the participating organizations are able to identify and bring in new developers who implement new features and hopefully continue to contribute to open source even after the program is over. Most importantly, more code is created and released for the use and benefit of all.

Feasibility of projects

It can be feasible for everyone having internet in web and mobile view.

**The fast evolving face of technology today sets higher demands for the massive crowd pleasing field "OPEN SOURCE".**

- STUDENT CODE-IN is founded with a vision to promote all-round information to those keen students who are here in the globe finding a way for their obstacle.
- At STUDENT CODE-IN we have strived to a system that supports and encourages you with varied quality of experiences offered by expert mentors.
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## CHAPTER-2 Tools

### Tools for project design and Implementation

#### 1. Visual Studio

Visual Studio Code is an source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git

#### 2. Bootstrap

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

#### 3. Github

GitHub is a **web-based interface that uses Git**, the open source version control software that lets multiple people make separate changes to web pages at the same time. As Carpenter notes, because it allows for real-time collaboration, GitHub encourages teams to work together to build and edit their site content.

#### 4. HTML , CSS

HTML stands for Hyper Text Markup Language

HTML is the standard markup language for creating Web pages

HTML describes the structure of a Web page

HTML consists of a series of elements

HTML elements tell the browser how to display the content

HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more!

## 5. Javascript

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm.

There are some very popular open source programs going on to promote open source culture towards students and make them learn to build in co-ordinate world project.

Student code is specially for beginners to work on their choice projects and excel their knowledge in the tech world.

The main problem was that students did not get industry experience and were unable to work on a real-life project or contribute to open-source,

What they need to do to crack the Google Summer of Code or the Google Season of Docs.

Student code-in is a global program focused on introducing students to open source software development. Students work on a 10-week programming project with an open-source organization during their break from a post-secondary academic program.

Progressive Web Apps, importantly, can also support push notifications and other background work due to a new web technology called “service workers.” Service workers can help cache new content and synchronize local changes to a remote server, which keeps Progressive Web Apps as up-to-date as a typical website, while staying as responsive as a native app.

Right now the best example of a Progressive Web App is the [Twitter Lite client](#). It’s fast, minimal, and even has a toggle so you can minimize data usage. Some online stores and publications have also taken advantage of the snappy performance of PWAs. I’ve actually been playing [a minimal 2048 clone PWA](#) on my iPhone for the last week. It works offline and remembers my high score between sessions. Sometimes it even saves the game state so I can resume a long run, but it’s not perfect.

Apple’s support for the Progressive Web App standards is scattered and far from complete. In fact, Apple seems to have a different vision than Google for how much a PWA should really be capable of. We’ll see how that vision evolves as PWAs become more ubiquitous and powerful on the platforms of Apple’s competitors.

## Pros:

- Faster than web apps
- Greater functionality as they have access to system resources
- Can work offline
- Safe and secure—native apps must first be approved by the app store
- Easier to build due to the availability of developer tools, interface elements, and SDKs

## Cons:

- More expensive to build than web apps
- Compatibility with different platforms (i.e. iOS and Android) usually means designing and building the app from scratch
- Expensive to maintain and update
- It may prove difficult to get a native app approved by the app store

## Web apps

### Pros:

- Do not need to be downloaded or installed—web apps function in-browser
- Easy to maintain—they have a common codebase regardless of mobile platform
- Will update themselves
- Quicker and easier to build than mobile apps
- Do not require app store approval, so can be launched quickly

### Cons:

- Do not work offline
- Slower than mobile apps, and less advanced in terms of features
- May not be as discoverable as mobile apps as they are not listed in a specific database, such as the app store
- Quality and security is not always guaranteed—web apps don't need to be approved by the app store

Web applications are more popular because of the following reasons:

- Compared to desktop applications, web applications are easier to maintain by as they use the same code in the entire application. There are no compatibility issues.
- Web applications can be used on any platform: Windows, Linux, Mac... as they all support modern browsers.
- Mobile App store approval not required in web applications.
- Released any time and in any form. No need to remind users to update their applications.
- You can access these web applications 24 hours of the day and 365 days a year from any PC.
- You can either make use of the computer or your mobile device to access the required data.
- Web applications are a cost-effective option for any organization. Seat Licenses for Desktop software are expensive where SasS, are generally, pay as you go.
- Web-Based Apps are Internet-enabled apps that are accessed through the mobile's web browser. Therefore, you don't require to download or install them.

## **CHAPTER 2**

### **FEASIBILITY STUDY/LITERATURE REVIEW**

An important outcome of the preliminary investigation is the determination that the system requested is feasible. Feasibility study is carried out to select the best system that meets the performance requirements.

