MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Final Year Internship Report

on

Web development using Blockchain at QuadB tech

Submitted By:

Deependra Singh

0901CS181036

Faculty Mentor:

Prof. Mir Shahnawaz Ahmad

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE
GWALIOR - 474005 (MP) est. 1957

MAY-JUNE 2022

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Web development using Blockchain at QuadB tech

A final year internship report submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

Submitted By:

Deependra Singh

0901CS181036

Internship Faculty Mentor:

Prof. Mir Shahnawaz Ahmad

Submitted to:

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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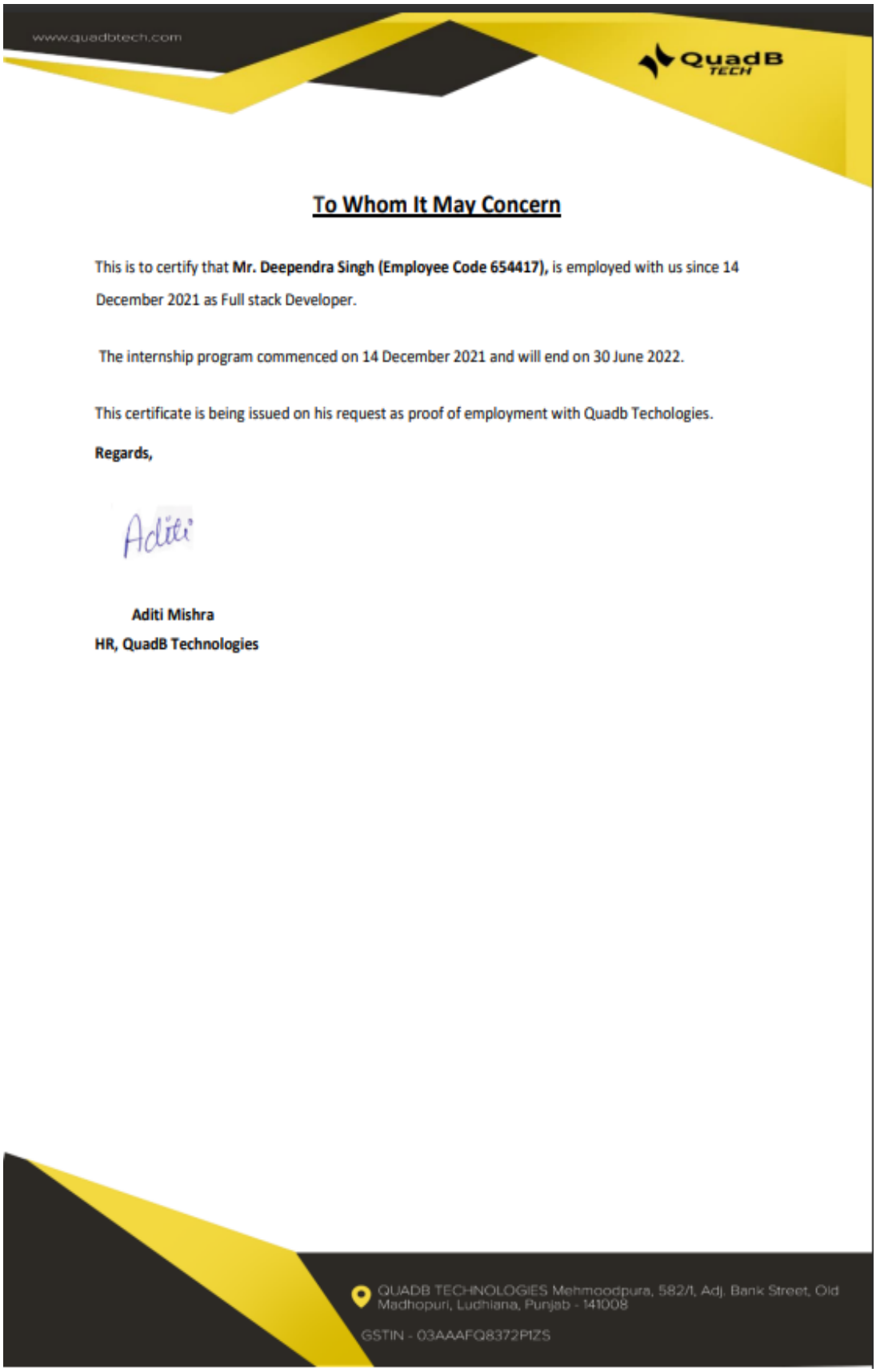
Internship Certificate:



www.quadbtech.com

QuadB TECH

To Whom It May Concern

This is to certify that **Mr. Deependra Singh (Employee Code 654417),** is employed with us since 14 December 2021 as Full stack Developer.

The internship program commenced on 14 December 2021 and will end on 30 June 2022.

This certificate is being issued on his request as proof of employment with Quadb Techologies.

Regards,

Aditi

Aditi Mishra
HR, QuadB Technologies

QUADB TECHNOLOGIES Mehmoodpura, 582/1, Adj. Bank Street, Old Madhopuri, Ludhiana, Punjab - 141008

GSTIN - 03AAAFQ8372P1ZS

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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CERTIFICATE

This is certified that **Deependra Singh (0901CS181036)** has submitted the Internship report titled **Full Stack Development** of the work he has done under the mentorship of **Mir Shahnawaz Ahmad**, in partial fulfillment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.

Mir Shahnawaz Ahmad
Faculty Mentor
Assistant Professor
EngineeringComputer Science and Engineering

Dr. Manish Dixit
Professor and Head,
Computer Science and

Dr. Manish Dixit
Professor & HOD
Department of CS
M.I.T.S. Gwa

¬¬¬¬¬MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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DECLARATION

I hereby declare that the work being presented in this Internship report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in CSE at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Prof. Mir Shahnawaz Ahmad**, Department of CSE.

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.

