



# A Qualitative Approach for Representation of Templates and Portfolios with User Accessible Environment

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## ABSTRACT

Personification of the present disclosure can be viewed as providing methods for creating a web site. In this respect, one embodiment includes the following steps: receiving a choice of a design template to be used in creating the website, the design template providing an initial layout for pages of the website and recommended content, rendering for display a representation of the website from the design template in a development environment, wherein the representation provides controls for editing content and layout of the website representation and the rendering produces HTML files that are displayed to a user and enabling the user to edit design features of the website based upon a rendered view of the website in the development environment, a presently displayed representation of a web page having editing tools embedded in the web page. Preferably, models conform to various types of web pages and other features that are typically found or visible on websites. There may be different options for each feature. The innovation is to provide a platform for making it easy to build websites and pages based on stored templates that enable the website and pages to be modified and configured without the user needing to write any software code.

**Key words:** Website, Template, Design, Web pages, Environment

## 1. INTRODUCTION

Information Technology is the use of computers and other equipments to distribute and update the data, most commonly in the sense of a company. The demand for the development of websites with the expansion of the Internet and the intranets is growing day by day. Start of coding is more difficult task that produces heterogeneous problems and errors, in case of as an ordinary individual who is getting interesting into the field of web technology; it is the almost impossible for him to build websites by coding. Easy site builder is mainly focusing on no code scenario where individuals only have to select the

pre-build templates of their desired websites and later they could customize it quickly. Easy site builder is containing more than 20 modern technology-based website templates which are readymade that can be customized and uploaded on the server by the user. This platform is mainly focusing on a scenario where people with premiere knowledge of coding could create beautiful and well-developed websites for their personal and business matter. The development of Easy site builder believes that everyone is a maker unless is provided with proper material.

Today, anyone with a computer and access to the internet can build websites using tools far more powerful the dream viewer from two decades ago but using Easy site builder project and its GUI based tools have extended far beyond static site to fully functional web applications. Using the platform in less than hour we can create a beautiful and fully responsive:

- Personal Portfolio
- Personal Blogs
- Beautiful designed landing pages
- Readymade web Applications
- Premium domains and free sub domains
- Premium packages and Premium templates
- One-page web Applications
- Product website portfolio
- Simple Single page websites
- Web Applications based Resumes

This application introduces a platform that is accessible to every individual. Implementation of such system helps users without taking too much effort on it. It is the easiest way in which there is no thought of code and so flexible that can easily load on range of devices. It saves the user's time, fulfills the needs according to their requirements and useful to connect more features and draw more benefits from them.

## 2. BACKGROUND OF PROJECT

The project is primarily intended to implement such a framework that creates websites without a scenario of coding. A website is a collection of interconnected web pages which are typically prepared and presented as a knowledge compilation.

Each web page is given a uniform resource locator ('URL'), which is usually an address route that specifies the site that hosts the web page and the location of the web page on the server. Web pages can be viewed using a web browser like Microsoft Internet Explorer and Mozilla Firefox. The HTML-encoded file is interpreted by web browsers as the submitted web page and its text is viewed. For instance, the layout and presentation of the content depends on the individual HTML code within an HTML or Active Server Page (ASP). As a result, to create a custom GUI, each web site is specifically coded with a distinctive look. Changes to a website's design and presentation are also time-intensive tasks that are typically carried out by an HTML-savvy web developer and not by those who are not technologically savvy. Therefore, there is a previously unaddressed need in the industry to fix the aforementioned weaknesses and shortcomings.

## 3. PROBLEM STATEMENT

IT specialists (specially, sound developers) can create website ventures in the modern technology environment with their best skills and coding. They often face some severe challenges during the code scenario and it would be much more challenging for people who have interest in creating or designing websites. To overcome the challenges, there should be a platform where the customer can conveniently edit the web models and can do much more with their design by using less effort without the headache of coding. Therefore, this application will facilitate and provide a comfortable environment to all users.

## 4. AIM AND OBJECTIVES

- To introduce a platform that is accessible to each individual.
- Initiating such templates that user can easily edit according to their requirement without the effort of coding.
- With over 25 prebuilt templates, Easy Site Built application offers templates that enable you to easily import any HTML or bootstrap template from the admin region of this site.
- To provide a scalable Easy site building component structure and more than 40 components to be used in potential free updates or to create your own custom components quickly.
- To provide live editing scenario that allows the user to edit most element properties such as padding, margin, border, shadows, backgrounds, text styles and more effectively visually and in real time, or manually edit HTML CSS and JS through embedded code editions for full project control.
- To provide the Publish and Export function to be released to remote the servers via FTP by uploading whole projects or adding custom domains and sub-domains to screen projects.

## 5. LITERATURE REVIEW

It was possible to interpret the embodiment of the present disclosure as offering methods for building a website [1]. In this respect, the following steps were included in one embodiment: the choosing of a design template was included in the construction of the website, the design template providing an initial structure for website pages and suggested content; the rendering of a website representation from the design template for display in a production environment in which the representation provides editing controls.

