

# MAJOR PROJECT ABSTRACT [Form – 1] (YEAR – 2022-23)

**NAME OF LAB COORDINATOR:** Mr. Kailash Soni

**TITLE OF PROJECT:** Product and Credentials NFT Platform for Businesses

**PROJECT TRACK:** (Tick the appropriate one / ones)

1. R&D (Innovation)	2. CONSULTANCY (Fetched from Industry)	<input checked="" type="checkbox"/> 3. STARTUP (Self-Business Initiative)	4. PROJECT POOL (From IBM / INFOSYS)	5. HARDWARE / EMBEDDED
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## BRIEF INTRODUCTION OF PROJECT:

Product and Credentials NFT Platform for Businesses is a digital asset management system that allows businesses to create NFTs of their physical and virtual products, as well as non-transferable documents like certificates and diplomas. These NFTs offer customers a unique and valuable asset that can increase the value of their purchase. The platform provides an easy and secure way for businesses to manage their digital assets while giving customers the confidence and reassurance that they are purchasing authentic products and credentials.

## TOOLS / TECHNOLOGIES TO BE USED:

NAME OF TOOL / TECHNOLOGY	VERSION	SOFTWARE / HARDWARE	PURPOSE OF USE
MongoDB	6.0.1	Software	To store the data
Express.js	4.18.2	Software	To create the REST API
Next.js	18.2.0	Software	To create the frontend
Node.js	16.13.1	Software	To create the backend
Solidity	0.9.0	Software	To create the Smart Contract
Web3.js	1.4.0	Software	To integrate with the Smart Contract
Goerli Testnet	N/A	Software	To deploy the Smart Contract

## PROPOSED PROJECT MODULES:

NAME OF MODULE	PROPOSED FUNCTIONALITY IN PROJECT
User Module	Used for managing the details of a user.
Web3 Module	Used to integrate with the Smart Contract.
Smart Contract Module	Used to manage the creation and storage of NFT's.
API Module	Used to provide the API to the users.
Email Module	Used to send the mail to the users.

## TEAM MEMBER DETAILS:

STUDENT NAME	CLASS & GROUP	MOBILE No.	EXPERTISE AREA	ROLE IN PROJECT
Akshat Gadodia	CSE A-G1	7737152961	Blockchain, Web3.js	Frontend/Backend/Blockchain
Akshita Sharma	CSE A-G1	7976452852	Next.js, Node.js	Frontend/Backend/Blockchain

**NOTE:** 1. This form is to be submitted by a team of maximum 4 students in the starting of semester to the lab coordinator.  
2. Students must keep a Xerox copy of this form as reference for project work and attach it to the final report.

## ROLE SPECIFICATION OF TEAM MEMBERS [Form – 2]

MEMBER 1 <u>Akshat Gadodia</u>		HANDLING MODULE <u>Web3 and Smart Contract Module</u>	
NAME OF ACTIVITY	SOFT DEADLINE DATE	HARD DEADLINE DATE	DETAILS OF ACTIVITY (STORY)
Basic Project Structure	01/02/2023	05/02/2023	Created the basic project structure required
Smart Contract Creation	15/02/2023	20/02/2023	Smart Contract created using Solidity
Smart Contract Testing	22/02/2023	24/02/2023	Smart Contract Deployed and Tested
Integration of Web3.js	30/03/2023	01/04/2023	Integration of account, etc is done in website using Web3.js
NFT Design Generation			NFT Card is designed
Code Optimization and Improvement			Code is improved and optimized
Final Testing and Debugging			Website is tested and some minor error solved

MEMBER 2 <u>Akshita Sharma</u>		HANDLING MODULE <u>User, API &amp; Email Module</u>	
NAME OF ACTIVITY	SOFT DEADLINE DATE	HARD DEADLINE DATE	DETAILS OF ACTIVITY (STORY)
Frontend Skeleton Creation	15/02/2023	18/02/2023	Created the basic frontend skeleton
User Module Created	22/02/2023	24/02/2023	Create user module REST API and database collections and integrated with the frontend
Front End Styling Improved	27/02/2023	28/02/2023	Front End Styling Improved
API Integration Implemented	25/03/2023	30/03/2023	API functionality and key generation is implemented
Email Module Implemented			Email module is implemented
Authentication Implemented			Authentication for admin is implemented
Final Testing and Debugging			Website is tested and some minor error solved

**MENTOR'S NAME & SIGNATURE :** Dr. Nilam Choudhary

- NOTE:** 1. This form is to be submitted by a team of maximum 4 students in the starting of semester to the lab coordinator.
2. Every member student must keep a Xerox copy of this form as reference for his / her part in project work.
3. Students must provide the detailed list of planned activities along with their completion deadline dates.
4. The lab coordinator will check the weekly progress of students against the information provided in this form.