Deependra Singh

0901CS181036

IV Year,

Computer Science and Engineering

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

ACKNOWLEDGEMENT

The full semester internship has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary/interdisciplinary internship as a curriculum requirement, under the provisions of the Flexible Curriculum Scheme (based on the AICTE Model Curriculum 2018), approved by the Academic Council of the institute. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

I would sincerely like to thank my department, **Department of Computer Science and Engineering, for allowing** me to explore this internship. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

I am sincerely thankful to my faculty mentors. I am grateful to the guidance of **Prof. Mir Shahnawaz Ahmad**, Department of Computer Science and Engineering, for his continued support and close mentoring throughout the internship. I am also very thankful to the faculty and staff of the department.

Deependra Singh
0901CS181036
IV Year,
Computer Science and
Engineering

ABSTRACT

The Company:

Our business consulting team will work vigorously to maintain a steady flow and momentum of your business. We Crazy about quality while meeting our clients, highest standards, we strive for excellence without missing the deadlines.

Today's world reaching peak of IT industries. There is a competitive environment of technology industry. For the same intention most of the times the people need to suffer s lot to get connected and hire a well-professional experience company where they can get the perfect and promising IT services.

So QuadbTech provides a quality of works with high quality content using SEO, because content is more important than the design which supports it. We trying to satisfy all those you need.

Methodology:

This project is to provide classifieds information. The website will provide different kinds of facilities to the user like vendor and venue booking for weddings. The user should register to utilize the site.
Each user will be given UserId and password. Using that Id and password user can enter in to the site and can put the ads. Those who want to view the information they can without registration. This project is implemented using HTML, CSS, Bootstrap,React.js, Node.js, Solidity as the front-end and MySQL as back-end.

Learning Objectives/Internship Objectives:

1. Internships are generally thought of to be reserved for college students looking to gain experience in a particular field. However, a wide array of people can benefit from Training
2. Internships in order to receive real world experience and develop their skills.
3. An objective for this position should emphasize the skills you already possess in the area and your interest in learning more
4. Internships are utilized in a number of different career fields, including architecture, engineering, healthcare, economics, advertising and many

more.

5 Some internship is used to allow individuals to perform scientific research while others are specifically designed to allow people to gain first-hand experience working.

6 Utilizing internships is a great way to build your resume and develop skills that can be emphasized in your resume for future jobs. When you are applying for a Training Internship, make sure to highlight any special skills or talents that can make you stand apart from the rest of the applicants so that you have an improved chance of landing the position

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CHAPTER 1: Introduction:

1.1 Overview: -

The premise of 'Web 3.0' was coined by Ethereum co-founder Gavin Wood shortly after Ethereum launched in 2014. Gavin put into words a solution for a problem that many early crypto adopters felt: the Web required too much trust. That is, most of the Web that people know and use today relies on trusting a handful of private companies to act in the public's best interests.

Although it's challenging to provide a rigid definition of what Web3 is, a few core principles guide its creation.

- Web3 is decentralized: instead of large swathes of the internet controlled and owned by centralized entities, ownership gets distributed amongst its builders and users.
- Web3 is permissionless: everyone has equal access to participate in Web3, and no one gets excluded.
- Web3 has native payments: it uses cryptocurrency for spending and sending money online instead of relying on the outdated infrastructure of banks and payment processors.
- Web3 is trust less: it operates using incentives and economic mechanisms instead of relying on trusted third-parties.

1.2 Objectives: -

- To provide a paly to earn model based on crypto tokens
- To provide a platform where user can enjoy his favourite game and earn ERC 20 Tokens
- Users can collect items from games while playing and can make NFT and publish them for sale.
- Give an understating of ERC20 tokens to users and how a user can further use them.
- Providing Users, a simple way to users for making NFTs and Publishing them.

1.3 Outcomes: -

- Built a web3 Play to earn model.
- Made a Working model where a user can get Crypto Token in their wallets
- Make website for publishing NFTs

CHAPTER 2: TECHNOLOGY USED

Front-end Details:

1) HTML is the language for describing the structure of Web pages. HTML gives authors the means to:

- Publish online documents with headings, text, tables, lists, photos, etc.
- Retrieve online information via hypertext links, at the click of a button.
- Design forms for conducting transactions with remote services, for use in searching for information, making reservations, ordering products, etc.
- Include spread-sheets, video clips, sound clips, and other applications directly in their documents.

2) CSS is the language for describing the presentation of Web pages, including colours, layout, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers. CSS is independent of HTML and can be used with any XML-based markup language. The separation of HTML from CSS makes it easier to maintain sites, share style sheets across pages, and tailor pages to different environments. This is referred to as the separation of structure (or: content) from presentation.

3) JavaScript is commonly used for creating web pages. It allows us to add dynamic behaviour to the webpage and add special effects to the webpage. On websites, it is mainly used for validation purposes. JavaScript helps us to execute complex actions and also enables the interaction of websites with visitors. Using JavaScript, it is also possible to load the content in a document without reloading the webpage.

4) jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

5) React.js: -React.js is an open-source JavaScript library that is used for building user interfaces specifically for single-page applications. It's used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components. React was first created by Jordan Walke, a software engineer working for Facebook. React first deployed on Facebook's newsfeed in 2011 and on Instagram.com in 2012.

React allows developers to create large web applications that can change data, without reloading the page. The main purpose of React is to be fast, scalable, and simple. It works only on user interfaces in the application. This corresponds to the view in the MVC template. It can be used with a combination of other JavaScript libraries or frameworks, such as Angular JS in MVC.

6)**Bootstrap** is a potent front-end framework used to create modern websites and web apps. It's open-source and free to use, yet features numerous HTML and CSS templates for UI interface elements such as buttons and forms. Bootstrap also supports JavaScript extensions.

Back-end Details:

1)**Node.js** is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser. Node.js lets developers use JavaScript to write command line tools and for server-side scripting—running scripts server-side to produce dynamic web page content before the page is sent to the user's web browser. Consequently, Node.js represents a "JavaScript everywhere" paradigm,[6] unifying web-application development around a single programming language, rather than different languages for server-side and client-side scripts.

2) **Solidity** is an object-oriented programming language for implementing smart contracts on various blockchain platforms, most notably, Ethereum. It was developed by Christian Reitwiessner, Alex Beregszaszi, and several former Ethereum core contributors. Programs in Solidity run on Ethereum Virtual Machine. Solidity is a statically typed programming language designed for developing smart contracts that run on the Ethereum Virtual Machine (EVM).