For a site designer, a process and procedure was proposed. The site builder is a program was developed for vendors, resellers and end-users to develop and edit websites for hosting. The suggested site builder designed with hosting in mind enabled providers to conveniently give their customers site construction capability [2]. Without any technical experience or HTML knowledge, the simple five-step wizard interface offered a convenient way for customers to build, change and upgrade their own websites. The LINUX/Unix or WINDOWS site builder program also came with a robust administration panel that enables providers to customize the application to their needs quickly and conveniently.

A computer-implemented framework was designed to help a retailer set up an automated online shop that tailored to the company of the merchant without needing programming from the merchant [3]. The method used a shop builder wizard to direct a merchant through a series of questionnaires intended to collect business-related knowledge from the merchant. A page generator was further used by the framework to build active server pages (ASPs) that form the personalized storefront. The page creator built active server pages from a collection of common templates for the development of an online storefront. The models were written in a mixture of hypertext language and scripting language as an extension of active server page technologies. Active server templates defined an optional, higher order scripting level that separates a new delimiter from a second level of code. The page generator read each active server prototype file during the development of the storefront and transforms it to a scripting program that has executable lines of code extracted from the

higher-order instruction level denoted by the new delimiters. Using the merchant data as input, the page generator then executed the scripting software to generate a personalized collection of active server pages.

A web builder was created with the aid of a node approach, which enabled users to create a website easily and clearly, without needing even one line of code added [4]. The site builder was based on the local host and has sub-domains. The web builder was introduced by a node-based framework that considers a piece of content as a node and helps users to manage a site's content. A user can control and change content quickly and easy to add the desired drag gable mechanism that makes the web builder or website extensible and modifiable. Node based and VPL (Visual Programming Language) blender processes were used as the basis for the application's performance. For the User Acceptance Testing (UAT), five respondents were selected to confirm if the functions of the device were properly created. The test results indicated that the framework can be improved by inclusion of features that enable the website to be released online, improve the application's interaction and make the website models subject to themes.

Small and medium-sized enterprises (SMEs) in China have large volumes and increasingly developing speeds [5]. A template-based E-commerce website Builder (TEB) was proposed, which was simple to use and scalable to expand. In TEB, each template consists of several template pages with tags. The template engine is able to parse pages and tags and smartly create template websites.

## **6. TOOLS AND TECHNOLOGIES**

### **6.1 SUBLIME TEXT 3**

Sublime Text 3 (ST3) is a lightweight, cross-platform code editor, known for its quick, user friendly and community support [6]. It is an impressive editor right out of the box, but the main strength lies in the ability to improve its features using Package Control and render individual settings.

### **6.2 XAMPP SERVER**

XAMPP is an abbreviation for cross-platform, Apache, MySQL, PHP and Perl, and it allows you to build WordPress site offline, on a local web server on your computer [7]. This simple and lightweight solution works on Windows, Linux, and Mac – hence the “cross-platform” part. XAMPP is a compact and lightweight distribution of Apache containing in a single package the most popular web development technology. Its content, small scale, and portability make it the perfect platform for PHP and MySQL students to create and test applications.

### **6.3 VISUAL PARADIGM**

Visual Paradigm (VP-UML) is a UML CASE Tool from the Object Management Community that supports UML 2,

SysML, and Business Process Modeling Notation (BPMN) (OMG) [8]. In addition to support for modeling, it offers capabilities for report generation and code engineering, including code generation. Visual Framework facilitates the management of specifications, including usage tales, use cases, SysML requirement diagrams and textual interpretation, and can reverse engineering diagrams from code and offer round-trip engineering for different programming languages.

### **6.4 JSON**

JSON stands for JavaScript Object Notation. JSON is a lightweight format used to store and transport data [9]. When data is transferred from a server to a web page, JSON is also used. JSON is easy to understand and "self-describing". The JSON format is syntactically similar to the JavaScript object creation code. Due of this resemblance, it is simple for a JavaScript application to translate JSON data into native JavaScript objects.

### **6.5 HTML**

The programming that is used to structure a web page and its content is HTML (Hypertext Markup Language) [10]. Content may be arranged, for example, within a series of paragraphs, a list of bullet points, or using images and tables of results. This article would, as the title implies, give you a clear understanding of HTML and its functions.

### **6.6 CSS**

The code that styles web content is CSS (Cascading Style Sheets). The fundamentals of CSS walk through what you need to start [11]. We're going to answer questions such as: How can I get the text red? How do I view material in the (webpage) layout at a certain location? How can I use background pictures and colors to decorate my webpage? Like HTML, CSS is not a language used for scripting. It's also not a markup language. CSS is a language for style sheets. CSS is what you use to style HTML elements selectively.

### **6.7 JAVA SCRIPT**

A full-fledged interactive programming language that can bring interactivity to a website is JavaScript ('JS' for short) [12]. Invented by Brendan Eich, it was (co-founder of the Mozilla project, the Mozilla Foundation, and the Mozilla Corporation). JavaScript is beginner-friendly and flexible. You will be able to build sports, animated 2D and 3D graphics, robust database-driven applications, and much more, with more experience! JavaScript is relatively lightweight on its own, and still very customizable.

### **6.8 PHP**

A programming language that helps web developers to construct interactive content that communicates with databases is the PHP Hypertext Preprocessor (PHP) [13].

Basically, PHP is used for web-based software application creation. PHP is a commonly used programming language on the server side and has become increasingly fast and powerful over the years. With HTML and databases, PHP fits well, making it a perfect language for those interested in creating interactive web apps.

