# INDUSTRIAL ATTACHMENT REPORT

A Report Submitted in Partial Fulfillment of the Requirements for the Award of Degree of

# **BACHELOR OF SCIENCE**

in

# INFORMATION AND COMMUNICATION ENGINEERING

Submitted by

Roll No.: 18511110

Session No.: 2017 - 2018

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# DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY FACULTY OF SCIENCE AND TECHNOLOGY BANGLADESH UNIVERSITY OF PROFESSIONALS

April 18, 2021

# **APPROVAL**

The report on "INDUSTRIAL ATTACHMENT" submitted by Musaddik Habib Shirsho, Roll No: 18511110, Session: 2017-2018 has been approved as acceptable as part of the Bachelor of Science in Information and Communication Engineering degree requirements.

Saiful Islam

Lecturer

Information and Communication Technology

Bangladesh University of Professionals

# **DECLARATION**

I hereby certify that the work is my individual research, and that I wrote it from beginning to end. I have adequately documented all information sources used in the paper. The report has never been submitted (in whole or in part) for a degree or certificate at any branch of engineering before.

Letter of Transmit

April 13, 2021

Saiful Islam

Lecturer, Department of Information and Communication Technology

Bangladesh University of Professionals

Subject: Regarding the Submission of industrial attachment report.

Dear Sir,

I'm a lot of thankful to you for introducing here with my "Industrial attachment Report", according to your directions. I have effectively finished my modern connection zeroing in on the Web development using php system (Laravel) as an incomplete culmination of the Bachelor of Information and Communication Engineering program prerequisite. I'm appreciative to you for showing such drive of useful situated training. I attempted with honesty, quickness and energy in assembling the material that contributed towards the readiness of this internship report.

Notwithstanding different deficiencies, I have attempted to follow your suggestions and all the pertinent data that you have assigned me. I made an honest effort to give the most reasonable and significant data accessible. Any insufficiencies or blemishes may emerge. I will welcome for any ideas or suggestions in regards to this report.

Yours sincerely,



Musaddik Habib Shirsho

Batch: BICE-18

Roll: 18511110

Department of ICT, BUP

# ACKNOWLEDGMENTS

\_\_\_\_\_

To beginning, I'd like to express my gratitude to Almighty Allah for providing me with the opportunity to complete the internship period and write a report in this manner. Despite his skipping supporting, I would never have been able to successfully complete both my intern time and this industrial internship study. I am grateful to my family for their genuine assistance and support during the duration of this project work.

I offer my conclusion of thanks to my entry level position director Mr. Saiful Islam sir, who has been a consistent wellspring of motivation as my understudy tutor. Without his nonstop direction and ideas, this report would have been not even close to fulfillment. My appreciation for his trust and liberality goes stunning. I obliged and appreciative to my learned and loved director for his idealistic character, consideration; urging backing and readiness to help have substantially and extraordinarily improve the nature of my Internship Report and raised to its current unmistakable quality.

The effective consummation of this entry level position report would not have been conceivable without the help and help of Skoder Technologies. I feel colossally honored to have gotten this throughout my intern program.

Because of our associates who helped us straightforwardly or in a roundabout way to achieve our work. We are particularly appreciative to Mr. SK Abir (Chief top dog, Skoder advances), has additionally been a positive and empowering effect on our examination endeavors.

Finally, I want to express my gratitude to Bangladesh University of Professionals Authorities for providing us with the opportunity to pursue this internship opportunity through the course "industrial Attachment." It truly prepares students for official work before they join the corporate sector.

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# **ABSTRACT**

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The industrial attachment report stresses the principal works completed by the creator as far as scholarly and non-scholastic points of view. The degree of this report is to recognize and outline the examination which was led, projects finished, expertise acquired and points on the victories as an assistant.

The idea of making life easier and prepare more quickly has led to the technology and automation of various processes. Computer engineering has had a major impact on a wide range of fields, including the business world.

To advance the innovation driven web-based business, www.crowdcontent.co has been created to make a typical stage for purchaser and vender to sell and purchase essential archives/documents/articles in a sensible cost in the wake of guaranteeing content quality. The author was shipped off Skoder Technologies to complete his entry level position. The author discovered him very fortunate by finding the opportunity to work in such a climate that Skoder Technologies gave and got acquainted with a portion of the new arrangements, new innovations.

The activities that the author worked in unquestionably helped him by expanding his viable information profundity. The innovative work projects were generally useful in widening his perspectives in regard to various web application improvement structures.

# ABBREVIATION LIST

SL.	ABBREVIATION	FULL FORM	
1.	SPA	Single Page Application	
2.	IT	Information Technology	
3.	ICT	Information and Communication Technology	
4.	E-Business	Electronic Business	
5.	SEO	Search Engine Optimization	
6.	AJAX	Asynchronous JavaScript And XML	
7.	JSON	JavaScript Object Notation	
8.	JQuery	JavaScript library	
9.	CSS	Cascading Style Sheets	
10.	HTML	Hypertext Markup Language	
11.	UI	User Interface	
12.	DB	Database	
13.	OS	Operating System	
14.	API	Application Programming Interface	

15.	CMS	Content Management System	
16.	CSIT	Computer Science Information Technology	
17.	PHP	Hypertext Preprocessor	
18.	SDLC	Systems development life cycle	
19.	DFD	Data Flow Diagram	
20.	SQL	Structured Query Language	
21.	XHTML	Extensible Hypertext Markup Language	
22.	XML	eXtensible Markup Language	
23.	SVG	Scalable Vector Graphics	
24.	XML	User Interface Language	
25.	MVC	Model View Controller	
26.	HMVC	Hierarchical Model View Controller	
27.	RDBMS	Relational Database Management System	
28.	XAMP	Cross-Platform (X), Apache (A), MySQL (M), PHP (P)	

# **SECTION 1: OUTLINE**

\_\_\_\_\_

# 1.1 CONTEXTUAL

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Temporary positions are formal projects intended to give functional involvement with genuine climate to understudies who are new to field. Temporary jobs help to fabricate skillful resume by giving understudies noticeable work insight. Despite the fact that schools and colleges help understudy in finding the correct Internship programs, it is the duty of the eventual assistants to painstakingly analyze temporary job projects and check whether those projects really offer the preparation they need.