Solidity uses ECMAScript-like syntax which makes it familiar for existing web developers however unlike ECMAScript it has static typing and variadic return types. Solidity is different from other EVM-targeting languages such as Serpent and Mutan in some important ways. It supports complex member variables for contracts, including arbitrarily hierarchical mappings and structs. Solidity contracts support inheritance, including multiple inheritance with C3 linearization. Solidity introduces an application binary interface (ABI) that facilitates multiple type-safe functions within a single contract (this was also later supported by Serpent). The Solidity proposal also includes "Natural Language Specification", a documentation system for specifying user-centric descriptions of the ramifications of method-calls

CHAPTER 3: Requirement Analysis

Phase 1: Requirement collection and analysis:
As a part of the standard protocol, we will create a static prototype of the website which will be non – working. This prototype will give you an idea of how the actual website will look like.

Phase 2: Design:
In this third phase, the system and software design documents are prepared as per the requirement specification document. This helps define overall system architecture. We will appoint a designer to provide a user friendly, eye catchy design to your project. To ensure a top-quality design you can give any reference website or template. This will help us to visualize the requirement and help us to provide the website of your choice.

Phase 3: Coding:
Once the system design phase is over, the next phase is coding. In this phase, developers start build the entire system by writing code using the chosen programming language.

Phase 4: Testing:
Once the software is complete, it will be deployed in the testing environment. The testing team starts testing the functionality of the entire system. This will be done to verify that the entire application works according to your requirement.
During this phase, QA and testing team may find some bugs/defects which they will communicate to our developers. The development team will fix the bug and send back to QA for a re-test. This process will continue until the software is bug-free, stable, and working according to your business needs.

Phase 5: Installation/Deployment:
Once the software testing phase is over and no bugs or errors left in the system then the

final deployment process will start.

CHAPTER 4: SYSTEM REQUIREMENT SPECIFICATIONS

4.1 System configurations:

The software requirement specification can produce at the culmination of the analysis task.

The function and performance allocated to software as part of system engineering are refined by established a complete information description, a detailed functional description, a representation of system behaviour, and indication of performance and design constrain, appropriate validate criteria, and other information pertinent to requirements.

4.2 Software requirements:

Operating System: Windows

Coding Language: HTML, CSS, jQuery, React.js, Node.js, Solidity

IDE: Visual Studio Code.

Database: PostgreSQL, MySQL

Package: npm.

4.3 Hardware Requirements:

Processor: Intel core i5

Memory: 8GB RAM

Hard Disk: 1TB

CHAPTER 5: ENHANCEMENT OF THE PROJECT DRAWBACKS

1 No automatic backup facilities available.
2 To run the application Internet Explorer 5.0 and above is required.
3 High bandwidth is required for as the transaction rate is high and third party gateway.

PROPOSED ENHANCEMENT:

Data backup facility will be introduced.

Graphical richness is required for the more user interactivity.

CHAPTER 6: RESPONSIBILITY AND TASKS

6.1 TIMELINE

The duration of the internship is 6 months and it started on 14Dec 2021 and till the completion of the project. Office working hours is flexible, we have to give our some hours daily with weekend-off.

6.2 Tasks

Task I:

- Learning HTML basic syntax and try hands on.
- Experimenting with different HTML tags Task II:
- Box model - how margins, padding, and borders work together.
- CSS units - used for expressing lengths.
- Position - specifies the type of positioning method. It also confuses many people so make sure you spend some time on it.

Task II:

- Variables - or Custom properties are entities that can be reused throughout a document. This is my favourite feature in CSS. They make working with CSS so enjoyable and you can create themes with just a few lines of code.
- Media query - decides what to show on different screen sizes. They are a key component of responsive design.
- Animation - lets an element change from one style to another. If you know how to use animation correctly, it makes your site standout. Otherwise, it will make your website look unprofessional.
- Flexbox, CSS Grid - used for building Responsive layouts.

Task III:

- Learning Concepts on java script, functions in Js.
- Installation of server, how to execute program
- How to connect with DB using MYSQL server.
- Designing of Login page, Registration page using HTML, CSS, JAVA SCRIPT, REACT.
- Execute the pages and pages connect with MYSQL database.

Task IV:

- Learning Solidity and Blockchain Development.

My Learning from this Project:

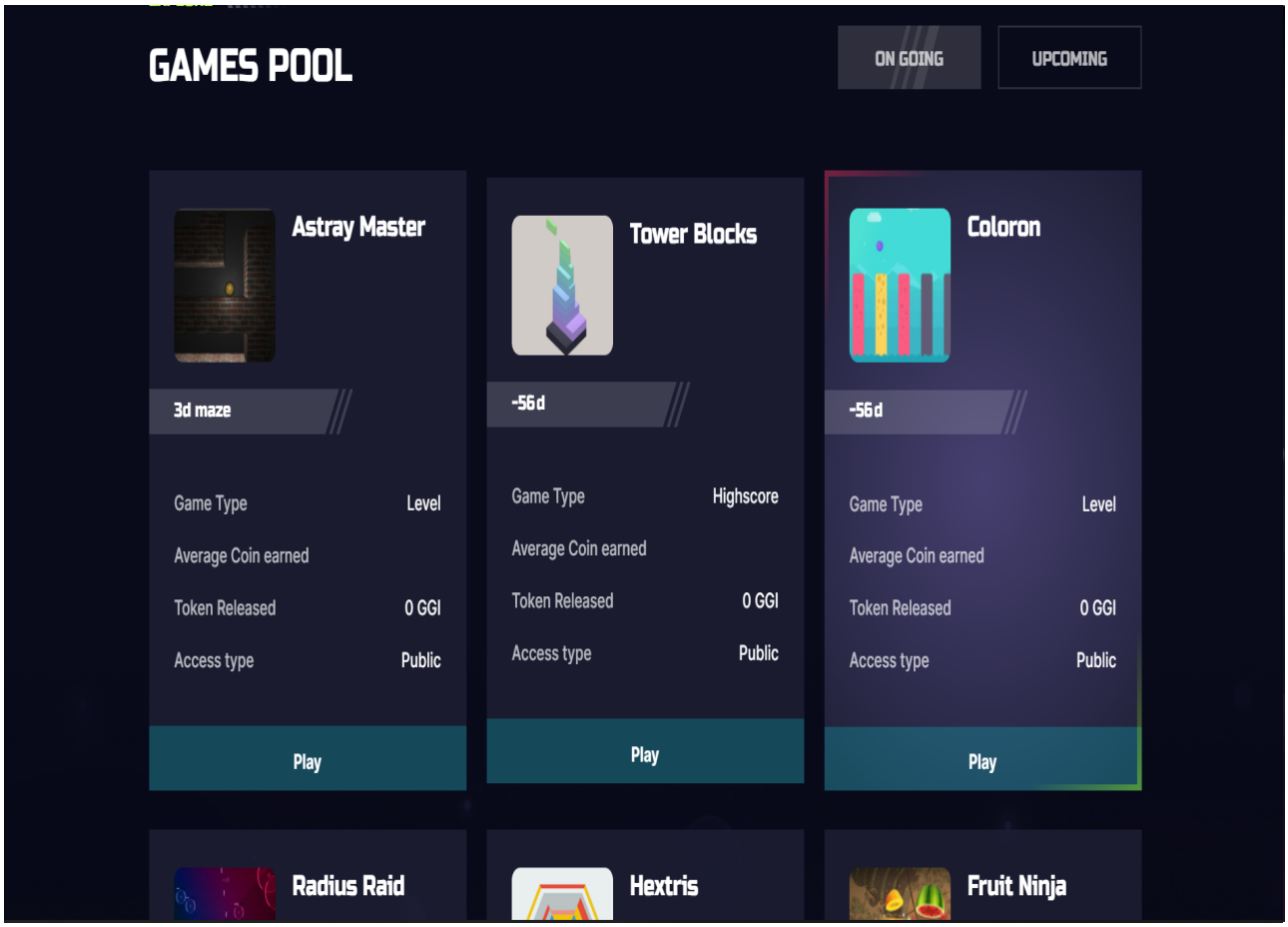
- HTML
- CSS
- JavaScript
- jQuery
- React
- Node
- Solidity
- PostgreSQL

