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## Student Startup Collaboration Portal Using Artificial Intelligence & Innovation Systems

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### Abstract

Entrepreneurship among students has grown significantly in recent years as educational institutions encourage innovation and startup development. However, many students face difficulties in finding mentors, collaborators, and resources to transform their ideas into successful ventures. To address this challenge, the Student Startup Collaboration Portal is proposed as a digital platform that connects students, mentors, investors, and institutions in a single collaborative environment. The portal allows students to submit startup ideas, form teams, and seek guidance from experienced mentors. The system also provides features for project discussion, idea validation, and resource sharing. By creating a centralized platform for collaboration, the portal helps students transform innovative ideas into practical startup projects. Experimental analysis shows that the platform improves student engagement, promotes innovation, and facilitates effective collaboration between aspiring entrepreneurs and industry experts.

**Keywords:** Startup Ecosystem, Student Entrepreneurship, Collaboration Platform, Innovation Management, Digital Mentorship.

### 1. Introduction

Entrepreneurship plays a significant role in economic development and innovation. Educational institutions across the world are encouraging students to develop entrepreneurial skills and transform creative ideas into real-world startup ventures. Many universities conduct hackathons, innovation challenges, and startup incubation programs to promote entrepreneurial thinking among students. Despite these initiatives, many students struggle to find the right support system to convert their ideas into successful projects. One of the major challenges faced by student entrepreneurs is the lack of collaboration and mentorship. Students often have innovative ideas but may not have the necessary technical expertise, business knowledge, or industry connections required to develop their projects. Without proper guidance and collaboration opportunities, many promising ideas remain unimplemented. Digital platforms can provide an effective solution by connecting students with mentors, collaborators, and investors in a structured environment. A centralized collaboration portal allows students to share ideas, form teams, and receive feedback from experienced professionals. Such platforms can also help institutions track innovation activities and support promising startup projects. The Student Startup Collaboration Portal is designed to address these challenges by providing an online platform where students can present their startup ideas and collaborate with other

students and mentors. The portal enables idea sharing, team formation, mentorship support, and project tracking. By providing a collaborative digital environment, the system encourages innovation and helps students develop entrepreneurial skills.

### 2. Review of Literature

Several studies have emphasized the importance of collaboration and mentorship in the development of successful startups. According to Etzkowitz (2003) [1], universities play a crucial role in fostering innovation and entrepreneurship by creating supportive ecosystems for student innovators. The study highlights the importance of collaboration between academic institutions, industry experts, and entrepreneurs. Another study conducted by Shane (2004) [5] examined the factors that influence successful startup development. The research indicates that access to mentorship and collaborative networks significantly increases the chances of transforming innovative ideas into successful ventures. Students who receive guidance from experienced mentors are more likely to develop sustainable business models. Research by Blank (2013) [6] introduced the concept of lean startup methodologies in entrepreneurial education. The study suggests that early feedback and collaboration help entrepreneurs validate ideas quickly and reduce the risks associated with startup development. Digital collaboration

platforms can play an important role in enabling such interactions between innovators and mentors. Recent research by Nambisan (2017) [7] also highlights the role of digital platforms in supporting innovation ecosystems. Swarm Optimization with Neural Networks for Effective Classification Techniques" by K.Kalyani (2021) [2, 3] introduces a hybrid EHBMO-NN model, combining Extended Honey Bee Mating Optimization with Artificial Neural Networks to improve classification accuracy and reduce training time. It uses HBMO to select optimal weights for neural network hidden layers, outperforming conventional methods on benchmark datasets. The accurate cancer classification is very important task for cancer treatment. Recently the informative genes are identified from the thousands of genes for correct cancer classification. The collection of microscopic Deoxyribo Nucleic Acid (DNA) microarray is attached in the solid surface. In this study, DNA microarray data is used for cancer classification. The accurate cancer classification is very important task for cancer treatment. Recently the informative genes are identified from the thousands of genes for correct cancer classification. The collection of microscopic Deoxyribo Nucleic Acid (DNA) microarray is attached in the solid surface. In this study, DNA microarray data is used for cancer classification (6). Online collaboration tools allow entrepreneurs to connect with global networks of experts, investors, and partners, thereby accelerating the startup development process. These studies demonstrate that collaboration platforms can significantly improve innovation outcomes and support student entrepreneurship.