Feasibility study is both necessary and prudent to evaluate the feasibility of the project at the earliest possible time. It involves preliminary investigation of the project and examines whether the designed system will be useful to the organization. Months or years of effort, thousand for millions of money and untold professional embarrassment can be averted if an in-conceived system is recognized early in the definition phase.

The different types of feasibility are:

Technical feasibility

Operational feasibility

Economical feasibility.

#### **Technical feasibility**

Technical Feasibility deals with the hardware as well as software requirements.

Technology is not a constraint to type system development.

We have to find out whether the necessary technology, the proposed equipments have the capacity to hold the data, which is used in the project, should be checked to carryout this technical feasibility.

The technical feasibility issues usually raised during the feasibility stage of investigation includes these:

- This software is running in windows 2000 Operating System, which can be easily installed.

- The hardware required is Pentium based server.

- The system can be expanded.

### **2.2.2 Behavioral Feasibility**

This feasibility test asks if the system will work when it is developed and installed.

Operational feasibility in this project:

- The proposed system offers greater level of user-friendliness.

- The proposed system produces best results and gives high performance. It can be implemented easily .So this project is operationally feasible.

### **2.2.3 Economical feasibility**

Economical Feasibility deals about the economical impact faced by the organization to implement a new system. Financial benefits must equal or exceed the costs.

The cost of conducting a full system, including software and hardware cost for the class of application being considered should be evaluated.

Economic Feasibility in this project:

- The cost to conduct a full system investigation is possible.

- There is no additional manpower requirement.

- There is no additional cost involved in maintaining the proposed system.

A website application, which is also popularly known as a web app, is a software application program that uses web-based technology to perform specific tasks. Remote web servers host web applications and store relevant information from numerous connected computers. You can use a client program to run the web applications and access or enter the required data. That is why people often refer to web apps as client-server programs.

Larry Wall developed one of the first web applications in 1987. It was a server-side Unix scripting language known as Perl and was useful for processing reports. Since then, web applications have undergone many developments, and the current ones are far more sophisticated in their features and use than the earlier simplistic ones. They are also far more indispensable for personal and business use.

How does a web application work?

A web app requires mainly three elements to function properly. This includes a web server to handle requests from the client, an application server to execute the tasks requested and a database to store the information. Here is how a web application typically works:

- The user will connect to the Internet and create a request to the web server through the application's user interface.
- The web server will process the request and send it to the right web app server.
- The web application server will perform the required task and generate the results of the required data.
- The web app server will send the information back to the web server.
- The web server will send the requested information to the client's device such as a laptop, desktop or mobile phone.
- The requested information will appear on the user's display.



## Basic features and purpose

A website is a collection of static, interlinked and globally accessible web pages that you can view on a compatible browser. It provides information to the viewer using text, images and videos. A web app, in comparison, is a software program with interactive content and other elements for user engagement. The user interaction determines the value or usefulness of a web application. Increasingly, it is common to see hybrid websites that combine static and interactive elements to provide a better user experience.

### Compilation

It is not strictly necessary to precompile a website before you deploy it. Additionally, if you make site changes, you do not need full recompilation and deployment. It will be enough to update the HTML code. For a web application, however, precompilation is crucial for efficient deployment. The advantages will be a faster initial response time, source code protection and the ability to identify and catch errors early. Every time you make a change, recompilation and deployment are essential for the entire application.

### Integration

It is optional for a website to integrate with a third party, and the process is relatively simple. For a web app, its complex functionality makes integration with third-party software programs and online tools trickier. However, third-party integration is essential for web applications for data collection, storage and processing.

### User interaction

You can instantly access and view a website on a web browser. The most commonly used web browsers are Brave, Qwant, Mozilla Firefox and Safari. However, you can only see or read the website content on a browser. You cannot interact with it. A web app requires you to download and instal it on your mobile device. You can then access, interact with and manipulate its data in a personalised manner.

## User authentication

A website does not require user authentication from its visitors. It may prompt them to sign up for updates or its newsletters, though. A web application will generally require user authentication before allowing access to its numerous options.

### New updates

If you update your website, the updates will become immediately visible to your visitors. To upgrade a web application, you will have to visit its website or an online app outlet and download the new version on your mobile device or computer. You will then need to instal it on the device before you can use the latest features.