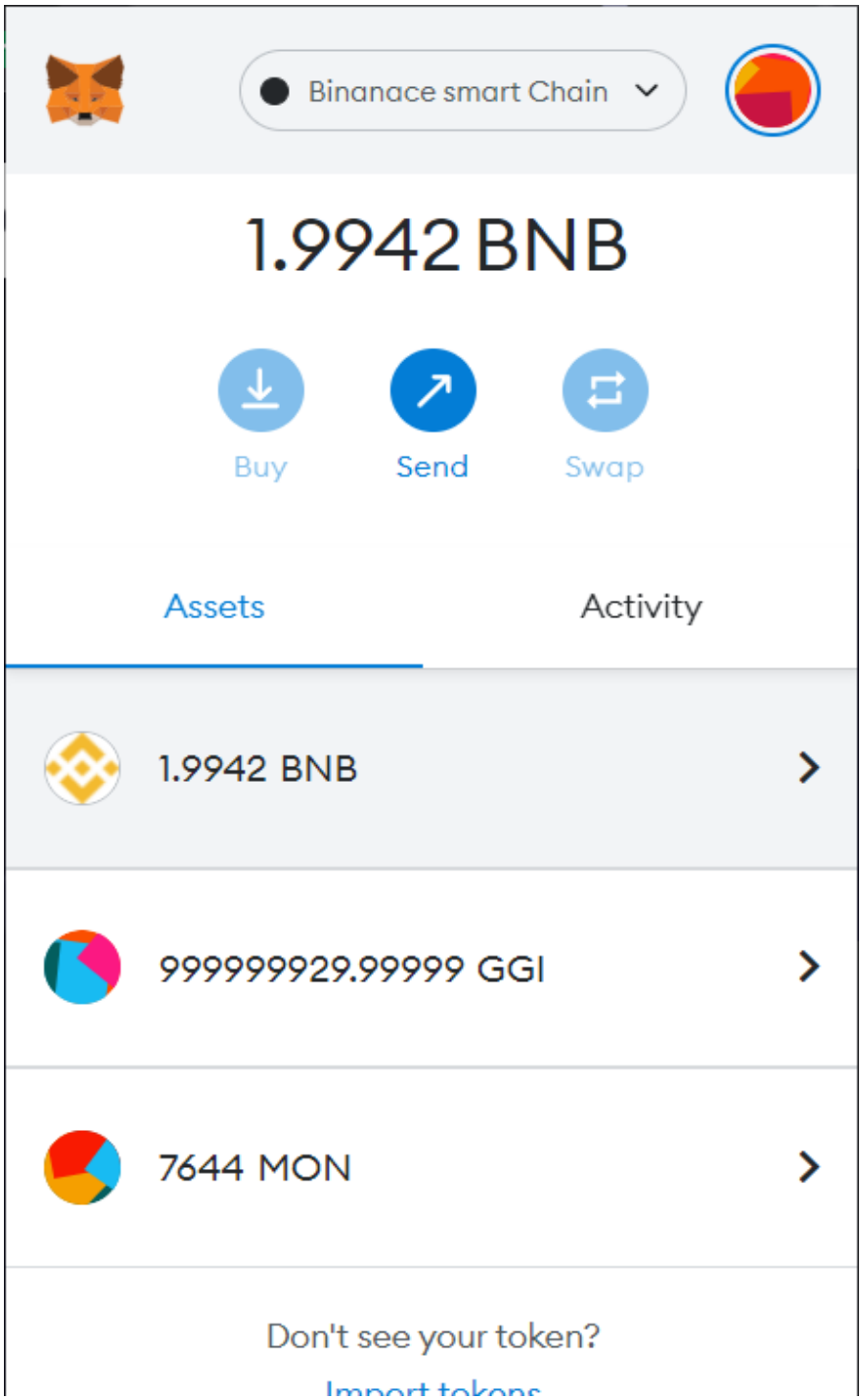
CHAPTER 7: PROJECT DETAILS

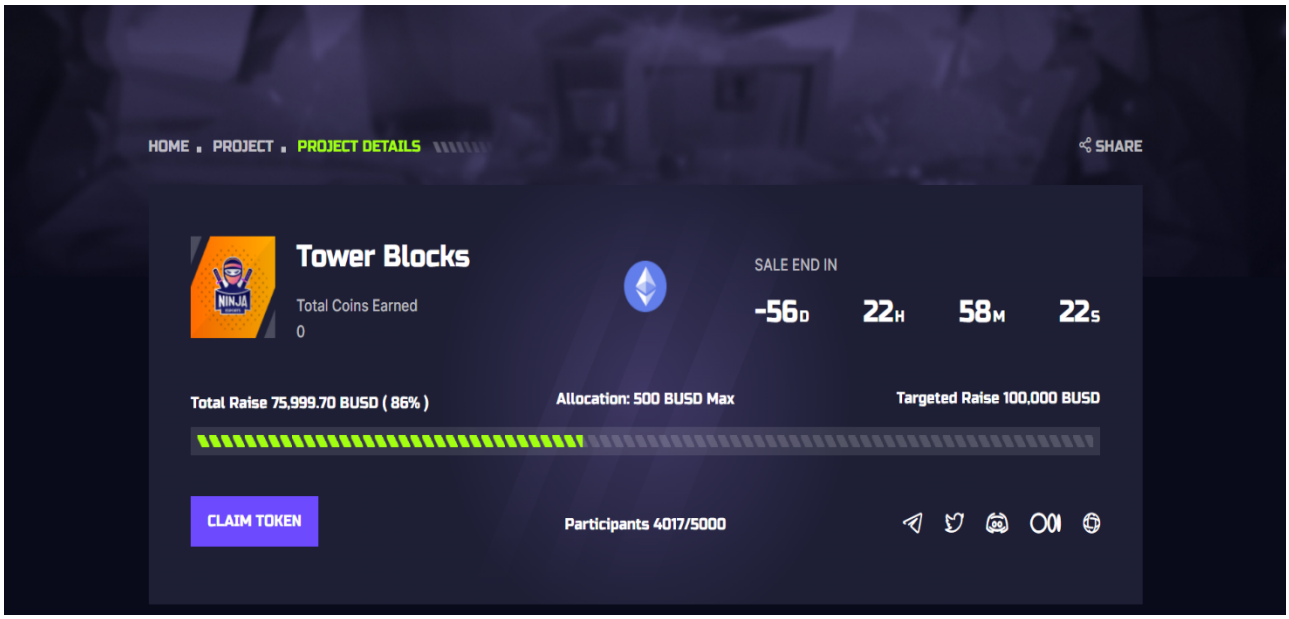
Project 1

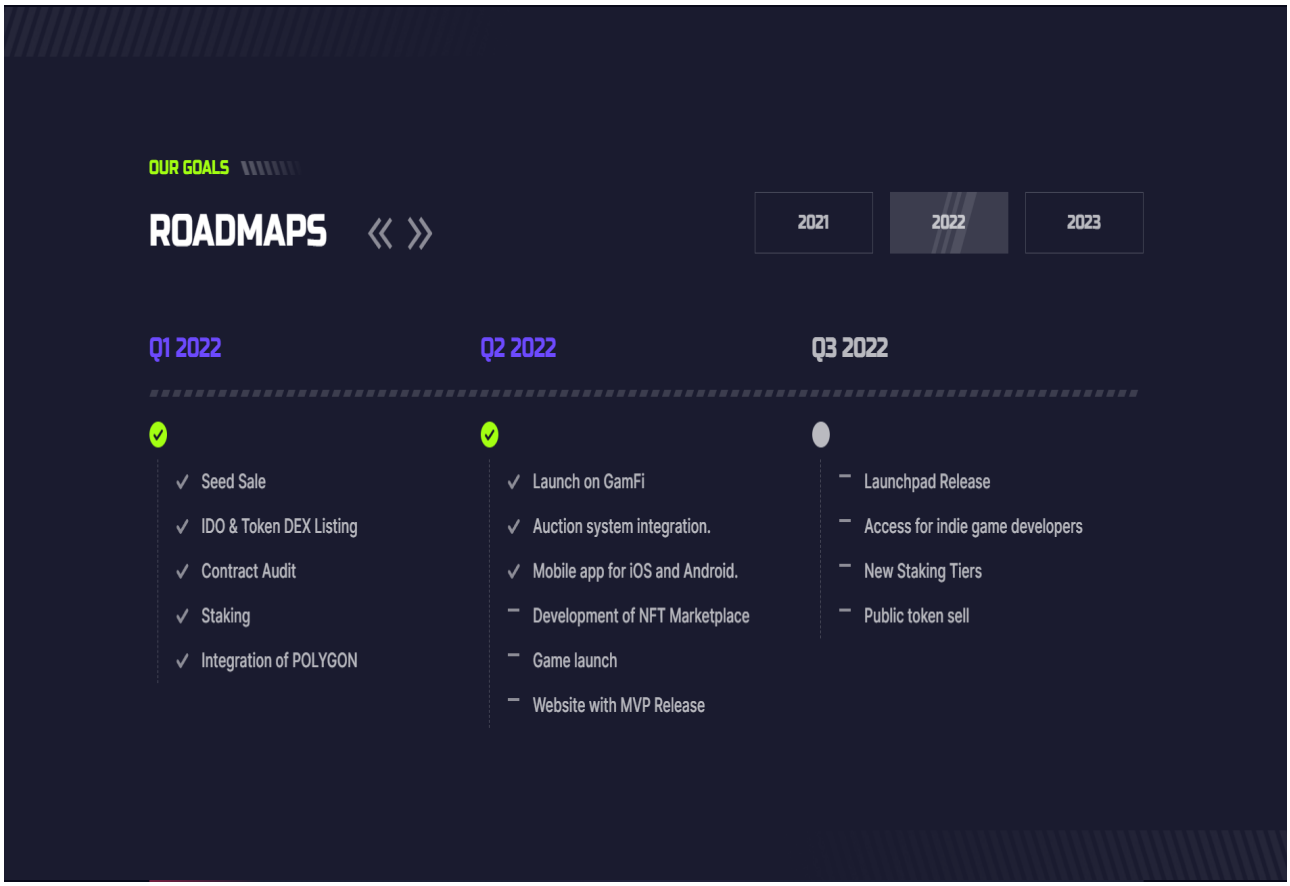
URL: - https://test.galaxygaminginu.com/