There is no predictable span for how long an Internship program keeps going however normally an Internship is the time of three to a year. During this period understudies have the chance to investigate their field of revenue, discover what future they are plunging and whether their ranges of abilities match their way of profession.

Temporary job program offers a particular stage to understudies to construct a powerful establishment to their vocation, comprehend the work environment culture, acquire indispensable business-related insight, create pertinent abilities, and furthermore presents the chance to discover lasting work in the host organization. A portion of the significant advantages of Internship program to understudies include:

- ➤ Learners can find out about the working environment culture and gain genuinely necessary work insight.
- Learners can at last experience useful execution of studies which knowledge have been gaining from the bookish studies.

- Learners can construct a solid establishment which will support them.
- Remarkable execution in the intern program can protect perpetual work with the present organization.
- Some temporary position programs are paid projects meaning understudies can bring in cash while they get important openness.

# 1.2 RESOLUTION OF INDUSTRIAL ATTACHMENT

\_\_\_\_\_

The internship program gives students with a fresh viewpoint. It expands learning opportunities beyond the course's core curriculum and university classroom events. These prospects help students improve their ability to apply theoretical knowledge to real-world situations, which helps them achieve their academic and career goals.

Internships help students grow their careers in a variety of fields such as coding, programming, networking, and so on by offering valuable field work knowledge that lets students to explore their areas of interest and improve applicable abilities and aptitudes.

Internships offer a unique opportunity for organizations to educate new talent, improve their professional development, and assist intern mentors/supervisors in their professional development. Interns can also help an organization identify new workers.

# 1.3 GOAL OF INDUSTRIAL ATTACHMENT

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The main target of this paper is to gain the knowledge of the overall system of an organization especially "Skoder Technologies" as well as gain professional skills & knowledge on organizational associated endeavors to implement them in near future.

The preeminent goal of entry level positions are:

- ➤ To examine the ICT area in corporate framework in Bangladesh.
- To set out open doors and create abilities in the field of interest.

- > To get fundamental business-related insight and building solid resume for splendid profession
- ➤ To create business contacts for example making network contacts.
- ➤ To give a few supports to the improvement of my own exhibitions.
- ➤ To give pertinent comments and future program bearings.

# 1.4 OPPORTUNITY OF THE INDUSTRIAL ATTACHMENT PAPER

\_\_\_\_\_

This report is to satisfy the necessity for modern connection. This paper has covered up the immediate and aberrant parts of programming and site improvement industry and their difficulties.

This report gives a knowledge of the experience that Author accomplished from my working environment. A short portrayal of 'Skoder Technologies' is incorporated so the experience can help other people to think about the organization and may help in future to pick this organization and may choose whether it is reasonable for them or not. Temporary position assists with feeling the genuine corporate life all the more intently and to assemble information. To accomplish this significant objective task-based work is the principle approach to assemble more insight. Till composing this report, I have finished first stage and aided in building up the https://crowdcontent.co/site. The course of events, undertakings, aftereffects of this venture are incorporated to imagine the entire mechanical connection time frame more clear.

# 1.5 PROBLEM EXPLANATION

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In today's world, with so much dispersed knowledge, there are so many challenges and the need to make the right choices in a short amount of time. Client demands for feedback differ, and it's often difficult to include expert solutions across a wide range of criteria in a consulting company. To address this issue, the CrowdContent marketplace was created. CrowdContent investigates, selects, and puts at our disposal the best of the best to help the user be successful in their work.

Our online marketplace of industry best practices is the CrowdContent Marketplace. It houses the world's largest collection of best-practice business papers. These best practice materials were created by a network of hundreds of subject matter experts, the majority of whom are seasoned executives and management consultants with more than 20 years of experience.

# 1.6 CONSTRAINT OF THE REPORT

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I encountered some limitations while preparing this paper. Regardless of the limitations, I attempted to create an engaging report by incorporating data and explaining the functionalities.

The following are the report's overall limitations:

- ➤ Since some information was considered to be classified for security purposes, there were some limitations on revealing it. As a result, the author was unable to include them in this article.
- ➤ Some of the knowledge obtained from secondary sources was not organized consistently by the author.
- ➤ The author was unable to provide or reveal any details in the study due to organizational confidentiality.

# **SECTION 2: SKODER COMPANY SUMMARY** 2.1 OUTLINE \_\_\_\_\_ SKODER is an Information Technology Support company launched in 2018. Over the years, we have helped many Startups along with enterprises to start and accelerate their business and make an impact on the world. Our main objective is to support the growing ideas that solves our day-to-day problems. People working on these issues may not technically that much sound. We view the solutions in a technical point of view and enrich those ideas into masterpieces. As an Information technology Supporting company, we tend to bring new innovative and unique ideas which values for our customers through our professional solutions. Our mission is to build a strong reliable supporting organization to serve an increasing demand for quality web and mobile app development, software solutions and graphics globally. About Skoder:

Skoder Lab

Skoder Dev

Skoder Studio

Skoder Media

Skoder Go

Skoder Remote

Skoder Market

**Skoder Connect** 

2.2 ABOUT Skoder Dev

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Skoder Dev, a leading software and websites development firm, was founded in 2017 and is based

in DOHS, Mirpur, Dhaka-1216. This company is dedicated to delivering the most of the

technological age through sustainable optimization.