### 6.9 MySQL

MySQL is a web-based computing system that operates on a server and is claimed to be suitable for both big and small applications [14]. Data is contained in tables in the MySQL database. A table consists of columns and rows and is a list of similar data.

## 7. WORKING OF PROJECT

### 7.1 WORKING FROM USER SIDE

#### 7.1.1 LOGIN PAGE

Whenever a user accesses our website, the user will first login from website in case the user has no ID then user will first sign-up for the first time, the entries for sign-up requires email, and password then the user have to confirm the password. There are two types of logins Admin and user of the site, if the Admin use his ID and password it will take it to the main Admin area Dashboard and if the user which signed up recently it will take it to the user Dashboard. Figure 1 shows the login page.

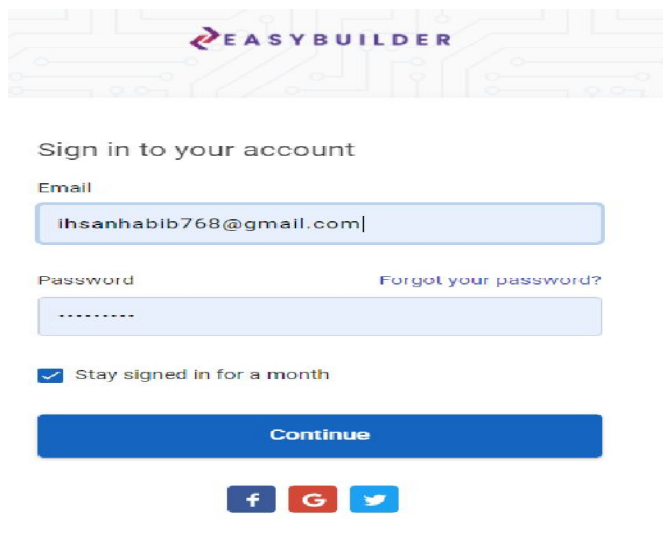


Figure 1: Login Page

#### 7.1.2 DASHBOARD

If a user accesses our website the user will see our landing page (Dashboard). In our landing page user will get a search engine with the sorting and status view bar that a user get help to find all types of templates and get the result what he wants, the status have a categories of published and unpublished projects that a user is working on, also user can sort the search

for the newest, oldest, A to Z and Z to A format. On the other left side of the corner user can register or Login which we will cover later, also there is a button labeled as new project to create new projects. The next section shows the projects that a user has been working on as some examples as shown in figure 2.

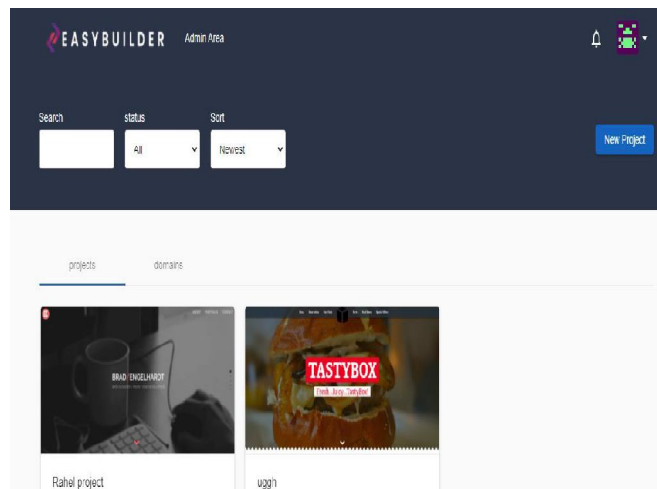


Figure 2: Dashboard

#### 7.1.3 CREATE A NEW PROJECT

On the right-hand corner there is a button for creating a new project after clicking on the button the user will get different types of templates to choose according to user's needs, and then choosing a template user will name the project as the shown in figure 3 and will proceed to the next step.

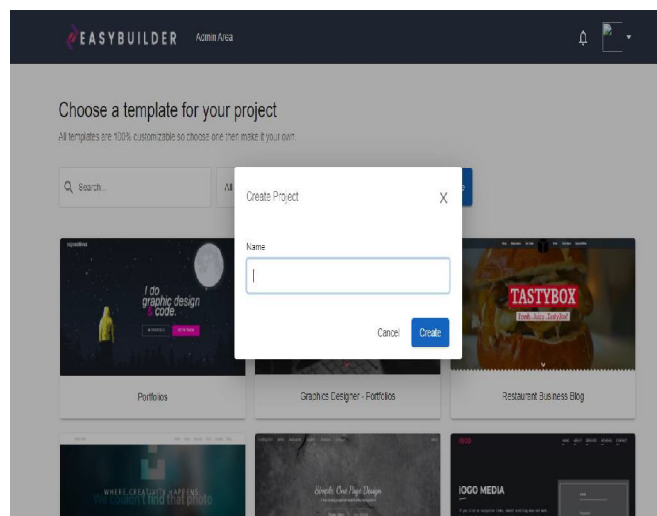


Figure 3: Create a new project

#### 7.1.4 CUSTOMIZING THE PROJECT

The next step is to customize the template from A to Z on the left side. There are the components or tools to customize the selected website as layout, Elements, inspector, pages, settings and Code Editor for editing user's code if user wants as shown in figure 4.