### Benefits of web applications

Web applications have many benefits, including the following:

- They are easy to instal and use on different computers and mobile devices.
- They only need a compatible browser for their operation and are not dependent on any particular operating system or device.
- As they can run on multiple platforms, developers do not have to build separate client-side programs for different operating systems and computers.
- Since a remote web server stores the web applications, there is no need to host them locally, and you do not have to worry about the space limitations on your hard drive.
- Web applications are stored on a remote web server, which reduces the need for technical support.
- It is easy to make changes to web apps and keep them updated since all updates are applied centrally on the web server.

- As the same web application version is available to all users, so it eliminates any compatibility issues.
- If you get a custom web app for your business, you can customise and scale it and add more functionality per your business needs.
- They help reduce software piracy in subscription-based web applications.
- For business users, web apps offer better work management and improved work efficiency. You can use them to integrate data from multiple sources, share data spreadsheets with your team members and collaborate on projects and reports.
- Web applications offer a higher level of data security, as the data is stored on remote dedicated web servers. Experienced server administrators monitor these servers for any potential breaches and take action to prevent them.
- They use cloud data storage, meaning that you will not lose your data in the event that your computer or mobile device gets damaged.
- Different web apps can be interoperable with each other, allowing for better web integration and adaption of emerging Internet technologies.

## **3. SYSTEM SPECIFICATION**

### **3.1 Hardware Specification :**

Processor	: Intel Pentium IV 2.4 GHZ or above
Clock speed	: 500 MHZ
System bus	: 32 bits
RAM	: 256MB of RAM
HDD	: 40 GB or higher
Monitor	: SVGA COLOR
Keyboard	: 108 keys
Mouse	: 2 button mouse

### **3.2 Software Specification**

OS	: MS WINDOWS XP SP2
Front End	: Visual Basic 6.0
Back End	: MS ACCESS 2003

When developing a web app, the developer generally codes it for functionality using a combination of server-side script languages and client-side scripting languages. For instance, they may use Java, Python, PHP and ASP for the server-side script and HTML5, CSS and JavaScript for the client-side script. The purpose of the server-side script is to allow the web application to store information on the web server and to retrieve it when necessary. The client-side script is for presenting the information to the users. After the compatible browsers execute and run the program, the user can access the information they want.

Generally, small teams can conceive and design many web apps. At the start, they will decide whether they need to create dynamic web apps that need server-side processing or static web applications that do not require server-side processing. The development phases consist of gathering information, planning and designing the application. It is also necessary to create and assemble content. The developers will then code the web app and test and review it for errors. After launching the web application, the developers will continue to monitor it for any necessary maintenance work and feature and coding updates.



#### **4. EXISTING SYSTEM**

Existing system refers to the system that is being followed till now. The existing system requires more computational time, more manual calculations, and the complexity involved in Selection of features is high.

The other disadvantages are :

lack of security of data

Deficiency of Data accuracy

Time consuming.

To avoid all these limitations and make the working more accurately the system needs to be computerized. Here in the Electronic bus ticketing, a detailed study of existing system is carried along with all the steps in system analysis.

#### **4.1 Draw backs of existing system**

Here in the Electronic bus ticketing, a detailed study of existing system is carried along with all the steps in system analysis. An idea for creating a better project was carried and the next steps were followed.

- v Lack of security of data.
- v More man power.
- v Time consuming.
- v Consumes large volume of pare work.
- v Needs manual calculations.
- v No direct role for the higher officials.
- v Damage of machines due to lack of attention.

To avoid all these limitations and make the working more accurately the system needs to be computerized.

### **5. PROPOSED SYSTEM**

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work. The existing system has several

disadvantages and many more difficulties to work well. The proposed system tries to eliminate or reduce these difficulties up to some extent. The proposed system will help the user to reduce the workload and mental conflict. The proposed system helps the user to work user friendly and he can easily do his jobs without time lagging.

## **5.1 Advantages of Proposed System**

The system is very simple in design and to implement. The system requires very low system resources and the system will work in almost all configurations.

It has got following features :

- Ensure data accuracy.
- Minimize manual data entry.
- Minimum time needed for the various processing
- Greater efficiency
- Better Service
- Minimum time required
- The open source opportunities would help prevent loss on account of malpractice
- It would also help in providing adequate data to the corporation, particularly with regard to boarding of passengers from fare stages and important points
- This would help the corporation prepare and organize its schedules more efficiently on the basis of traffic demand.
- It would provide data on concessions given to various sections.
- Another additional feature is that the data in the software could be fed into the computer.

