

**Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal – 574115**  
**Hackothsava 2023 – Synopsis**

<b>Team Name:</b>		Zenith			
<b>College Name and Address:</b>		St Joseph Engineering College, Vamanjoor, Mangalore			
<b>Course:</b>		BE			
<b>Theme of submission:</b> (check mark the relevant box)		<b>Transformative Education</b> <input type="checkbox"/>	<b>Sustainable Industrialization</b> <input checked="" type="checkbox"/>		
<b>Team Members:</b>		<b>Name</b>	<b>Year of study</b>	<b>Mobile no.</b>	<b>email - ID</b>
1	Leader	Alriya Treeza D Souza	2nd	8660527370	21i03.alriya@sjec.ac.in
2	Member 1	Chaitanya	2nd	8792620374	21i07.chaitanya@sjec.ac.in
3	Member 2	Sharon Tyana Menezes	2nd	9986268376	21i27.sharon@sjec.ac.in
4	Member 3	Shane Priyanka Rodrigues	2nd	9900434363	21h52.shane@sjec.ac.in
<b>Project Title:</b>		IndustriaHub			

**Abstract of the proposed project:**  
(word limit 300 )

We are developing a cutting-edge application tailored for visionary industrialists seeking to obtain knowledge to establish Unique Sustainable Industries that have not been established in India yet but are coming up in the world and are extremely efficient compared to current Industries.

By harnessing the power of advanced machine learning models, our application, powered by Python for backend development and Django and other frameworks for frontend development, enables precise predictions regarding a place's suitability for industry establishment by assessing the availability of crucial resources and infrastructure scope. Moreover, it allows industrialists to make informed decisions backed by an accurate data-driven analysis of the current Market to help them analyse all profit and loss factors to predict the turnover of their industries and also refine their products and services to stay ahead of the competition. Should a location lack the necessary resources, our application promptly delivers targeted and insightful messages, guiding users towards more suitable alternatives.

In addition, our application also alerts industrialists to potential environmental impacts that their industry might have on various environmental factors thus ensuring that sustainability and responsible practices are at the forefront of decision-making. By utilising a MySQL database, our application fosters collaboration by providing a dynamic platform for skilled workers to showcase their expertise. Industrialists can effortlessly connect with qualified professionals, fostering employment opportunities and driving economic growth.



Detailed Methodology with diagrammatic representation: proper

**Data Collection:** Gather relevant data related to industry establishment, including information about resources availability, infrastructure scope, market trends, and environmental factors. This data can be obtained from various sources such as public databases, government reports, industry research, and user inputs.

**Data Pre-processing:** Clean and pre-process the collected data to ensure its quality and consistency. Handle missing values, remove outliers, and perform data transformations or normalization as required. This step prepares the data for further analysis.

**Developing Machine Learning Model:** Utilize advanced machine learning models to analyse the pre-processed data and make predictions regarding the suitability of a place for industry establishment. This involves training the models using historical data and relevant features, such as resource availability, infrastructure parameters, market indicators, and environmental factors.

**Prediction and Analysis:** Apply the trained machine learning models to new data to generate precise predictions regarding the suitability of different locations for establishing unique sustainable industries. Assess the profit and loss factors, predict industry turnover, and identify areas for refinement to stay competitive in the market. This analysis is driven by accurate and data-driven insights.