Skoder Dev is an ever-expanding group of driven and brilliant individuals. This outstanding team

has all of the answers to their customers' most difficult problems. The activities of this business

are accessible both onshore and offshore, and they are delivered with pride and enthusiasm. This

company is made up of a community of young, inspired, and professional individuals whose main

focus is to provide creative web and software development solutions to their clients.

2.3 CONTACT DETAILS

\_\_\_\_\_

**Organization**: Skoder Technologies

Address: Road-9, Avenue-3, house-632, A-1, Dhaka-1216, Bangladesh.

Email: contact@skoder.co

**Phone**: 01521494166, +880 1750-726094

Website: https://www.skoder.co

Official Logo:



Figure 1: Official Logo

2.4 SERVICE AREA

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Every company in today's world relies heavily on technology to keep operations linked, drive sales, and meet ever-increasing consumer demands. Information Technology (IT) is unquestionably essential for handling technology, and it covers a broad variety of topics including computer programs, information technology, programming languages, database management systems, networking, and so on. With these considerations in mind, Skoder Technologies offers a diverse range of services and solutions. Skoder Technologies offers the following services:

**Skoder Services:** 

	Startup Development			
	Software Solution			
	WebTech & Mobility			
	Internet of Things			
	AR-VR-MR Development			
	NextGen Branding			
	Cyber & Cloud			
	Data Technology			
	Artificial Intelligence			
2.5 TE	ECHNOLOGY USED			
>	Web Application Technologies: PHP, Laravel, API, AJAX, JavaScript, JSON, JQuery,			
	CSS3, HTML5.			
>	UI Frameworks: Twitter Bootstrap 4.			
>	Frameworks: Laravel, CI			
>	DB: Mysql.			
>	Operating System: Windows 10			
>	Other: Facebook API, Google Map API, CMS, Google API's			

**SECTION 3: BREAKDOWN OF ACTIVITIES** 

\_\_\_\_\_

3.1 ORGANIZATION SELECTION

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It is vital to choose association that satisfies our destinations. All things considered for our temporary job, it is important to choose association where there is learning climate on the grounds that as an understudy our first rationale is to figure out how the functions are completed in the genuine field.

The four-year level of BSc. permits us to achieve information on different parts of Information Technology. Entry level position program acquaints the understudies with the expert world. As the IT world is an immense territory to deal with, that is the reason Among the different standards and areas gave to us in temporary job essential articulation, programming Development Company was picked. Numerous organizations were shortlisted and drawn closer out of the association with great climate.

Skoder is an IT organization that covers site improvement, programming advancement, AI, IOT, research work. Business applications arrangements utilizing present day advancements and other web related frameworks. The organization assisted me with acquiring wide insight by getting me associated with their tasks.

3.2 INTERVAL PERIOD

\_\_\_\_\_

**Start Date**: 10 February 2021

**Duration:** 5 weeks

**Position**: Web Developer Intern

**Supervisor:** Mr. Saiful Islam sir (Lecturer, Bangladesh University of Professionals)

**Working Hour**: 09:00 am – 6:30 pm

Completion Date: 17 March 2021

3.3 ROLES AND OBLIGATION

During the internship, participants explore a variety of platforms and programming languages. The aim was to create a fully functional web-based system using various tools and frameworks such as PHP (Laravel).

During the internship period php framework (Laravel) has been implemented more deeply. As a result new features of Laravel has been learnt for developing this project. Laravel authentication, sending mail to multiple users and CRUD (C = create, R = read, U = update, D = delete) features has been implemented more vastly. Core php knowledge is prerequisite before advancing to Laravel. Mysql database and query knowledge is also very much important to fetch data from database. Daily meetings with the Supervisor and discussions with advisors aided in broadening my understanding of the current structure and problem history. The Skoder Developers Company provides software development as one of its main services. Skoder Developers offers versatile and scalable software (web-based or desktop-based) solutions to meet the needs of small and large businesses.

3.4 Crowd content (Overview)

Crowd content is an online platform that allows users to locate necessary documents and sell their valuable files/documents/articles to others in a secure and quality-assured manner. The best practice, suggestion, and documents in business will help a consumer grow his or her business.

There are some categorizations of users. Normal customers and premium members. Customers can buy their products by registering in crowd content. For premium members referral discount feature is also available. Library is a pro feature which can use only the premium members.

Subscription can be achieved in some categorize. 'Individual' subscription is only for one person. It is counted as monthly and download count limit. 'Team' subscription has made for a team consisting of 5-10 members. And lastly the big package 'Firm' package is for people of 15-20 persons in a firm.

A regular customer can be an author. Author can write blogs in crowd content website. Moreover, a customer can also sell their product/files/articles/documents here. Crowd content helps the seller to find his customer and sell the document with a feasible price.

The payment method is very easy and user friendly. After a successful transaction buyer/seller can pay the amount using mobile banking or cards or internet banking system. Mastercard, debit card and visa cards are available for card transaction. For our local mobile banking system, bkash, rocket. Nagad, t-cash are available for secure and successful transactions.

If a user doesn't want to be crowd content member but he finds his documents in our site and he wishes to buy that. Then there is free download feature where he/she can download the free documents/files just by giving name, e-mail & job information.

Crowd content values the user satisfaction and information security. The information is safely stored using encryptions methodology. We store data to give better user experience in future. A user can request for his product if it is not found in website. User can also review a product and help others to choose the best documents/files.

There are a lot of sites which does nearly same job. So, there might be a question that "Why crowd content?". The answer is crowd content ensures files/documents' quality. The file will be checked before uploading to the site. Crowd content supplies necessary documents in a short time to a vast customer. It is a reliable platform for best practices.

3.5 CREW MEMBERS

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For the project, author has been paired with Touhedul Islam Ratul, my senior programmer. He gave me introductions so that the author could grasp the project in a short amount of time, and he also assigned me the problem to solve. Without his guidance, the author would not be able to complete the project.