## **6. SYSTEM DESIGN**

### **6.1 INTRODUCTION**

System Design is the most creative and challenging phase in the system life cycle. Design is the first step into the development phase for any engineered product or system. Design is a creative process. A good design is the key to effective system. System design is a solution how to approach the creation of a new system. System design transforms a logic representation of what is required to do into the physical specification. The specification is converted into physical reality during development.

### **6.2 LOGICAL DESIGN**

The logical flow of a system and define the boundaries of a system. It includes the following steps:

- Reviews the current physical system – its data flows, file content, volumes, frequencies etc.
- Prepares output specifications – that is, determines the format, content and Frequency of reports.
- Prepares input specifications – format, content and most of the input functions.
- Prepares edit, security and control specifications.
- Specifies the implementation plan.
- Prepares a logical design walk through of the information flow, output, input, controls and implementation plan.



- Reviews benefits, costs, target dates and system constraints.

### **6.3 PHYSICAL DESIGN**

Physical system produces the working systems by define the design specifications that tell the programmers exactly what the candidate system must do.

It includes the following steps.

- Design the physical system.
- Specify input and output media.
- Design the database and specify backup procedures.
- Design physical information flow through the system and a physical design Walk through.
- Plan system implementation.
- Prepare a conversion schedule and target date.
- Determine training procedures, courses and timetable.
- Devise a test and implementation plan and specify any new hardware/software.
- Update benefits , costs , conversion date and system constraints Design/Specification activities • Concept formulation.
- Problem understanding.
- High level requirements proposals.
- Feasibility study.
- Requirements engineering.
- Architectural design.

### **6.4 INPUT DESIGN**

Input Design deals with what data should be given as input, how the data should be arranged or code, the dialog to guide the operating personnel in providing input, methods for preparing input validations and steps to follow when error occur. Input Design is the process of converting a user-oriented description of the input into a computer-based system.

This design is important to avoid errors in the data input process and show the correct direction to the management for getting correct information from the computerized system. It is achieved by creating user-friendly screens for the data entry to handle large volume of data. The goal of designing input is to make data entry easier and to be free from errors. The data entry screen is designed in such a way that all the data manipulates can be performed. It also provides record viewing facilities.

When the data is entered it will check for its validity. Data can be entered with the Page 16 help of screens. Appropriate messages are provided as when needed so that the user will not be in maize of instant. Thus the objective of input design is to create an input layout that is easy to follow.

In this project, the input design consists of a log in screen, tab for compression/ decompression, source and destination browsing button, a menu list for selecting the algorithm, Compress/Decompress option, compress/decompress button.

## **6.5 OUTPUT DESIGN**

A quality output is one, which meets the requirements of the end user and presents the information clearly. The objective of output design is to convey information about past activities, current status or projections of the future, signal important events, opportunities, problems, or warnings, trigger an action, confirm an action etc.

Efficient, intelligible output design should improve the system's relationship with the user and helps in decisions making. In output design the emphasis is on displaying the output on a CRT screen in a predefined format.

The primary consideration in design of output is the information requirement and objectives of the end users. The major formation of the output is to convey the information and so its layout and design need a careful consideration.

There is an output display screen for showing the compressed/ decompressed file or folder details (Original file size, Compressed/Decompressed file size, distinct characters)

### **Page 17 7. Research gaps**

According to research the open source platform is a generic web portal application that aids bus customers to reserve a seat in a certain bus company anytime and anywhere and variety of buses that satisfy the customer's requirements are provided. The project, on the bus company's side, serves as a marketing strategy and aids an efficient processing and delivery of itinerary receipts.

The project used software like Adobe Photoshop CS4 for the creation of the images, Adobe Dreamweaver CS4 and Notepad++ as a development tool, MySQL for the database, Apache as the web server, mPDF for the creation of PDF and PayPal Sandbox for the payment. For the main effects, it used jQuery. However, the softwares adopted in this project, has in recent times been upgraded.

Therefore, Adobe Dreamweaver CS6, Adobe Photoshop CS6, MySQL v.5 are going to be used to implement this project.

## **Open source Software**

**Open source software is software with source code that anyone can inspect, modify, and enhance.**

**"Source code" is the part of software that most computer users don't ever see; it's the code computer programmers can manipulate to change how a piece of software—a "program" or "application"—works. Programmers who have access to a computer program's source code can improve that program by adding features to it or fixing parts that don't always work correctly.**

Similarly, after considering the type of system which Badariah adopted, this project will be designed with the same aim of presenting the customers of Imo Transport Company with the opportunity of making reservations at the comfort of their homes or offices without being faced with the challenges of queuing at counters before embarking on any journey.