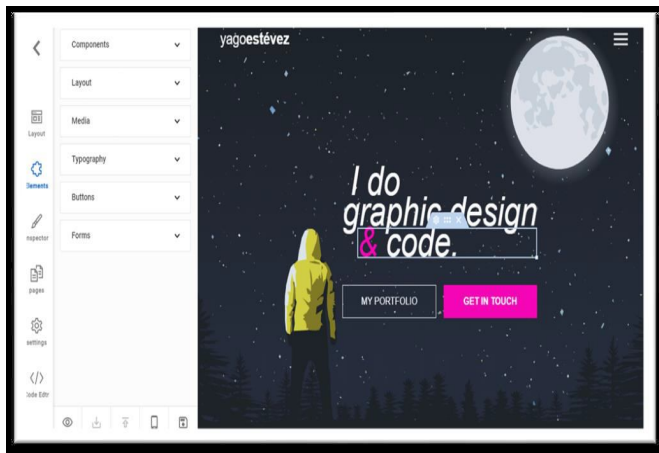


Figure 4: Customizing the project

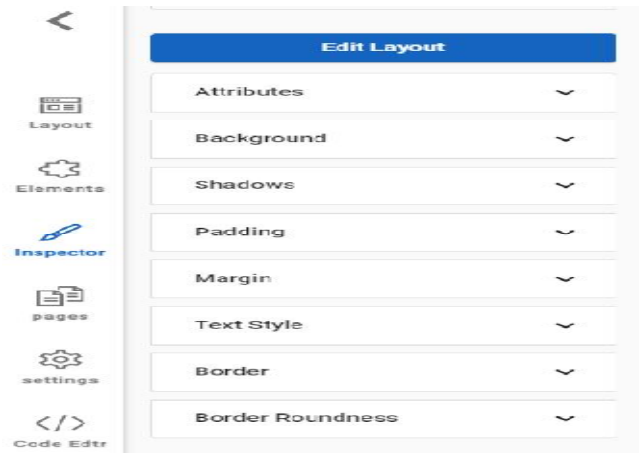


Figure 6: Inspector

### 7.1.5 ELEMENTS

In the page customize the user will first get to familiar with the elements to the user where a user can alter all the components of the project as a template have inside it as progress bar, list group, Card, Header Image, Material Box, Navbar, and Services List. Inside the elements there is another property called layout which contain access to the divider, Div. etc as shown in figure 5.

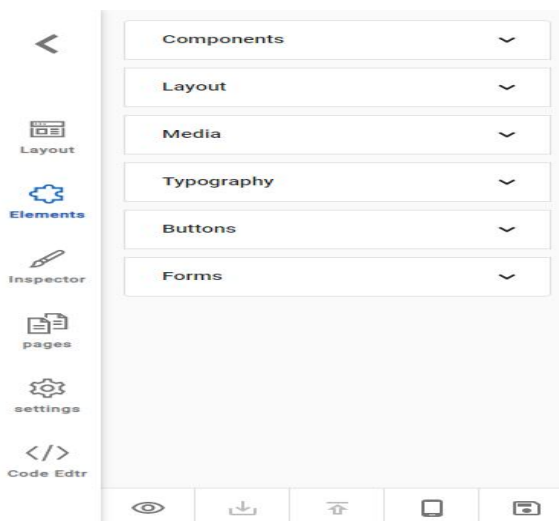


Figure 5: Elements

### 7.1.6 INSPECTOR

The inspector tool is used mostly for the designing and outlook of the website. The inspector tool has Attributes inside it to change attributes of the project for different devices, the second tool in inspector is Background it controls the background as color of project, background Images, Gradient whereas the user have all access to the background. Third tool is shadows to alter Shadows of components to set angles, Distance, Blur, Spread. Fourth tools are padding of the page to increase or decrease the padding of boxes or containers. Fifth tool is text Style to change the Font Styles and paragraph design also borders as shown in figure 6.

### 7.1.7 PAGES

In the page section user have access to the set the details of the Active Page. Where a user can create a new page, select form the Active Page user want to alter settings includes page SEO Option, Page Name, Page title and description as shown in figure 7.

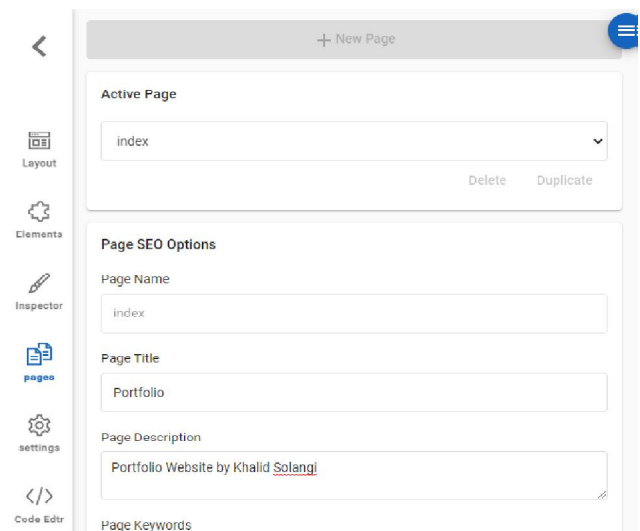


Figure 7: Pages

### 7.1.8 SETTINGS

In the Settings section, user can change the project template also the Builder Settings as auto saving the projects changes. Hover Box appears when a user hover over the area activation button, and finally the selection box when a user selects an area button as shown in figure 8.