3.6 TECHNOLOGIES

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When author was told to work on CrowdContent, he asked Touhedul Islam Ratul sir what technologies he needed to learn in order to complete the project. He sent me a list of technologies to learn, which author did.

- \* SQL Query
- \* Web Socket
- \* PHP (Laravel framework)

# 3.7 POSSIBILITY AND PROGRESS TACTICS

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The possibility of the project is to build crowdcontent.co website. The main motive to build this website is to provide documents/files/PowerPoint slides/business documents etc. at a reasonable price to by ensuring document quality.

The advanced admin panel was created to keep track of users and manage all administrative tasks. Different admins have different roles, which are done by the super admin. Laravel is used to generate all of the web APIs, and MYSQL is used as the database. Super Admin can create admins with limited administration power. The transactions are monitored in admin panel. Test cases are written in such a way that they cover all of the relevant field validations as well as database validations. Following the development of the application, the subsequent test cases are run alongside a couple of runs, and any bugs found are fixed. The finished product is shipped after the testing is completed.

# 3.8 WORKING SCHEDULE (WEEKLY)

\_\_\_\_\_

Task	Details	Start	End
Meeting	First Meeting	15.02.21	15.02.21

FAQ, about us, contact us page implementation	Overall feedback sends	16.02.21	18.02.21
Front-End Development	Homepage Design	16.02.21	18.02.21
Request for products	If desired documents/ Product is absent in website, they can request for that product	18.02.21	20.02.21
<b>Necessary Meeting</b>		19.02.21	19.02.21
Finding Template	Choosing templates of Crowd Content library	19.02.21	20.02.21
Modify quotation	Send email to admin	21.02.21	23.02.21
Front-End Development	Crowd Content Library (HTML)	21.02.21	22.02.21
Feedback from customer	Create a FAQ, about us, contact us page and make it dynamic	21.02.21	23.02.21
<b>Necessary Meeting</b>		23.02.21	23.02.21
Front-End Development	Crowd Content Library (CSS & Bootstrap)	23.02.21	25.02.21

Admin CRUD	Create a admins using super admin	24.02.21	25.02.21
Rate & Samp; feedback, for individual products & Samp; view reviews	Rating & Samp; feedbacks of individual documents and make it visible to all products.	25.02.21	28.02.21
Front-End Development	Crowd Content Library(JavaScript)	26.02.21	27.02.21
Social Login	Login by google, Facebook account	25.02.21	02.03.21
Newsletter subscription, Product request	Newsletter subscription functionalities in frontend and admin panel	03.03.21	07.03.21
Admin create, banner change, logo change	Admin can create new admins, banner and logo can be changed from admin side	08.03.21	15.03.21

**SECTION 4: SYSTEM ANALYSIS** 

4.1 SOFTWARE CONFIGURATION

PHP was used to build this website (Laravel). Laravel is a PHP-based open-source continuous

improvement web framework for building interactive websites.

Laravel:

Laravel is a web application technology with a syntax that is both descriptive and sophisticated. A

web interface gives your application structure and a starting point, make sure to focus on making

something awesome while we handle the information.

Laravel aims to provide such a fantastic developer experience while still delivering advanced

features including comprehensive dependency injection, an interactive database distribution layer,

queues and scheduled tasks, module and integration and system testing, and much more. [2]

**Operating System:** Windows 10

**Database**: MS SQL Server (back end)

PHP version: 7.4.7

Composer version: 2.0.8

4.2 SOFTWARE TOOLS USED

The project is split into two sections: front end and back end.

#### 4.2.1 FRONT FND:

CSS, HTML 5, Bootstrap 4, and other technologies were used to build the front end.

### 4.2.1.1 HTML

HTML elements are the components that make up HTML pages. Images and other artifacts, such as interactive forms, may be inserted in the rendered page using HTML constructs. HTML allows you to construct organized documents by indicating structural semantics for text elements like headings, paragraphs, lists, links, quotes, and other elements. Tags, which are written in angle brackets, separate HTML elements. Tags like <img /> and <input /> add content to the page directly. Other tags, such as , surround and include information about document text, and may include sub-elements of other tags. The HTML tags are not displayed by browsers; instead, they are used to interpret the page's content.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997. (Wikipedia, HTML, n.d.)

# 4.2.1.2 CSS

CSS (Cascading Style Sheets) is a style sheet language for defining the appearance of a document written in a markup language like HTML. Along with HTML and JavaScript, CSS is a key component of the World Wide Web.

CSS is outlined to empower the division of introduction and substance, counting format, colors, and textual styles. This division can make strides substance availability, give more adaptability and control within the determination of introduction characteristics, empower numerous web pages to share organizing by indicating the significant CSS in a partitioned .css record which reduces complexity and redundancy within the basic substance as well as empowering the .css

record to be cached to move forward the page stack speed between the pages that share the record and its designing. [4]

### 4.2.1.3 JAVA SCRIPT

JavaScript could be a scripting or programming dialect that permits you to execute complex highlights on web pages — each time a web page does more than fair sit there and show inactive data for you to see at — showing convenient substance overhauls, intuitively maps, energized 2D/3D graphics, looking over video jukeboxes, etc. — you'll wagered that JavaScript is likely included. It is the third layer of the layer cake of standard web innovations, two of which (HTML and CSS) we have secured in much more detail in other parts of the Learning Range. [5]

4.2.1.4 PHP (Laravel)

Laravel is an open-source PHP framework, which is robust and easy to understand. It follows a model-view-controller design pattern. Laravel reuses the existing components of different frameworks which helps in creating a web application. The web application thus designed is more structured and pragmatic.

Laravel has a large feature set that includes the core features of PHP frameworks such as CodeIgniter and Yii, as well as other programming languages such as Ruby on Rails. Laravel has a large number of features that will speed up web growth.[6]

#### 4.2.2 BACK END

MySQL, which is used to construct databases, is used to design the back end.

