Innospark TN: Fostering Student Entrepreneurship and Investment Synergy in Tamil Nadu

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ABSTRACT- In the ever-evolving landscape of education, aspiring student entrepreneurs often grapple with the challenge of securing funding and support for their innovative ideas. This project proposes the development of an advanced Student Support Web Portal, leveraging the transformative capabilities of artificial intelligence (AI), to facilitate seamless connections between students, potential investors, and governmental/private organizations in Tamil Nadu, India. The web portal will serve as a centralized platform for students to register their project ideas, presenting detailed problem statements and design concepts. Al will play a pivotal role in the enhancement of this platform, introducing intelligent algorithms to analyze and categorize project submissions based on various parameters such as feasibility, impact potential, and alignment with investor preferences.

I.INTRODUCTION

"Student entrepreneurs in Tamil Nadu face hurdles securing funding for innovative ideas. This project proposes an AI-powered Student Support Web Portal. The portal acts as a central hub connecting students, investors, and supporting organizations. Students register project ideas with detailed problem statements and design concepts. AI analyzes submissions for efficient categorization and matchmaking. Investors can leverage AI filters to discover projects aligning with their interests. The portal fosters collaboration between students, investors, and government/private entities. This symbiotic relationship, powered by AI, aims to transform student ideas into successful ventures, contributing to Tamil Nadu's thriving startup ecosystem."

II.LITERATUREREVIEW

1) <u>Cláudia Pinho,2</u>) <u>Mário Franco,3</u>) <u>LuisMendes</u> "ONLINE WEB PORTAL AS TOOLS TO SUPPORT INFORMATION

MANAGEMENT IN HIGHET EDUCATION INSTITUTIONS" A Systematic literature review: International Journal of Information Management 41(2):

Web portals have become vital for Higher Education Institutions (HEI), since they serve as an interface and communication channel between all academic staff. Therefore, this study aims to provide a systematic literature review (SLR) of the role of web portals as tools to support information management in HEIs, based on various studies published up to the present day. Based on the results obtained, it was possible to identify, explore and systematize the main themes on this topic: Software used in web portals, Internal and external benefits, Acceptance of technology and Management and storage of information. The evidence demonstrates there is a major shortage of scientific articles in the HEI context. Also revealed is the importance for these institutions of implementing a web portal appropriate to their needs, and the web portal's importance to help in decision-making. This SLR also suggests future lines of research according to the gaps identified in the theoretical corpus

III. PROPOSED SYSTEM

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Students submit project ideas with problem statements and designs. AI analyzes submissions for categorization and matchmaking. AI algorithms ensure investors find projects aligning with their interests. Investors can easily discover projects using AI-powered filters. Government/private organizations can find projects aligned with their goals. The portal fosters ongoing communication and collaboration.

Student Interface Investor Interface Organization Interface Admin Interface Al Engine Project Search and Filtering Monitoring Funding Allocation/ Support Programs

V.BLOCK DIAGRAM

VI.COMPONENTS DESCRIPTION:

1. STUDENT INTERFACE:

This is the entry point for students. They can register, login, and submit their project ideas. Login/Registration: Students create accounts for secure access. Project Idea Submission Form provides a structured way to present ideas. Problem Statement: Students clearly define the problem their project addresses. Design Concept: They outline their proposed solution and approach. Supporting Documents (optional): Students can upload relevant documents (e.g., prototypes, market research).

- 2.AI ENGINE: The AI engine analyzes student submissions to categorize projects and identify potential matches. Natural Language Processing (NLP): Analyzes the text content of problem statements and concepts to extract key information. Machine Learning (ML): Uses algorithms to categorize projects based on: Feasibility: Assesses the likelihood of the project succeeding based on various factors. Impact Potential: Evaluates the potential positive outcomes of the project. Industry Alignment: Categorizes the project within relevant industry sectors. Investor Preferences: Learns from historical data to identify investors likely interested in the project type.
- 3.DATABASE: Acts as the central storage for all platform data. Stores student profiles, project details (problem statements, design concepts, documents), AI-generated categorizations, and investor data (interests, investment history). This allows for efficient search and retrieval of information.
- 4.INVESTOR INTERFACE: Provides a platform for investors to discover and connect with promising student projects. Login/Registration: Investors create accounts for secure access. Project Search and Filtering: Allows investors to search for projects based on various criteria like category, keywords, or impact potential. Communication Tools: Enables communication with student project owners through messaging or video conferencing.
- 5.GOVERNMENT/PRIVATE INTERFACE: Connects government agencies and private organizations with student projects aligning with their goals. Login/Registration: Organizations establish accounts for secure access. Project Search and Filtering: Similar to investors, organizations can search for projects relevant to their strategic objectives (e.g., job creation, social impact). Funding Allocation/Support Programs: Organizations can directly offer funding or support programs to selected student projects.