This project will also enlighten prospective customers and users of the system on the need to patronize the system as it displays more advantages over the old system by providing an easy to use Graphic User interface (GUI) interaction, checking availability of routes before boarding etc.

### **1. Research Methodology**

The system of collecting data for research project is known as research methodology. The data may be collected for either theoretical or practical research for example management research may be strategically conceptualized along with Page System Implementation Design operational planning method and change management. Information which was used for this study was carried out by oral interview.

### 3.1 Choice of Methodology

For any project to be completed, it has to go through stages called Development Life Cycles. System Development Life Cycle (SDLC) is the process of understanding how an Information System (IS) can support business needs, designing the system, building it and delivering it to users. The SDLC composes of four phases: Planning, Analysis, Design and Implementation.

In order for this project to be developed, the methodology that will be used is the System Structured Analysis and Design Methodology. The SSADM is classified as a Waterfall Development. With Waterfall Development, analyst and users proceed sequentially from one phase to the next and each phase can be mapped out and evaluated (Hevner, 2004). Below, in figure 3.1 is a diagram on the waterfall methodology.

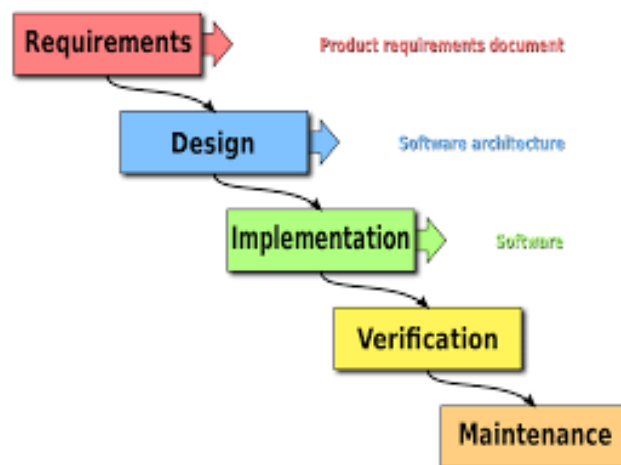


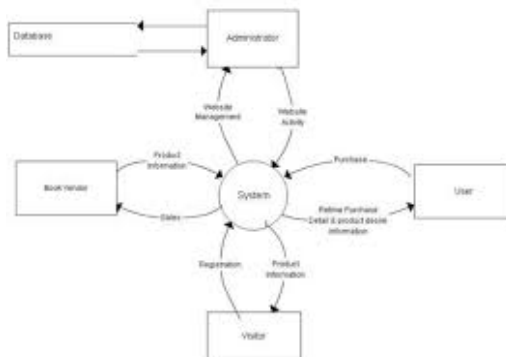
Figure 1. The waterfall development Methodology (Wee, 2007)

## 1.DATA FLOW DIAGRAM (DFD)

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its process aspects. A DFD shows what kind of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored.

The development of DFD'S is done in several levels. Each process in lower level diagrams can be broken down into a more detailed DFD in the next level. The Toplevel diagram is often called context diagram. It consist a single process bit, which plays vital role in studying the current system.

The process in the context level diagram is exploded into other process at the first level DFD. Figures 3.1 to 3.2 shows a data flow diagram about the system.



**Figure 2. Dataflow diagrams**

## USE CASE DIAGRAM FOR USERS AND ADMIN

A use case is a description of a system’s behaviour as it responds to a request that originates from outside of that system (the user). In figure 3.4, a use case of the activities in a bus transport system is shown.



Figure 3. Use case diagram

In other words a use case describes “who” can do “what” with the system in question. The use case technique is used to capture a system’s behavioural requirements by detailing scenario-driven threads through the functional requirements.

#### 4. INPUT AND OUTPUT DESIGN

The input design is the link between the information system and the user. It comprises of the developing specification and procedures for data preparation and those steps are necessary to put transaction data into a usable form for processing data entry while an output design is a process that involves designing necessary outputs in the form of reports that should be given to the users according to the requirements.

Below are some screenshots which comprises of both input and output designs of the proposed system.