# 4.2.2.1 MYSQL

MySQL ("My S-Q-L", authoritatively, but too called "My Continuation") is (as of July 2013) the world's moment most broadly utilized open-source social database administration framework (RDBMS). The SQL state stands for Organized Inquiry Dialect. The MySQL advancement extend

has made its source code accessible beneath the terms of the GNU Common Open Permit, as well as beneath a assortment of exclusive understandings. MySQL was claimed and supported by a single for- benefit firm, the Swedish company MySQL AB, presently claimed by Prophet Enterprise. MySQL could be a well known choice of database for use in web applications and may be a central component of the broadly utilized Light opens source web application computer program stack (and other 'AMP' stacks). Light is an acronym for "Linux, Apache, MySQL, and Perl/PHP/Python." Free-software-open-source ventures that require a full-featured database

administration framework frequently utilize MySQL. For commercial utilize, a few paid versions

are accessible

4.3 SPECIFICATION OF THE HARDWARE

Processor: Intel core i5 8th generation

Hard Disk: 756GB

RAM: 8GB

4.4 DATA PREREQUISITE

The query to the database is one of the inputs, and the answer to the query is one of the outputs.

The consumer also receives information about their accounts as one of the outputs. In this project,

the inputs will be user-generated queries such as "build an account," "be a premium member,"

"make payment," and so on. When a user requests information about their account from the server,

such as the time, date, and sum charged, or a wish list, the performance will now be available.

4.6 PRACTICABILITY ANALYSIS

A feasibility analysis evaluates a system plan for its organizational viability, ability to satisfy

consumer expectations, and efficient use of resources. The aim of the feasibility study is to get a

sense of the problem's complexity rather than to solve it.

# 4.6.1 METHODOLOGICAL FEASIBILITIES

For any type of program or website, technical viability is critical. Taking this into account, crowd content is created by making the necessary resources more accessible for system creation and maintenance. The organization has all of the tools that are used or needed for production. We are making use of the resources that are already available to us.

### 4.6.2 COSTING FEASIBILITIES

This application's development is cost-effective. The company did not have to spend a lot of money to implement a similar system that was already in place. The only thing left to do is create a conducive atmosphere for growth under effective supervision. We would be able to maximize the usability of the corresponding services if we do so. The company will not be able to invest more in the organization even after it has grown. As a result, the system is financially viable.

# 4.7 EXHIBITING SYSTEM

A requirements model is made up of many of these diagrams, each focusing on a different aspect of the users' requirements. It concentrates on the external actions of the device rather than the internal design.

# 4.7.1 USE CASE ILLUSTRATION

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The use-case diagram depicts the user's and admin's activities. And the way they're portraying their characters. The following diagram depicts the system's key features, despite the fact that the

entire mechanism is vast and complex.

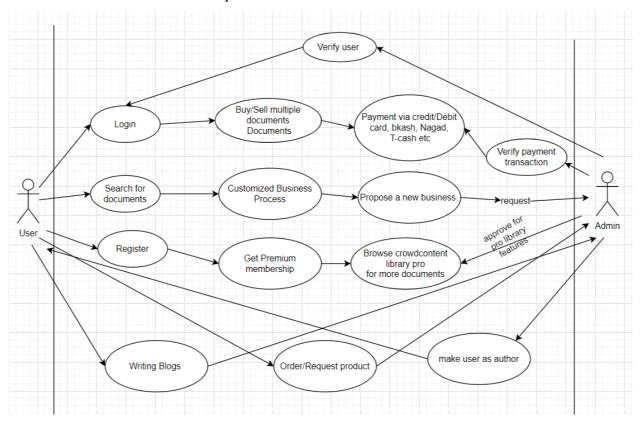


Figure: Use case diagram of crowdcontent

# **SECTION 5: SYSTEM DESIGNING STRATEGY**

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5.1System Features

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The whole software ecosystem is defined in details bellow:

5.1 User Application Features:

# **5.1.1 Registration and Login**

The users need to register with their details and get verified. There are two types of users: Freemium and Premium users. Freemium users will create accounts and get access to the features without library. On the other hand, Premium users will create accounts and get access to the features with library.

# **5.1.2 Dashboard Management**

User dashboard will contain all the details of user with the web app like previous purchase, uploads, experience and other details stuffs.

# **5.1.3 Browse and Search**

User will be able to search with categories.

# **5.1.4 Browse and Purchase**

User will be able to purchase the documents according to their needs.

# **5.1.5 Details about Crowd Contents**

The user web site will contain all the information of Crowd Contain and Skoder Technologies logo. The logo should not hamper the core functionality of the terms and conditions. There will be a logo of Skoder as IT partner at the end of the footer or in the About Crowd Content page as for example. This will make a better relationship between Skoder and Crowd Content.

# **5.1.6 Terms and Conditions**

The users will be aware of terms and conditions of Crowd Content in the application page.

#### **5.1.7 Rate and Feedback**

The users can rate and give feedback in web application about his experience.

# **5.1.8 Purchase Business Toolkits**

User will able to buy any kind of business toolkit according to categories. They can search and find any kind of toolkits.

# 5.1.9 Upload Documents for Sell

Premium users can upload business documents and they can sell that documents as well.

# 5.1.10 Virtual Library

Premium users can read the virtual library, but freemium users cannot read virtual library.

### **5.1.11 Business Process Contact**

User can request for business process development service. It's a service provided by Crowd Content team. User will fill up the form and request for a business process.

# **5.1.12 Free Download**

Admin can set enable the free download option to let the users download the documents free.

# 5.2 Admin Application Features

# 5.2.1 Registration and Login

The super admin login credential will be given by the developer company.

# **5.2.2** Approve and Manage Files

Admin will approve all the files and will manage them.

# 5.2.3 Rate and Feedback

Admin will get any kind of feedback and ratings in the Appstore.

# **5.2.4 Purchase Details**

Admin will keep the detailed documents of purchase.