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6. THE DATABASE: The database in the Student Support Web Portal with AI acts as the central nervous system, storing and managing all crucial information that fuels the platform's functionalities.

Students Table: This table stores information about student users, including, Student ID (unique identifier), Name, Contact details, Educational background, Skills and experience (optional)

Projects Table: This table houses all project details submitted by students, such as: Project ID (unique identifier) Student ID (foreign key linking to the Students table), Project Title, Detailed Problem Statement, Comprehensive Design Concept, Links to any uploaded supporting documents (e.g., prototypes, market research reports)

AI Categorization Table: This table stores the AI-generated project categorizations based on various parameters:Project ID (foreign key linking to the Projects table), Feasibility Score (predicted likelihood of success) Impact Potential Score (potential positive outcomes),Industry Category (relevant sector), Investor Match Score (likelihood of interest from investors based on historical data)

VII.CONCLUSION

In conclusion, the proposed Student Support Web Portal with AI presents a compelling solution to bridge the funding gap faced by aspiring student entrepreneurs in Tamil Nadu, India. By leveraging the transformative power of artificial intelligence, this platform aims to create a seamless connection between students, potential investors, and governmental/private organizations. The intelligent features, including student idea categorization, AI-powered matchmaking, and dynamic investor engagement, streamline the process of securing funding and support for innovative ideas. This fosters a holistic ecosystem for nurturing student ventures, ultimately contributing to the vibrancy of the Tamil Nadu startup landscape. Looking ahead, the project's future scope holds immense potential. Integration of advanced AI functionalities like entrepreneurial skill development and market analysis can further empower students. Expanding the ecosystem through international collaboration and alumni networks can provide broader opportunities. By implementing these advancements, the Student Support Web Portal with AI has the potential to become a cornerstone for fostering a thriving student entrepreneurial ecosystem in Tamil Nadu, India.

REFERENCES

- [1] C.Nagarajan and M.Madheswaran 'Experimental verification and stability state space analysis of CLL-T Series Parallel Resonant Converter' Journal of ELECTRICAL ENGINEERING, Vol.63 (6), pp.365-372, Dec.2012.
- [2] C.Nagarajan and M.Madheswaran 'Performance Analysis of LCL-T Resonant Converter with Fuzzy/PID Using State Space Analysis'-Springer, Electrical Engineering, Vol.93 (3), pp.167-178, September 2011.
- [3] C.Nagarajan and M.Madheswaran 'Stability Analysis of Series Parallel Resonant Converter with Fuzzy Logic Controller Using State Space Techniques'- Taylor & Components and Systems, Vol.39 (8), pp.780-793, May 2011.
- [4] C.Nagarajan and M.Madheswaran 'Experimental Study and steady state stability analysis of CLL-T Series Parallel Resonant Converter with Fuzzy controller using State Space Analysis'- Iranian Journal of Electrical & Converted Engineering, Vol.8 (3), pp.259-267, September 2012.
- [5] Nagarajan C., Neelakrishnan G., Akila P., Fathima U., Sneha S. "Performance Analysis and Implementation of 89C51 Controller Based Solar Tracking System with Boost Converter" Journal of VLSI Design Tools & Technology. 2022; 12(2): 34–41p.
- [6] C. Nagarajan, G.Neelakrishnan, R. Janani, S.Maithili, G. Ramya "Investigation on Fault Analysis for Power Transformers Using Adaptive Differential Relay" Asian Journal of Electrical Science, Vol.11 No.1, pp. 1-8, 2022.
- [7] G.Neelakrishnan, K.Anandhakumar, A.Prathap, S.Prakash "Performance Estimation of cascaded h-bridge MLI for HEV using SVPWM" Suraj Punj Journal for Multidisciplinary Research, 2021, Volume 11, Issue 4, pp:750-756
- [8] G.Neelakrishnan, S.N.Pruthika, P.T.Shalini, S.Soniya, "Perfromance Investigation of T-Source Inverter fed with Solar Cell" Suraj Punj Journal for Multidisciplinary Research, 2021, Volume 11, Issue 4, pp:744-749
- [9] C.Nagarajan and M.Madheswaran, "Analysis and Simulation of LCL Series Resonant Full Bridge Converter Using PWM Technique with Load Independent Operation" has been presented in ICTES'08, a IEEE / IET International Conference organized by M.G.R.University, Chennai.Vol.no.1, pp.190-195, Dec.2007
- [10] M Suganthi, N Ramesh, "Treatment of water using natural zeolite as membrane filter", Journal of Environmental Protection and Ecology, Volume 23, Issue 2, pp: 520-530,2022
- [11] M Suganthi, N Ramesh, CT Sivakumar, K Vidhya, "Physiochemical Analysis of Ground Water used for Domestic needs in the Area of Perundurai in Erode District", International Research Journal of Multidisciplinary Technovation, pp: 630-635, 2019

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