PROJECT SYNOPSIS

On

DIY

Towards Partial Fulfilment of the Requirement for the Award of Degree of

Bachelor of Computer Application

From

Babu Banarasi Das University

Lucknow



Academic Session 2023 – 2024 School of Computer Applications

Submitted By:

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TRAINING DETAILS PROFORMA						
(To be filled by Student) Type of Training: Six month's Project Training Course: BCA (DS-AI) Section: 31 Semester: 6 th (Final Year) University Roll Number: 1210258001 Name of the Student: Aakarsh Chaurasia						
Company's Details: Name of Company : Digipodium						
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Mobile No: 7269095830 E-Mail: shakeelareeba02@gmail.com Date of Joining: 05 Feb 2023 Expected Date of Completion: 10 May 2024						
Project's Details:						
Title of the Project: DIY						
Tools Used:						
Front End Tools: HTML, CSS, React, JavaScript. Back End Tools: Node JS, Express JS, MongoDB.						
Date:						
Signature of the Student						

Enclosure:

Synopsis of the Project (on Separate Sheet)

DIY

Problem Statement:

- However, many people face challenges like not knowing how to start, not having the right tools or materials, or feeling unsure about their abilities. This will be easier and more accessible for everyone, so people can feel confident and empowered to bring their ideas to life.
- Many people who want to do DIY projects face a problem: they can't always find the right materials or tools shown in online videos or tutorials. This makes it hard for them to start or complete their projects and takes away the fun of creating something new."

Introduction:

- Many DIY enthusiasts face a common challenge when attempting to recreate projects from online videos. Often, they encounter difficulties in finding the specific materials or tools showcased in the DIY tutorials. This hurdle not only obstructs the excitement of creating something new but also causes frustration as individuals struggle to source the necessary items.
- DIY Innovate is an online store, where creativity is the star! We have everything you need for fun projects, like making cards, showpieces, photo frames, gift hampers. You can not only buy the kits to make things but also watch helpful videos to guide you through the process. Imagine searching for a specific craft, such as card making, and not only discovering the essential product kits but also having access to step-by-step video guides for each project. Our website is designed with your convenience in mind.

You can instantly connect with us through our online chat system for any assistance you may need. And buying is super easy and safe with our online payment system.

Objective:

- **Provide a diverse project range:** Offer a wide variety of product kits catering to different crafts and hobbies to attract a broad audience.
- **Integrate video tutorials:** Implement a video functionality that seamlessly integrates tutorials for each product, enhancing the user's understanding and engagement.
- **Enable Online Chat Support:** Facilitate real-time communication through an online chat system to assist customers with queries, guidance, and support.
- **Eco-Friendly Shopping:** A space where customers can effortlessly discover and buy environmentally friendly items, encouraging a lifestyle that supports the well-being of our planet.
- **Secure Payment Gateway :** Implement a secure payment gateway to facilitate smooth and safe transactions for customers.

Scope:

- **<u>User Experience:</u>** Responsive design for various devices, efficient search and filtering, reviews and ratings for products.
- **Product Catalog:** Curate and showcase a diverse range of product kits for various crafts and hobbies.
- **Support and communication:** Online chat system for customer support.

- **Video Functionality:** Implement a video feature to provide step-by-step tutorials for each product, enhancing user engagement and understanding.
- **Reviews and Ratings:** Allow customers to leave reviews and ratings for products.
- **Product Categories:** Categorize products for convenient browsing, such as home decor, kitchenware, and garden items.

Modules:

- 1. <u>Authentication System:</u> Authentication system acts like a special key (username and password) to ensure only authorized users can access our crafting website, providing a secure and personalized experience.
- 2. <u>DIY Package Manager:</u> DIY Package manager is about empowering users to seamlessly manage.
- 3. <u>Cart System:</u> Cart system is an online feature that allows users to add, manage, and organize selected items before proceeding to checkout in an e-commerce platform, making the shopping experience more convenient.
- 4. <u>Video Streaming system:</u> Video streaming system is a platform or service that enables the delivery and playback of videos over the internet, allowing users to watch content in real-time without the need for downloading.
- 5. <u>Package Searching System:</u> Package searching system is a feature that allows users to search and find specific packages or items within a system or platform, enhancing efficiency and user experience in locating desired products or information.

- 6. **Review and Rating System:** Review and rating system is a feature that allows users to share their feedback and rate products or services, providing valuable insights for other users and influencing purchasing decisions.
- 7. <u>Payment Gateway:</u> Payment gateway handles the transfer of payment data between customers and e-commerce websites online, ensuring safe and seamless transactions.

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- 8. Ordering System: Ordering system is an online mechanism that enables users to place requests for products or services, facilitating a structured process for businesses to manage and fulfill customer orders.
- 9. <u>Animation Handler:</u> Animation handler is a system that manages and controls the display and behavior of animations in software or web applications, enhancing the visual experience for users.
- 10. <u>User Dashboard</u>: User dashboard is a personalized interface for individual users, presenting key information, settings, and features in a centralized and user-friendly manner for easy navigation and interaction within a system or application.