# **5.2.5 Business Toolkits Management**

Admin will categorize all the toolkits for the users.

# **5.2.6 Manage Blogs**

Admin can manage blogs when it needs.

# **5.2.7 Business Process Requests**

Admin will get the desired business process development application by the users.

### **5.3 SYSTEM ARCHITECTURE**

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The aim of system architecture activities is to identify a holistic solution based on logically connected and coherent values, concepts, and properties. The application architecture has functionality, resources, and properties that, to the greatest extent possible, satisfy the problem or issue outlined by a collection of system requirements (identifiable to project and stakeholder requirements) and lifespan principles and are able to be implemented throughout frameworks (for example- mechanics, electronics, hydraulics, software, services, procedures, human activity).

Proposed system framework is conceptual, logical, multinational, and based on achieving the system's purpose and life cycle principles. It also concentrates on system and system feature high-level structure. It discusses the system-of-architectural interest's values, definitions, properties, and characteristics. It may also be used on multiple systems, establishing the general framework, pattern, and collection of specifications for classes or families of identical or related systems in some cases.[1]

5.4 DATABASE DESIGN

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A database schema is defined as a collection of instructions for creating, implementing, and maintaining a company's database management systems. Database design's main aim is to construct physical and theoretical manifestations of the required data model. The database structure used for preparing, storing, and managing information is defined by database design. Only a database designed to hold only useful and essential information may achieve data accuracy.[7]

5.5 DATABASE SCHEMA

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A database schema is a modular framework that describes the logical view of the database. It defines how data is organized and how relationships are established among them. It defines all of the data restrictions that will be implemented. The schema describes the entities in a database schema, as well as their relationships. It contains a database summary that can be visualized using schema diagrams.

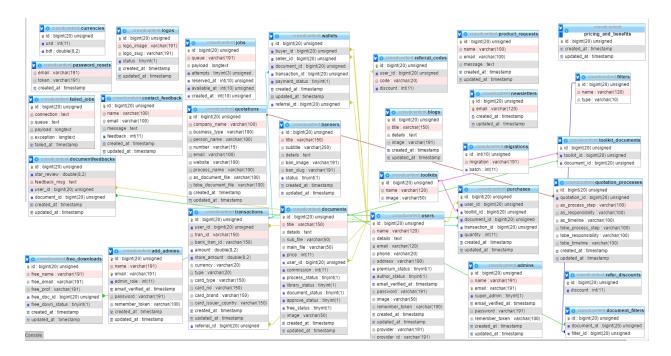


Figure 2: Database Schema

# 5.6 USER INTERFACE DESIGN

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User interface (UI) design, also known as user interface engineering, is the process of creating user interfaces for machines and apps, such as computers, household appliances, cell phones, and other electronic devices, with the aim of increasing usability and improving the experience for users. In terms of achieving user goals, the purpose of user interface design is to make the user's interaction as easy and effective as possible (user-centered design).

It is easier to complete the mission at hand with great application creation because it does not draw too much attention to itself. Graphic design and typography are used to promote the usability of the interface, affecting how well the user conducts such experiences and enhancing the design's visual impact; design aesthetics can improve or remove from users' capacity to use the interface's features.[8]

# 5.7 User Interface Layout

The outlook creates user satisfaction for the website. However, system performance also plays major role. Crowd content UI is designed considering good user experience and demand. The outlook is simple and easy. Anyone can browse the whole UI environment. However, there plays a lot of backend function to provide the user best experience. The layout pictures are attached bellow to give a small idea about crowd content.

#### 5.7.1 HOME PAGE LAYOYT

This is home page or the 1<sup>st</sup> page of website. This page contains few documents/files from process and documents page to advertise. Recently added documents and toolkit is also shown here using slider. A blog section is also visible written by authors. 'View All' button will redirect to all blogs page to see more blogs in crowd content. Some samples of toolkit documents are also shown. But there is always more to discover. Author section shows top authors in crowd content.

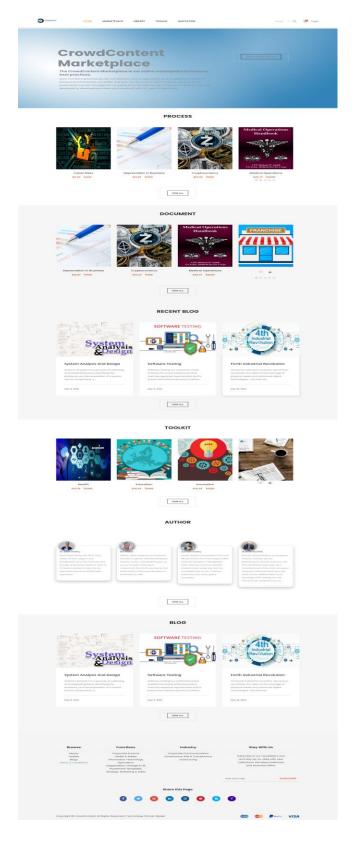


Figure 2: crowd content Home page

#### 5.7.2 MARKETPLACE

Marketplace tab contains documents and process subtabs. These two pages are visible for all kind of users (premium/ non-premium). Free documents/files/articles can also be found in these pages.

To download the free documents user has to provide his/her name, job & email. Documents page sample is given bellow.

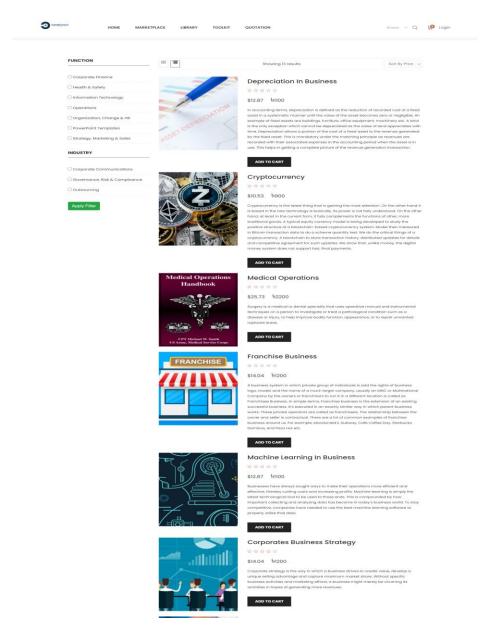


Figure 3: crowd content marketplace.