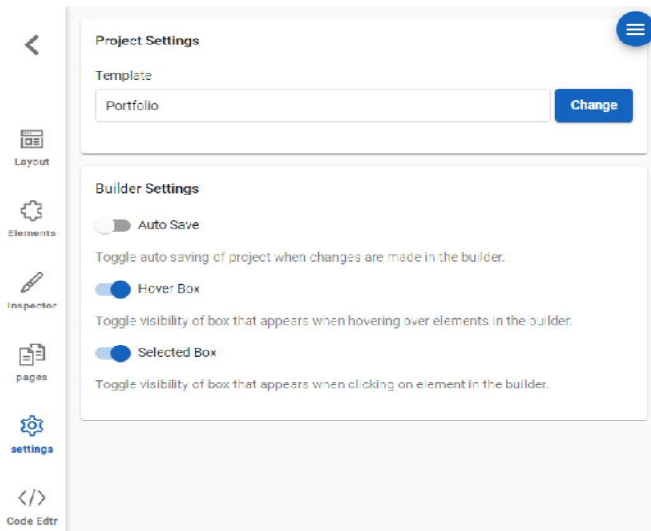


Figure 8: Settings

## 7.2 WORKING FROM ADMIN SIDE

### 7.2.1 DASHBOARD (ADMIN)

When admin Login to the system, the Admin user can access the Admin Area, Dashboard, Account Settings, turn into Dark or into Light mode and Log Out as shown in figure 9.

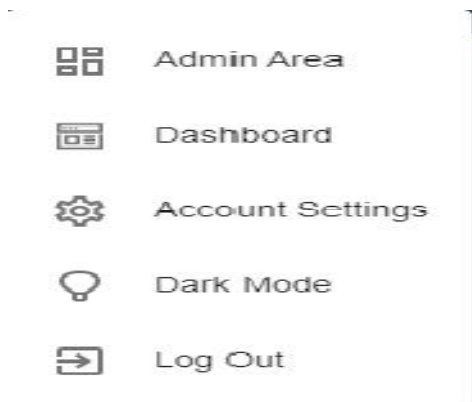


Figure 9: Dashboard (Admin)

### 7.2.2 ADMIN AREA

If the user selects the Admin Area then it will redirect to the Admin Area Settings in Analytics where we can watch to the user analysts as total Users, Total Projects, Total Pages, and Total Templates. The section also includes Appearance Settings, where an admin can change the Appearance, Settings, Templates, Projects, Users, Roles, Pages, Tags, Files, Translation, and Ad's. Figure 10 shows the admin area.

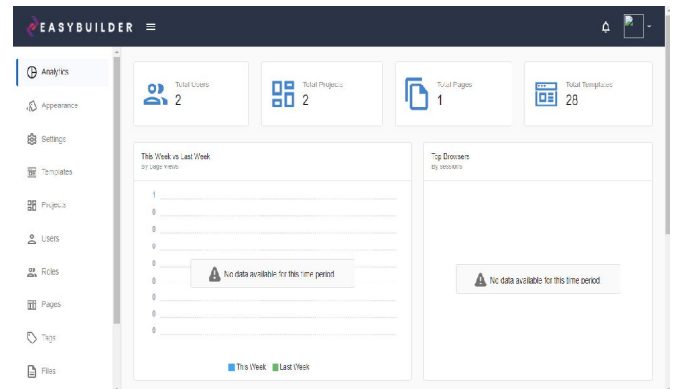


Figure 10: Admin Area

### 7.2.3 APPEARANCE

The appearance settings the features to alter all the settings in the main Area (Dashboard) at a user Appearance. These features can change every aspect of the appearance page as Landing Page, General, Themes, Menus and Custom Code where we can customize the page with Admin Code and SEO Settings. Figure 11 shows the appearance section of project.

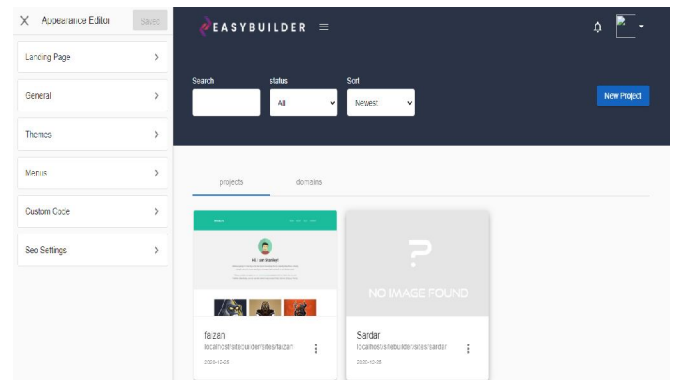


Figure 11: Appearance

### 7.2.4 LANDING PAGE

In the landing page section, there are tools to setup the landing page where admin can change User Header Title, Header Subtitle, Header Image; Header Overlay colors also Action Buttons, Primary Features, Secondary Features, Channels, footer Title, Footer, Subtitle and Footer Image as shown in figure 12.