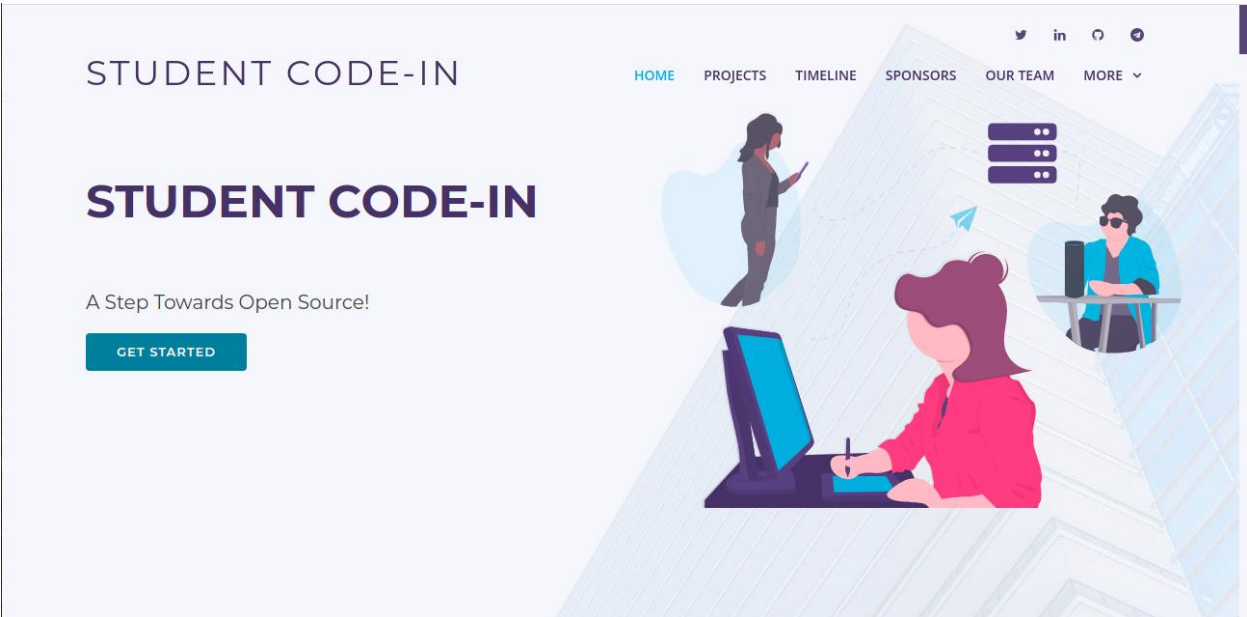


Figure 4. SCI Home Page

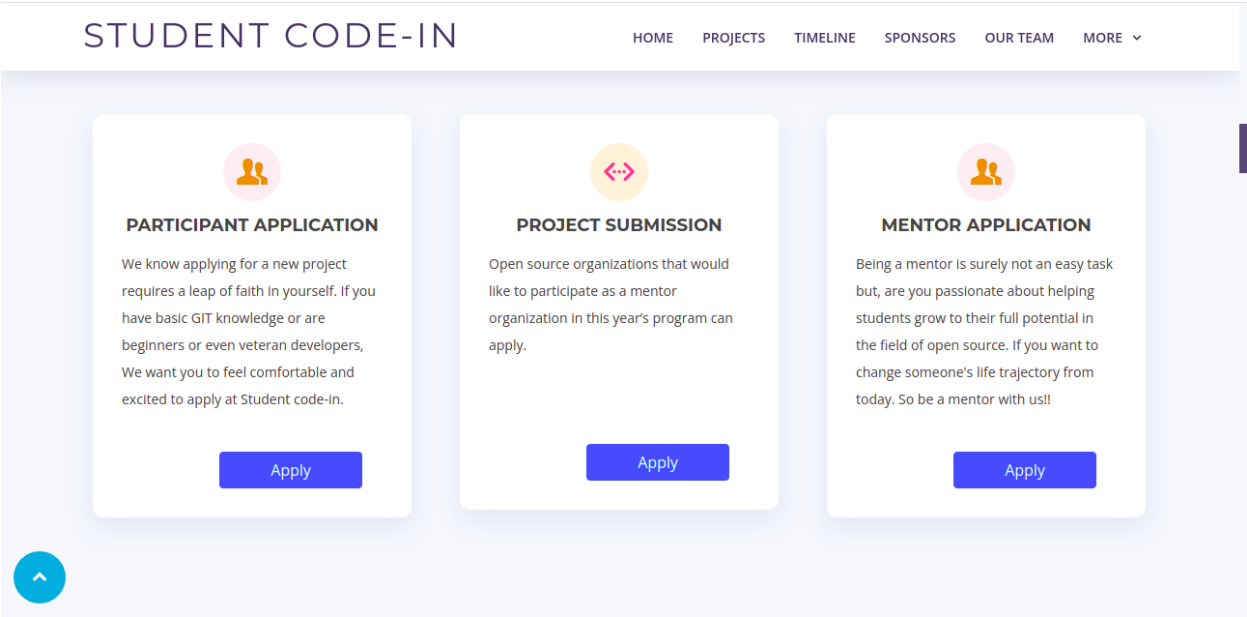