# 5.7.3 LIBRARY PAGE

Library is the collection of documents & process page's files. Only premium members can access library page. To be a premium member the user will have to pay a certain amount of money for monthly subscription. Then the user will get more discount or download token for free download for premium users.

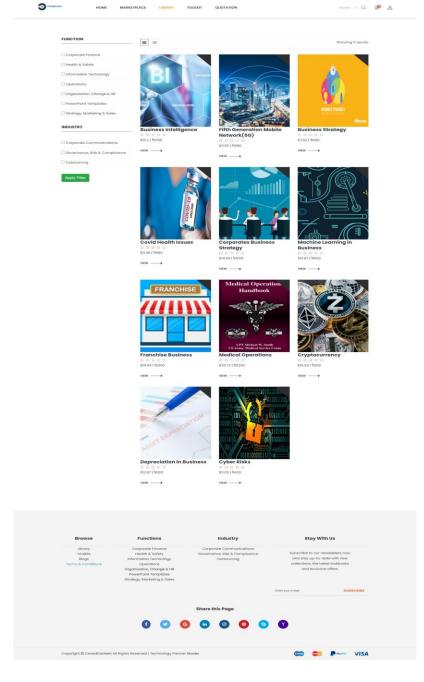


Figure 4: crowd content library

# 5.7.4 TOOLKIT PAGE

Toolkit page is a bundle of multiple documents at a discounted price. In a toolkit or bundle it can contain documents from process and documents. The price is reduced as the user will take various products as a bundle. The discount rate varies as the customer's regularity in crowd content. Premium members will get more discount comparing to non-premium users.

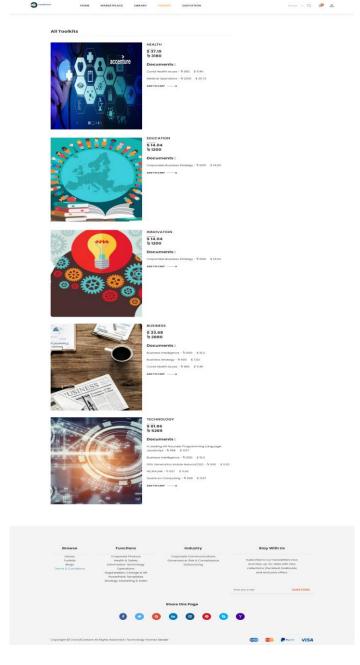


Figure 5: crowd content toolkit

#### 5.7.5 CART PAGE

User can see the selected documents in cart page. By using referral code (provided by crowdcontent for special members) user will get discounted price

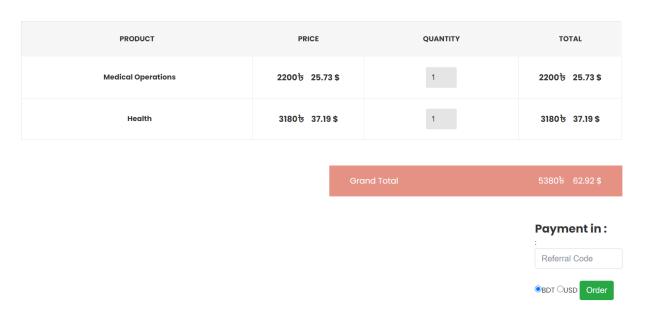


Figure 6: crowd content cart page

# 5.7.6 SSLCOMERZE TO SUCURE PAYMENT

SSLCOMERZE is a secure transaction method. After buying the documents user will pay the amount through debit/credit cards (visa, mastarcard) or mobile banking system (bkash, rocket, m-cash, nagad etc.) or internet banking systems.

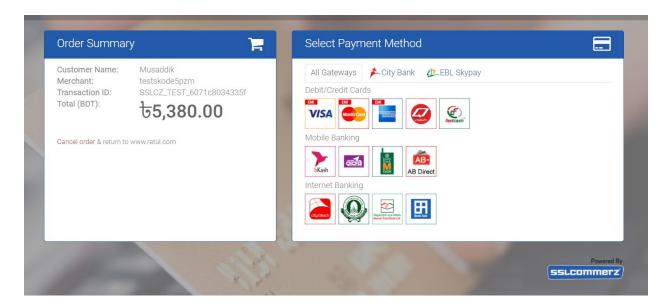
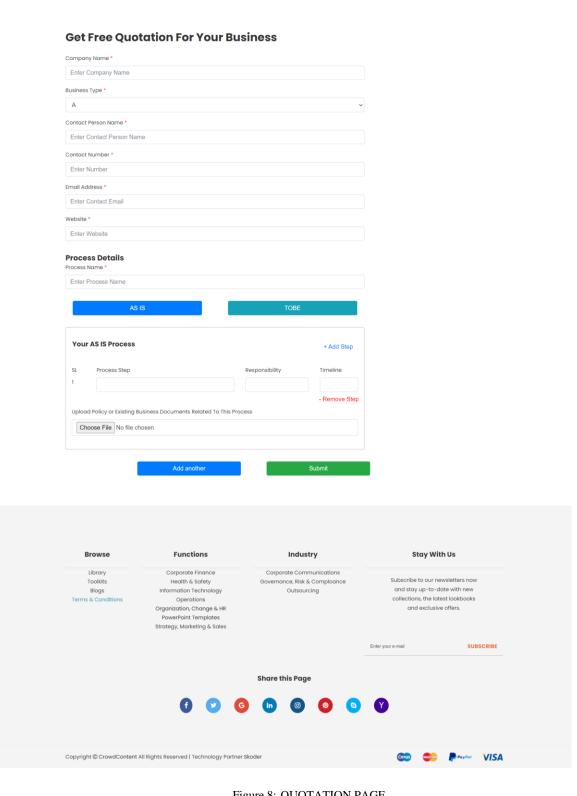


Figure 7: SSLCOMERZE

# 5.7.7 QUOTATION PAGE

In this page the logged in user can propose business methods. He/she can criticize current methods and can propose his way method or thinking which can be applied. Then the request will send to admin panel. Admins or moderators will take decision about it.