Website Visuals: -

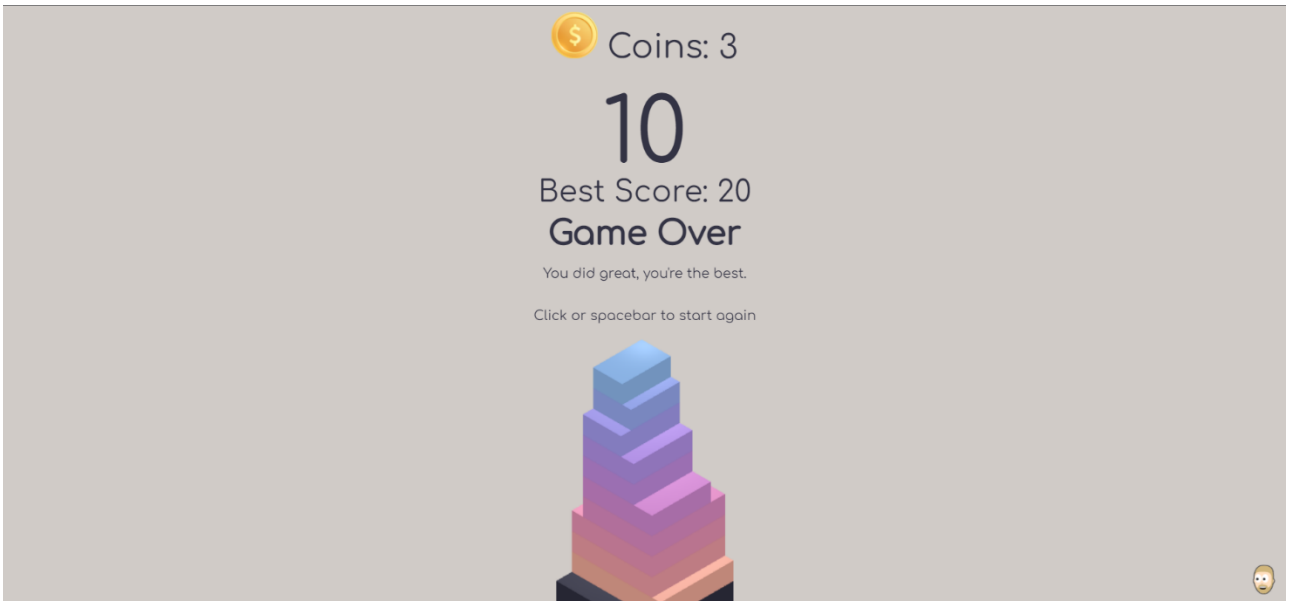








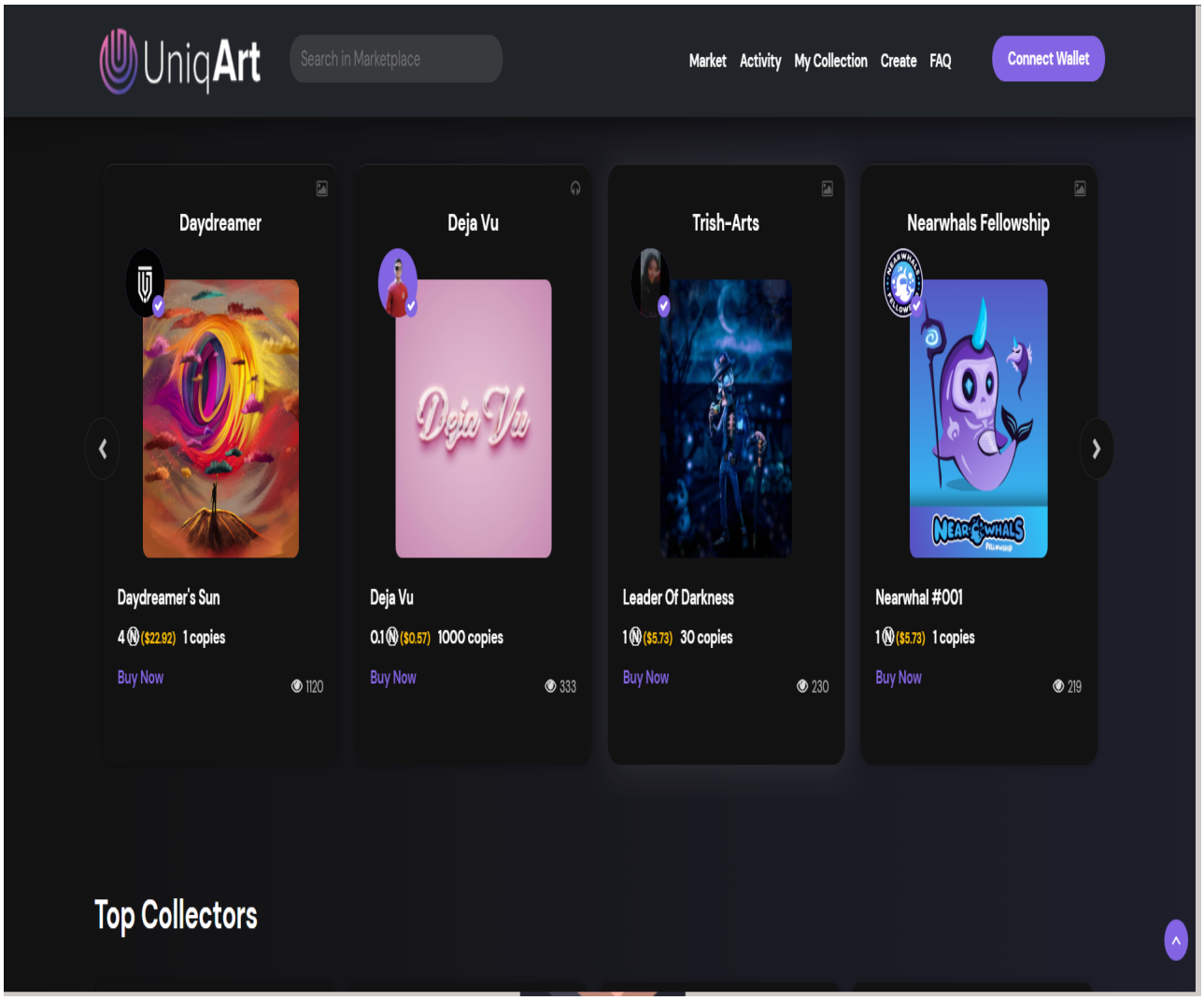
Game Visuals: -

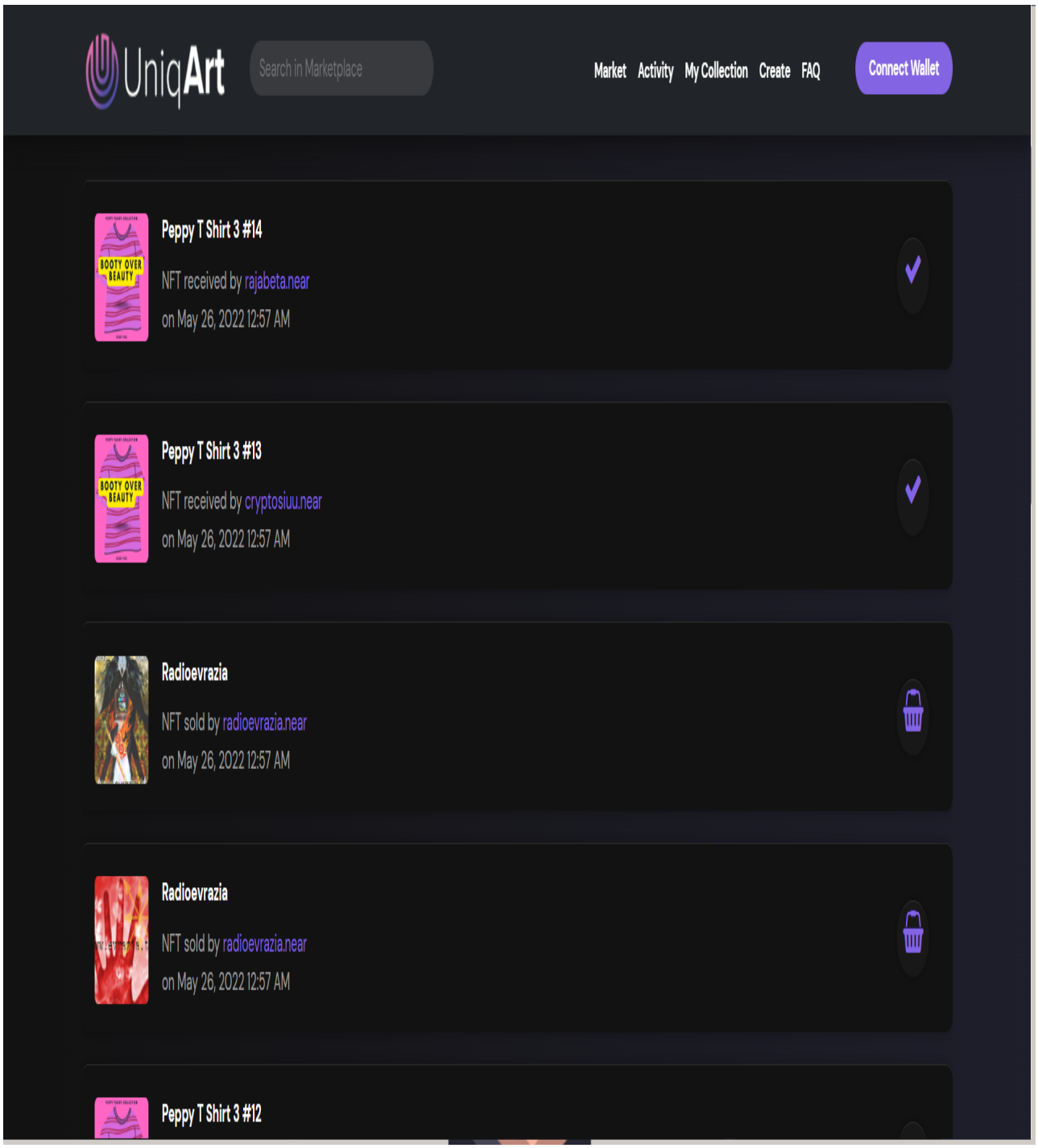


Project 2

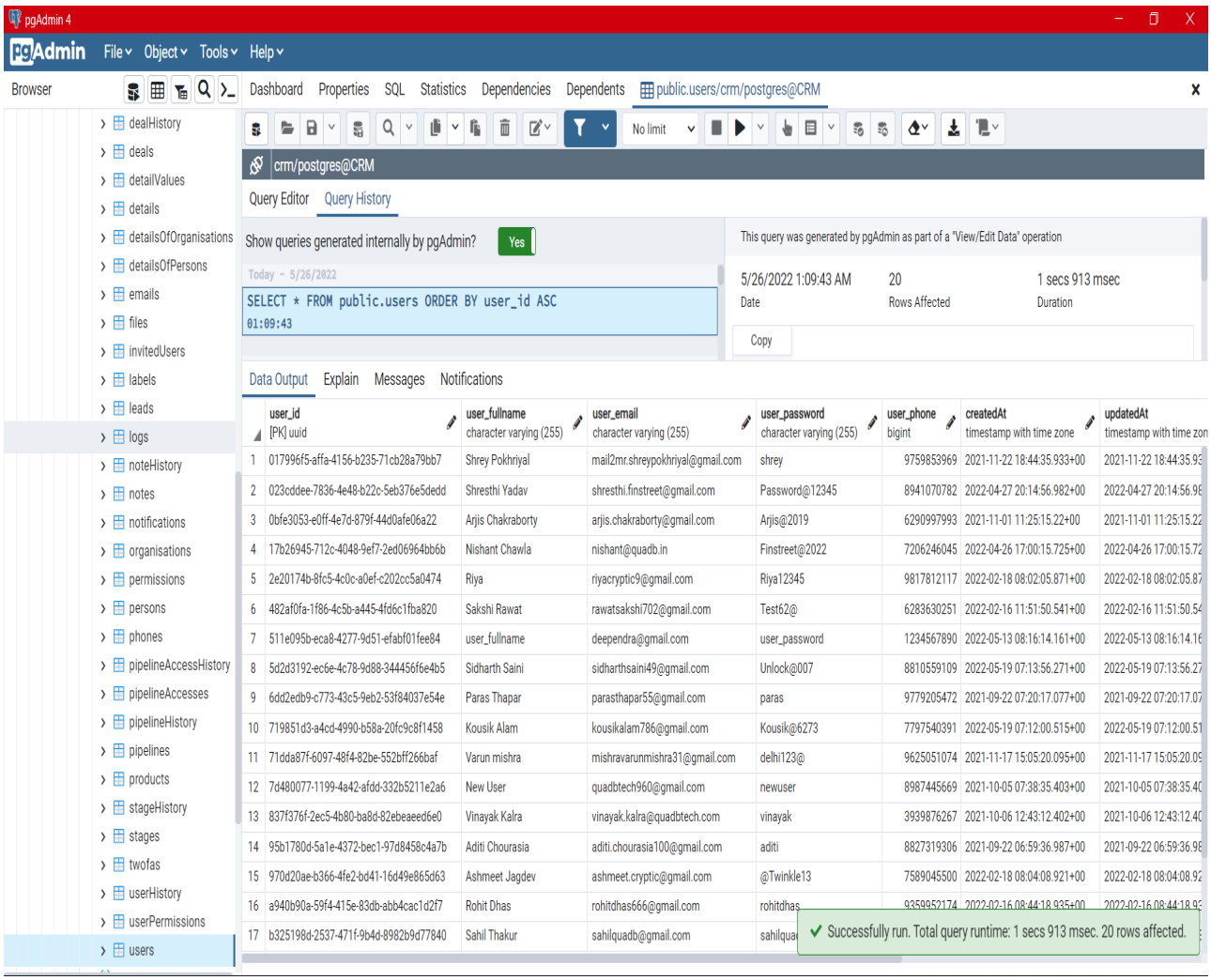
URL: - https://uniqart.io/

Website Visuals: -





Database :



CHAPTER 8: CONCLUSION

The end of this module brought with it new techniques and tools for organizing websites identifying & grouping specific elements within websites including & embedding multi-media content adding metadata to further define our webpages.

Although it can be hard to come up with a design that is well suited to all of the users, there will be a design that is appropriate for most of the audience. The better the page design, the more hits a page will get. That implies an increase in accessibility and a possible increase in business. By interacting with my trainee and classmates I got to learn a lot. It helped me to enhance my communicative skills and represent my work with confidence. It boosted my confidence to design more webpages and create some great designs just for fun.

RECOMMENDATION

We have successfully implemented the site . With the help of various links and tools, we have been able to provide a site which will be live soon and running on the web. We have been

successful in our attempt to take care of the needs of both the user as well as the administrator. Finally, we hope that this will go a long way in popularizing.

Appendix A: List of FPR

FPR-1

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Deependra Singh		Department	CSE	
Industry/Organization	QuadBTech		Date/Duration	14/12/2021 to 14/1/2022	