Figure 5. Different Section Admin/User



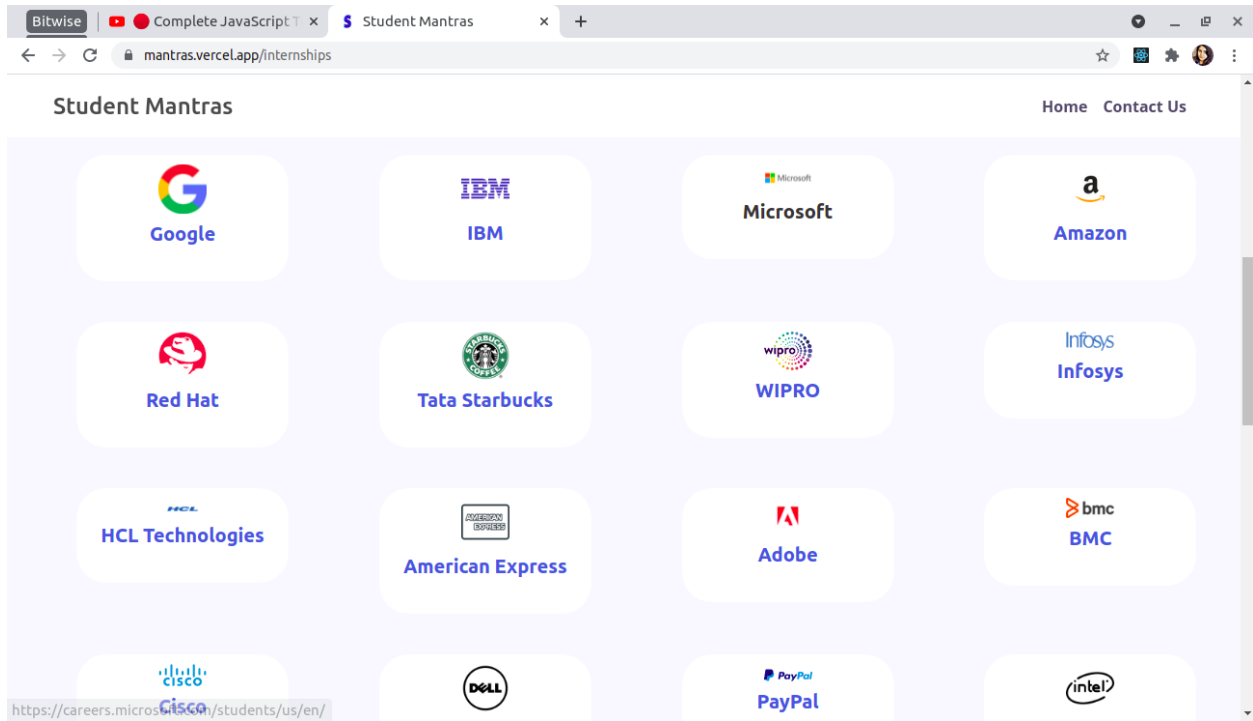
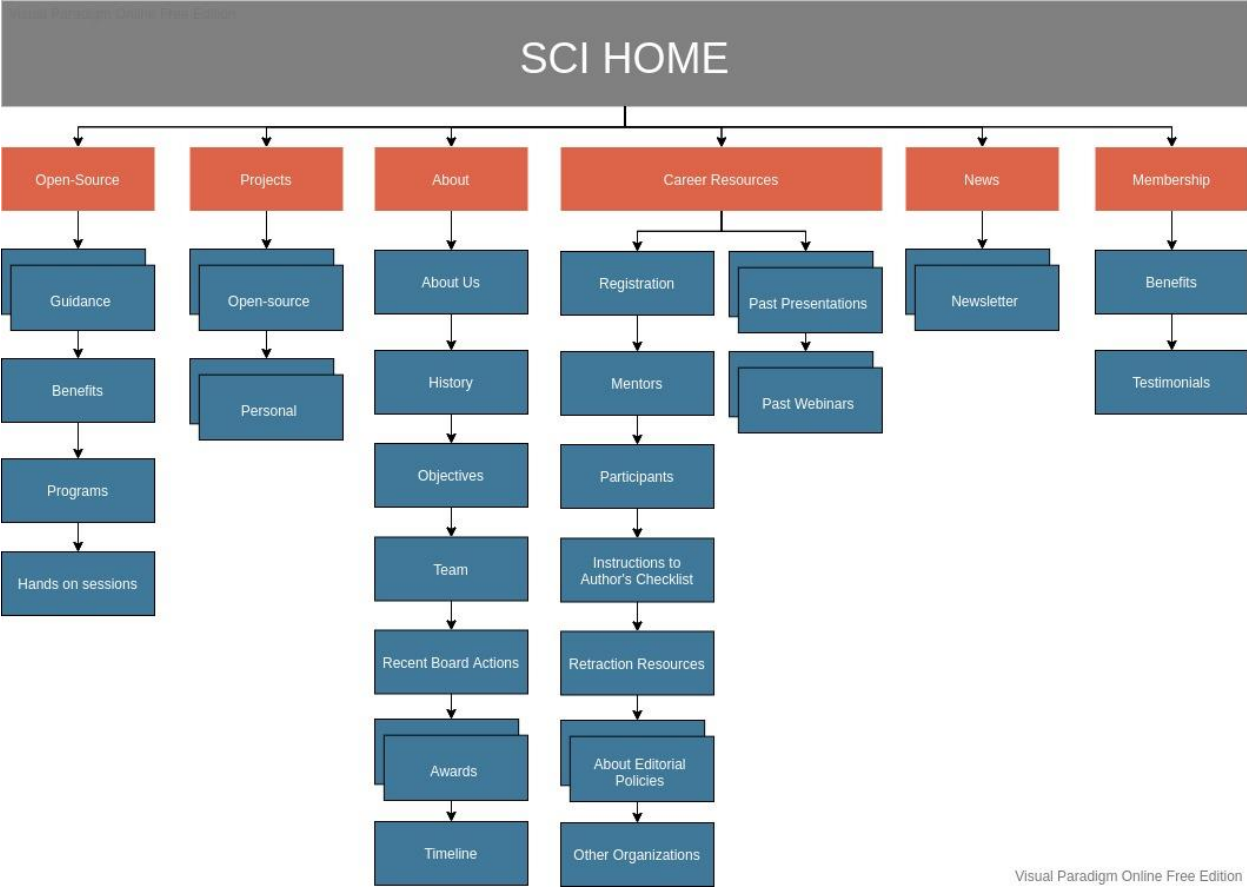