O CrowdContent

HOME MARKETPLACE

LIBRARY TOOLKIT QUOTATION

Figure 8: QUOTATION PAGE

Browse v Q 😥 🙎

# **SECTION 6: SYSTEM TESTING**

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#### 6.5 TESTING APPROACHES

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The methods and techniques which is used to test a product to ensure it is fit for purpose are known as testing methodologies. Testing methodologies typically include ensuring that the product meets the specifications, has no unfavorable side effects when used outside of its design criteria, and, in the worst-case scenario, can fail-safely. We use a variety of research techniques. Here are a few examples of methods that are briefly described:

#### 6.5.1 STRATEGY FOR BLACK BOX TESTING

This testing strategy of software testing approach that involves testing the features and functionality of software programs without following a specific code structure. Code implementation specifics is also not visible. The internal paths are not known. Black Box Testing is a form of software testing that focuses on the input and output of software applications and is entirely powered by software acceptance criteria. Behavioral testing is another name for it.[9]

#### 6.5.2 STRATEGY FOR WHITE BOX TESTING

For this form of software testing that is focused on the internal code framework of a program. In white-box research, test cases are created using an internal viewpoint of the framework as well as programming skills. This research is normally conducted on a per-unit basis. In order to verify input-output flow and enhance architecture, protection, and usability, testers must have knowledge of the internal configuration, design, and code of the application under test.[10]

#### 6.5.3 SYSTEM TESTING STRATEGIES

Device inspection examines the whole system. After all of the components have been incorporated, the program is thoroughly reviewed to ensure so that it can fulfil the Quality Standards. A specialist research team performs this sort of testing.

6.5.4 STRATEGY FOR FUNCTIONAL TESTING

We conducted functional testing to ensure that a software application works and functions as

intended. We check the core application features, text input, menu functions, and installation and

configuration on localized machines, among other things, during functionality testing.

6.5.5 STRATEGY FOR ALPHA TESTING

In this level of testing, and it will be done by the teams. Alpha testing refers to the mixture of unit

testing, system testing, and integration testing. The following aspects of the application will be

checked during this process.

6.5.6 STRATEGY FOR BETA TESTING

This test is carried out when alpha testing has been successfully resulted. The program is tested by

a representative of the target audience during beta testing. Pre-release testing is another term for

beta testing. Software beta test versions are best circulated to a large audience via the Internet,

partly to give the application a "real world" test and partly to give a sneak peek at the next update.

Website link: <a href="https://crowdcontent.co/">https://crowdcontent.co/</a>

CERTIFICATE OF COMPLETION



Figure 9: Certificate of completion from Skoder technologies

# SECTION 7: SUMMERY AND IMPROVEMENTS FOR THE FUTURE

#### 7.1 CONCLUSIONS

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With the advancement of the web and the internet, it is becoming increasingly simple for end users to access web-based services.

# 7.2 FUTURE IMPROVEMENTS PLAN

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The crowdcontent platform is a web-based ecommerce site. Multiple users' enrollment is quite normal for an ecommerce site. So, it is clear to estimate the network traffic.in future the system will be more robust and to compete with competing models, the app must have special and innovative functionality.

As artificial intelligence and machine learning are the leading technologies, We can use it to make the site more user friendly and easy. The site contains resourceful & costly documents. To ensure data protection blockchain methodology can be used to make the transactions more secure and authentic.

The use of a mobile app to communicate with an online platform is becoming increasingly simple and convenient. For a wide range of users, an app for iOS and Android platforms is needed. The app is more feature-rich than the website. It gains access to the native API and caches data locally to save bandwidth and provide offline access.

# References

- [1] Alan Faisandier, G. R. (n.d.). *System Architecture*. Retrieved from sebok: https://www.sebokwiki.org/wiki/System\_Architecture
- [2] docs, M. w. (n.d.). *What is JavaScript?* Retrieved from MDN web docs: https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First\_steps/What\_is\_JavaScript#a\_high-level\_definition
- [3] guru99. (n.d.). *Black Box Testing*. Retrieved from guru99: https://www.guru99.com/black-box-testing.html
- [4] Laravel. (n.d.). Meet Laravel. Retrieved from Laravel: https://laravel.com/docs/8.x
- [5] Naeem, T. (n.d.). *All You Need to Know About Database Design*. Retrieved from astera: https://www.astera.com/type/blog/all-you-need-to-know-about-database-design/
- [6] Rajkumar. (n.d.). *What is White Box Testing?* Retrieved from softwaretestingmaterial: https://www.softwaretestingmaterial.com/white-box-testing/
- [7] tutorialspoint. (n.d.). *Laravel Overview*. Retrieved from tutorialspoint: https://www.tutorialspoint.com/laravel/laravel\_overview.htm
- [8] Wikipedia. (n.d.). CSS. Retrieved from Wikipedia: https://en.wikipedia.org/wiki/CSS
- [9] Wikipedia. (n.d.). HTML. Retrieved from Wikipedia: https://en.wikipedia.org/wiki/HTML
- [10] Wikipedia. (n.d.). *User interface design*. Retrieved from Wikipedia: https://en.wikipedia.org/wiki/User\_interface\_design