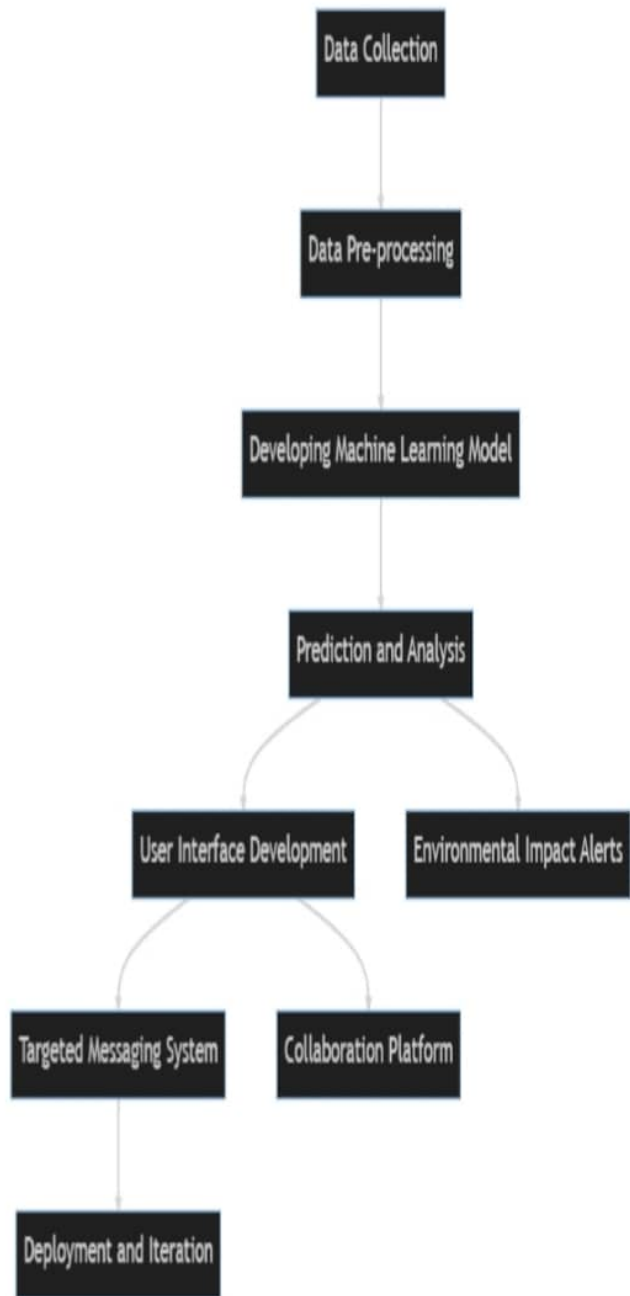
**User Interface Development:** Use Django and other frameworks for frontend development to create a user-friendly interface for industrialists. Design the interface to display the predictions, analysis results, and other relevant information in a visually appealing and intuitive manner.

**Targeted Messaging System:** Implement a messaging system within the application to deliver targeted and insightful messages to industrialists in case a location lacks the necessary resources. Provide alternative options or guide users towards more suitable locations based on the analysis and recommendations.

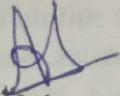
**Environmental Impact Alerts:** Incorporate a module that alerts industrialists to potential environmental impacts their industry might have on various environmental factors. This ensures that sustainability and responsible practices are considered during decision-making and industry establishment.

**Collaboration Platform:** Develop a dynamic platform within the application using a MySQL database to foster collaboration between industrialists and skilled workers. Allow skilled professionals to showcase their expertise, enabling industrialists to connect with qualified individuals for employment opportunities, fostering economic growth, and driving innovation.

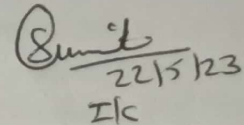
**Deployment and Iteration:** Deploy the application on suitable infrastructure to make it accessible to industrialists.



<b>Software/ hardware required for the implementation:</b>	<b>Software: Python, MySQL, Flutter, Dart, Django and Machine Learning Libraries</b> <b>Hardware: Laptop, Extension Chords</b>
<b>Benefit to the society from the project</b>	<b>Promotion of sustainable Industries, Economic growth and employment opportunities, Efficient Resource Allocation and Planning, Environmental Awareness and Protection, Technological advancement and innovation, drive economic growth and development, Contribute to more sustainable and prosperous society.</b>



**Signature of the team leader**



**Signature of the HoD/ Principal**  
**With seal**