Figure 6. Companies section



Visual Paradigm Online Free Edition

Figure 7. SiteMap

## **5. Summary**

In 1974, American airlines were the first to use an automated learning system, which was still almost manual. Technology grew, and a computer coding system was developed. In this present era, online booking or reservation system has improved the operations of various sectors of a nation's economy deploying this system.

SCI being a web based system that ensures that the company would be able to transform most of the processes carried out manually into automated, error-free and easy to use operations in the organization especially in the area of transportation; also it would be able to generate report for the management decision purpose.

This system will be developed using a waterfall methodology for research and design purposes, PHP as the programming language because of its server-side processing capabilities that makes data process less on the client personal computer, an implementation strategy as well as testing and maintenance strategies suitable for efficient deployment of the system.

### **5.1 Recommendations**

Research and development are continuous processes; this is the same in computer and software development. However, this work is recommended for Imo Code Company Limited, Owerri, since their operation are still carried out manually and it can also be useful to other Open source Software industries whose processes are still manually done.

The system can contribute more on those mentor / representatives handling the account if it can generate reports by trip so that they will no longer go to a certain module to check the reservation and its details.

Also, it will be more beneficial to both clients and bus representatives if clients can create an account just like in airlines websites. With that, the system can record the modifications made.

Open Source Software functioning resides STUDENT CODE-IN is founded with a vision to promote all-round information to those keen students who are here in the globe finding a way for their obstacle. At STUDENT CODE-IN we have strived to a system that supports and encourages you with varied quality of experiences offered by expert mentors.

Irrespective of any discrimination on the grounds of gender and pre-requisite knowledge about open source. We welcome every individual that walks to the corridor of Student Code-in.

All the students who want to explore their talent can apply here for an experience that will create a benchmark for the whole of your life.

Besides that we will be grateful to do our part for building your future in an accomplished way.

## **5.2 Conclusion**

As we have seen that there are ample of opportunities available but they all are in scattered way. So we are making a web application, a platform where we different resources regarding internships , open-source programs, scholarships etc of different companies are on a same platform ,and for user friendly experience with the viewers we are implementing it as a web app.

If you are looking for opportunities and lacking to find one to grow your tech career in getting internships, jobs, or getting your hands in open source this web app i.e Student Mantras will help you in finding the best of big tech giants' programs all at one place.

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