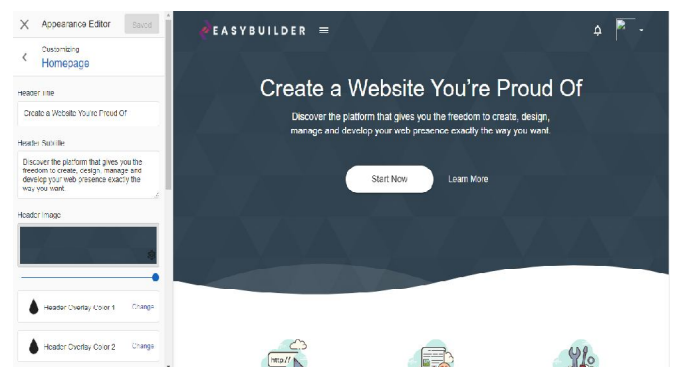


Figure 12: Landing Page

### 7.2.5 GENERAL

General section is about the customizing general things as Site name, Logo (Navbar), Favicon, and Site descriptions. Figure 13 shows the general section.

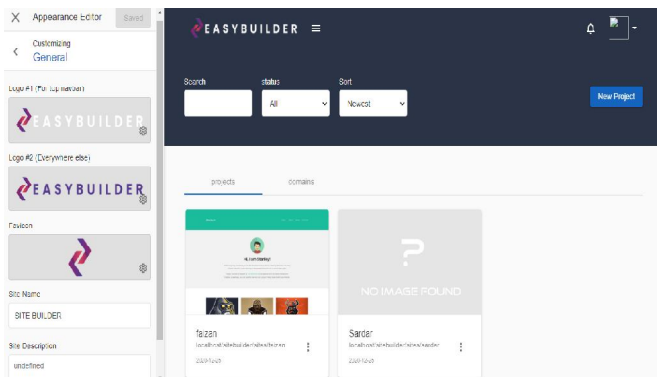


Figure 13: General

### 7.2.6 UI THEME

The Theme Features activates new themes or edit new themes like Dark or Light. User can customize these themes accents to contrast, Default, emphasis, lighter, Backdrop as shown in figure 14.

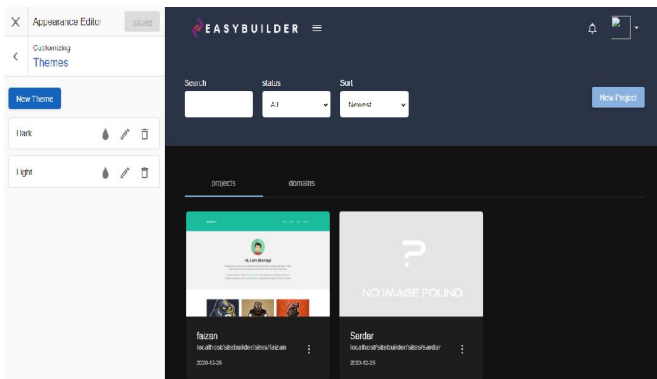


Figure 14: UI Theme

### 7.2.7 MENUS

Menus Features is for the Dashboard Menus to customizing the Menu which includes Adding a New Menu and even to customizing dashboard Menu its name, Position, Menu Items, label, Type and etc.

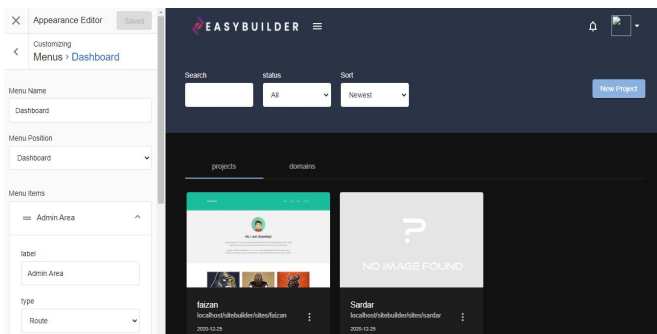


Figure 15: Menus

### 7.2.8 TEMPLATES

The template tools have features to add a new template to the projects and adding them in to different categories, an admin can delete or add template to website which will be used by a user to create a new project as shown in following figure 16.

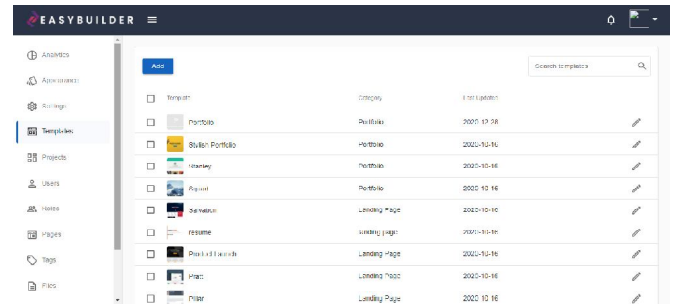


Figure 16: Templates

### 7.2.9 USERS

The users settings include settings for add a user and it keeps a record of the users access and their roles is it an Admin or a user. Figure 17 shows the users section.