Criterion	**Poor**	**Average**	**Good**	**Very Good**	**Excellent**
Punctuality/Timely completion of assigned work			✓		
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work			✓		
Behaviour/Discipline/Team work			✓		
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	Play to earn model using blockchain metamask and ethereum.				
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Sharan Gopal				
Signature of Industry Mentor	Sharan				

Receiving Date		Name of Faculty Mentor		Sign	

FPR-2

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Dupendra Singh		Department	CSE	
Industry/Organization	QuodbTech		Date/Duration	14/1/2022 to 26/02/2022	
Criterion	**Poor**	**Average**	**Good**	**Very Good**	**Excellent**
Punctuality/Timely completion of assigned work			✓		
Learning capacity/Knowledge up gradation			✓		
Performance/Quality of work				✓	
Behaviour/Discipline/Team work			✓		
Sincerity/Hard work			✓		
Comment on nature of work done/Area/Topic	Completed making Smart contract for token & credit transfer with web3 & Solidity.				
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Sharan Gopal.				
Signature of Industry Mentor	Sharan				

Receiving Date	Name of Faculty Mentor	Sign	

FPR-3

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Deependra Singh		Department	Computer Science and Enginnering	
Industry/Organization	QuadbTech		Date/Duration	30-03-202	
Criterion	**Poor**	**Average**	**Good**	**Very Good**	**Excellent**
Punctuality/Timely completion of assigned work			✓		
Learning capacity/Knowledge up gradation			✓		
Performance/Quality of work				✓	