System Authentication Access Products Kit Section View Tutorials Ready to use Feedback Admin User Payment Manage Kit Manage Tutorials Expert Contact Chat

Resources (Hardware & Software) to be used:

1. Hardware Requirements

Client Side

Processor Dual Core or above

RAM 8 GB

Disk space 256 GB (SSD)

Monitor Desktop/laptop/ tab/ mobile

Network Internet Connection

Other Keyboard/mouse

> <u>Developer Side</u>

Processor Quad Core or above (2 GHz or

more)

RAM 8 GB or above

Disk space 500 GB (SSD)

Monitor Network Desktop/Laptop
Internet Connection

2. Software Requirements

> Client Side

 Web Browser (Google Chrome, Firefox, Microsoft Edge, Apple Safari or above)

> <u>Developer Side</u>

- Web Browser (Google Chrome, Firefox, Microsoft Edge, Apple Safari)
- Node JS 20 or above
- Vs code
- Frontend Framework React 18
- Backend Framework Express JS
- Database MongoDB

♣ Project Schedule Plan:

The objective of Software Planning is to provide a framework that enables the manager to make reasonable estimates of resources, cost, and schedule. These estimates are made within a limited time frame at the beginning of a software project and should be updated regularly as the project progresses. In addition, estimates should attempt to define best case and worst-case scenario so that project outcomes can be bounded.

Gantt Chart:

A Gantt chart is popular type of chart that illustrates a project schedule. Gantt Chart illustrates the start and finish dates of the terminal elements and summary elements of a project. Terminal element and summary comprise the work breakdown structure of the project.

Task	5Feb-24Feb	25Feb-6Mar	7Mar-16Mar	17Mar-16Apr	17Apr-21Apr	22Apr-6May
Develop project proposal						
	20 days					
Analysis						
		10 days				
Designing		10 44.5	•			
			•			
			10 days			
Coding						
				30days		
Unit Testing				· ·		
					5 days	
Implementation						15 days

Gantt Chart

Project Team:

Instructor : Areeba Shakeel

Mentor : ------

Project Team Members: Aakarsh Chaurasia, Raj Tilak

Process Description:

- 1. **Authentication System** Authentication system provides access control for systems by checking to see if a user's credentials match the credentials in a database like sign in, signup, etc
- 2. **Algorithm Selection System:** Algorithm selection system is a type of software or tool that helps automate the process of

- selecting the best algorithm for a given task. It works by evaluating a set of algorithms based on their performance and other relevant criteria, and selecting the one that is most likely to provide the best results.
- 3. **Dataset Loading System:** A dataset loading system is a type of software or tool that helps manage and load datasets into a machine learning or data analysis environment. The system provides a way to easily access and manipulate the data for analysis or training purposes.
- 4. **Model Training System:** It's helps train machine learning models on datasets. It provides a way to specify the type of model to be trained, the algorithm used for training, and the hyperparameters that control the behaviour of the algorithm.
- 5. **Model Accuracy Tracker:** Its's helps monitor and track the performance of machine learning models over time. It provides a way to evaluate the accuracy of the model on new data, compare the performance of different models, and identify areas for improvement.
- 6. **Model Handler:** IT's helps manage and deploy machine learning models in production environments. It provides a way to load trained models, pre-process input data, make predictions using the models, and return the results to the calling application.
- 7. **User Dashboard:** In the context of artificial intelligence or machine learning, a user dashboard may be used to display information related to the performance of machine learning models or the results of data analysis.
- 8. **Feedback System:** User can take subscription where he gets upcoming updates and notifications with high priority membership.
- 9. **Configuration System:** A configuration system may be used to manage the settings and parameters of machine learning models or algorithms.

- 10. **Model Loading System:** A model loading system may be used to load models that have been trained using different algorithms or frameworks, such as TensorFlow, PyTorch, or Scikit-learn. It may also include functions for preprocessing input data, such as scaling or normalizing the data, and postprocessing the output data, such as decoding or formatting the predictions.
- 11. **Image Classifier:** An image classifier is a type of machine learning model that is trained to recognize and categorize images based on their visual features. The goal of an image classifier is to correctly identify the object or scene depicted in an image.
- 12. **Pose Estimator:** Pose estimation is the process of detecting and estimating the position and orientation of objects in an image or video. A pose estimator is a computer vision model that can analyze an image or video and estimate the pose of one or more objects in it.
- 13. **Text Toxicity Detection:** Text toxicity detection is the process of identifying and flagging text that contains language or content that is considered toxic, offensive, or harmful. The goal of text toxicity detection is to help prevent harassment, bullying, and other forms of harmful behavior online.
- 14. **Speech Recognizer:** A speech recognizer is a computer program or system that can analyze and transcribe spoken language into written text. The goal of a speech recognizer is to enable computers to understand and interpret human speech.
- 15. **Payment Gateway:** A payment gateway is a software application that facilitates the secure processing of online transactions, typically involving the exchange of money between a customer and a merchant. Payment gateways are used to authorize and process payments for e-commerce websites, online marketplaces, and other digital platforms.

Contribution of the student in the project:

- 1. **Aakarsh Chaurasia:** Authentication System, Algorithm Selection System, Dataset Loading System, Model Training System, Model Accuracy Tracker
- 2. **Raj Tilak:** Model Handler, User Dashboard, Feedback System, Configuration System, Model Loading System
- 3. **NA:** Image Classifier, Pose Estimator, Text Toxicity Detection, Speech Recognizer, Payment Gateway.

4Conclusion:

DIY Innovate, an online store dedicated to creativity, this obstacle is overcome. We offer everything you need for fun projects like card making, showpieces, and more. Not only can you buy kits for these projects, but you can also watch helpful videos for guidance. Imagine easily finding kits and