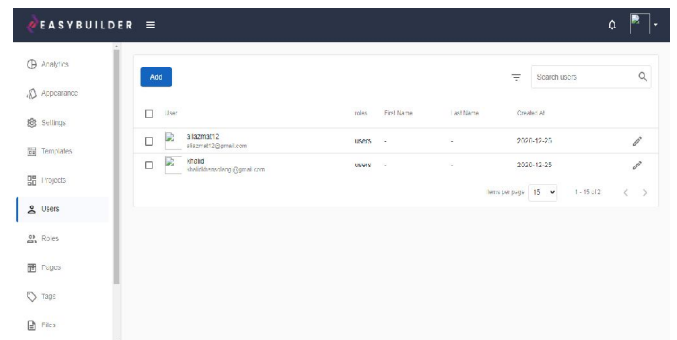


Figure 17: Users

### 7.2.10 ROLES

Roles Section gives privileges to a specific user to assign some certain roles or responsibility for the website. It gives some of the access to the Guest user to access some of the admin Privilege. The Guest user can change certain things as templates code the main dashboard. The admin will assign the privileges to the user as shown in following figure 18.

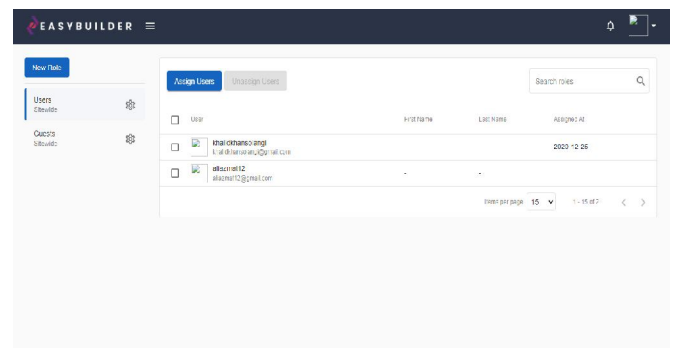


Figure 18: Roles

### 7.2.11 PAGES

The Pages feature can add or remove the pages from the website as shown in figure 19.

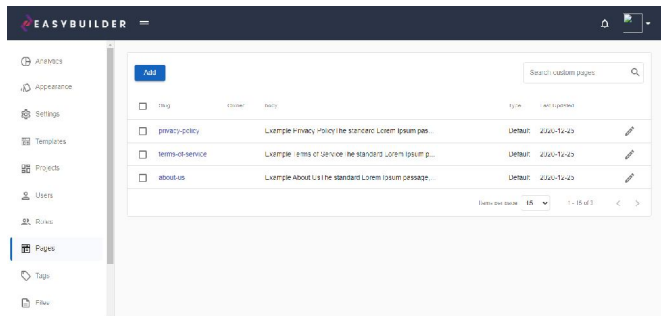


Figure 19: Pages

### 7.2.12 FILES

The Files section contains the File entries which Contains images and also handles the files records. Following figure shows the files section.

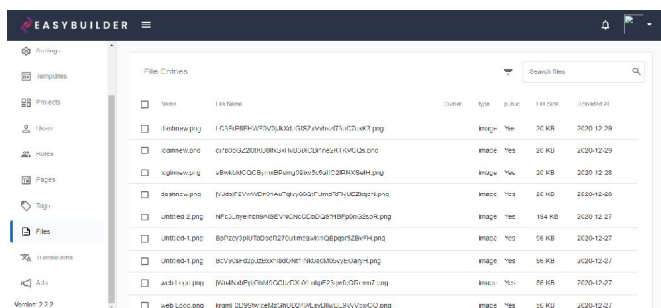


Figure 20: Files

### 7.2.13 AD'S

Ad's section includes adding Ad's to the website on top to the dashboard and at the bottom of user dashboard as shown in figure 21.

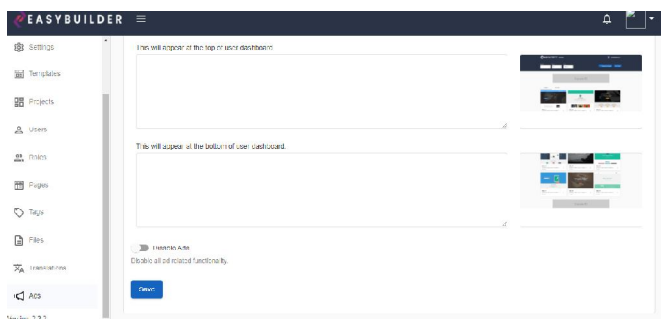


Figure 21: Ad's

## 8. TESTING AND EVALUATION

**Primary data:** Primary data was collected by firsthand (Primary source) information producing the set of questions in English language related to the project.

**Secondary data:** Secondary data has also been used for literature review that justifying our research work; in the light of numerous academic articles of various authors.

**Sampling:** Random sampling method was used by collecting the data from the 180 respondents including both students and teachers of Shaheed Benazir Bhutto university Campus Naushahro Feroze.

**Statistical methods:** In starting, we checked the reliability of the instrument by using spss26 through Cronbach's alpha.

### 8.1 VALIDITY/RELIABILITY ANALYSIS

The peer review and expert opinion offered validity for the research tool. After testing, several changes were made to the analysis instrument claims. To test the effectiveness of tools, the following final draft of the questionnaire was used as shown in Tables 1.