Behaviour/Discipline/Team work			✓		
Sincerity/Hard work			✓		
Comment on nature of work done/Area/Topic	Deployment of DApp on Server and Database Deployment				
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Sharan Gopal.				
Signature of Industry Mentor	Sharan				

FPR-4

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Deependra Singh		Department	Computer Science and Enginnering	
Industry/Organization	QuadbTech		Date/Duration	12/04/2022	
Criterion	**Poor**	**Average**	**Good**	**Very Good**	**Excellent**
Punctuality/Timely completion of assigned work			✓		
Learning capacity/Knowledge up gradation			✓		
Performance/Quality of work				✓	
Behaviour/Discipline/Team work			✓		
Sincerity/Hard work			✓		
Comment on nature of work done/Area/Topic	Develop games for Decentralized web apps				
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Sharan Gopal.				
Signature of Industry Mentor	Sharan				

Receiving Date		Name of Faculty Mentor		Sign	

FPR-5

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Deependra Singh		Department	CSE	
Industry/Organization	QuadBTech		Date/Duration	29/04/2022	
Criterion	**Poor**	**Average**	**Good**	**Very Good**	**Excellent**
Punctuality/Timely completion of assigned work			✓		
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work			✓		
Behaviour/Discipline/Team work			✓		
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic	Made Avatar games for NFTs with unity and JavaScript.				
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Sharan Gopal				
Signature of Industry Mentor	Sharan				

Receiving Date		Name of Faculty Mentor		Sign	