Table 1: Questionnaire for project

Qno: 1	Is this Project providing you such a platform that is reliable and easily accessible?
Qno: 2	Does this project save your time?
Qno: 3	Which feature do you think that it is missing and should be added to this project?
Qno: 4	What do you think that a platform without coding is efficient or not?
Qno: 5	This project lets you edit to enhance the template design landing pages and many more. Does this inspire you?
Qno: 6	Does this project provide you such portfolios that strengthen your business?
Qno: 7	What do you think this project is efficient in marketplace?
Qno: 8	Does this site cover the needs that you want to acquire?
Qno: 9	Is this project said to be effective, efficient, and highly scoped in modern world technology?
Qno: 10	Is this project going to create an impact able usage record on Web Developers and Freelancers?
Total Cronbach's alpha: $\alpha = .80$	

The descriptive statistics was also run using Spss26 and the following results were achieved as discussed below.



Results are based on pie chart analysis discussing across the concepts of time saving, coding or without coding, Business strengthen and users need.



Figure 22: Time saving

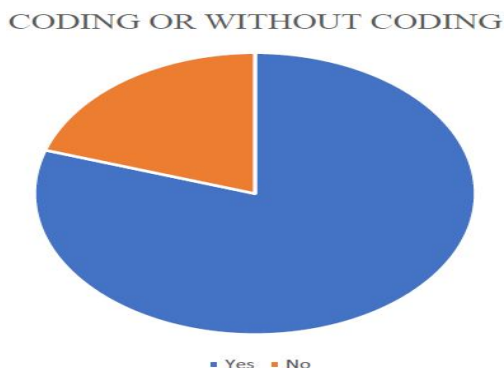


Figure 23: Coding or without coding

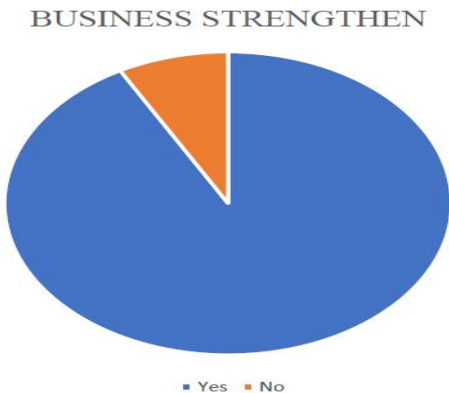


Figure 24: Business Strengthen

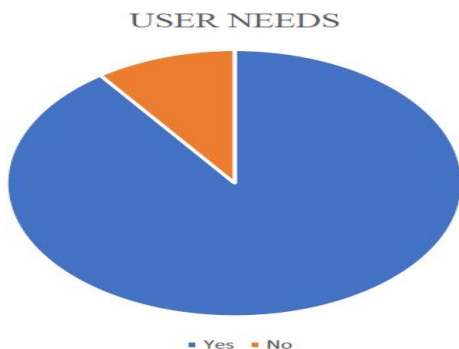


Figure 25: Users Need

## 9. FEATURES OF PROJECT

### 9.1 SCALABLE

It is highly scalable in nature, provides more than 40 components to be used in latent for free updates or to create own custom component quickly.

### 9.2 MOVEABILITY

It offers advance drag and drop competences that allow the user to rapidly move items in the builder any time you like by dragging and dropping them.

### 9.3 ROBUSTNESS

It is Robust in nature; it allows live editing through one can easily edit most of the element properties such as padding, shadows, borders, backgrounds etc.

### 9.4 EASY MANAGEABLE

It manages the appearance of website orthodoxy (color, theme, landing page, menus etc.) with the built-in advert editor

## 10. CONCLUSION

A development server designed to receive a choice of a design template to be included in the construction of the website. A design template including an initial configuration for website pages and recommended content, and a representation of the website from the design template in a development environment are included in one of the framework embodiments. The representation provides controls for the editing of the content and structure of the representation of the website, in which the rendering produces HTML files that are presented to a user, and allows the user to edit the interface features of the website based on a rendered view of the website in the production environment, a currently displayed representation of a web page with editing software embedded in the web page. Editing applications consist of tools for editing pre-existing components of a single embodiment of a web page. Furthermore, after the creation of server generated HTML files that are passed to the production server, the framework requires a production server designed to host the web site. The innovation is to provide a platform for making it easy to build websites and pages based on stored templates that enable the website and pages to be modified and configured without the user needing to write any software code.

## 11. FUTURE WORK

This platform enhances its performance by providing upgraded resumes in future. In order to compete with different technologies, this system applies such features that are related to modern specifications and requirements that will work user

accordingly. The main motive is that, this platform going to achieve the user's accessibility whatever this platform provides, the user may easily access it, without putting too much efforts. Furthermore, this platform is going to strengthen the business by introducing such new templates, designs, portfolios and many more. Moreover, the high-level projects and management systems will also be added to the template section. The platform will also be introduced with the high-level technologies like WooCommerce, Laravel, React, Redux, Angular, etc. The platform will also be integrated with new sections like hire experts from platform to solve very complex problems. More features like Live Chat, Sitemap, etc will also be integrated with the system.

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