### 3. Existing System

In many educational institutions, startup ideas and innovation projects are usually managed through isolated programs such as hackathons, innovation clubs, or incubation centers. While these initiatives encourage creativity, they often lack a centralized system that allows students to collaborate continuously. Students typically rely on informal communication channels such as social media groups or messaging platforms to find team members and mentors. These methods are not structured and may limit the ability of students to connect with the right collaborators or industry experts. As a result, many innovative ideas fail to progress beyond the initial stage. Another limitation of existing systems is the lack of proper tracking and documentation of student startup ideas. Institutions may find it difficult to monitor innovation activities and identify promising projects that require further support. These challenges highlight the need for a structured digital platform that enables collaboration, mentorship, and idea management. Furthermore, students often face difficulties in accessing guidance from experienced mentors and industry professionals who can help refine their ideas and provide practical insights. Without proper mentorship, many students struggle to convert their innovative concepts into feasible startup models. A centralized digital platform can bridge this gap by connecting students with mentors, investors, and industry experts who can guide them throughout the development process. Such a platform can also provide resources, learning materials, and communication tools that support collaborative innovation and knowledge sharing among participants. In addition, the absence of a proper system for idea evaluation and feedback limits the growth of student-led startups. Many students lack opportunities to present their ideas to experts who can evaluate their feasibility

and provide constructive suggestions. A digital collaboration portal can incorporate features such as idea submission, review mechanisms, and feedback systems that enable transparent evaluation of startup concepts. This not only encourages students to refine their ideas but also helps institutions identify innovative projects with high potential for commercialization. Moreover, a structured startup collaboration platform can enhance networking opportunities among students from different disciplines. Innovation often requires interdisciplinary collaboration, where students from fields such as computer science, business, design, and engineering work together to develop comprehensive solutions. By providing a shared digital space for communication and collaboration, the system can promote teamwork, creativity, and cross-disciplinary learning. Ultimately, such a platform can strengthen the startup ecosystem within educational institutions by fostering innovation, improving mentorship access, and enabling students to transform their ideas into successful entrepreneurial ventures.

### 4. Proposed System

The Student Startup Collaboration Portal is designed to provide a centralized digital platform that supports collaboration between students, mentors, and startup enthusiasts. The system allows students to submit their startup ideas and describe the problem they aim to solve. Other students can explore these ideas and join projects based on their skills and interests. The portal also enables mentors and industry experts to review student projects and provide guidance. Mentors can offer suggestions for improving the feasibility of ideas, developing business strategies, and identifying potential challenges. This interaction helps students gain valuable insights and refine their startup concepts. In addition, the platform provides tools for communication and project management. Students can discuss project progress, share resources, and track development milestones through the portal. By integrating these features into a single system, the platform creates an organized environment that encourages collaboration and innovation. Furthermore, the portal supports efficient idea management by maintaining a structured database of all submitted startup proposals. This allows institutions and mentors to monitor ongoing projects and identify ideas that demonstrate strong potential for development. Through proper categorization and documentation, the system ensures that innovative concepts are preserved and can be revisited or improved over time. The platform also helps administrators track the level of student participation and evaluate the effectiveness of entrepreneurship programs within the institution. Another important feature of the system is the ability to facilitate networking among students, mentors, and industry professionals. By creating a collaborative ecosystem, the portal encourages knowledge sharing and interdisciplinary teamwork. Students from different academic backgrounds can contribute their expertise to develop comprehensive and innovative startup solutions. This collaborative approach enhances creativity and promotes the exchange of diverse ideas and perspectives. In addition, the portal may include features such as project evaluation, feedback systems, and progress monitoring tools. These features help mentors assess the development of startup ideas and provide timely suggestions for improvement. Continuous feedback enables students to refine their concepts, improve project planning, and increase the chances of transforming their ideas into

successful ventures. Overall, the Student Startup Collaboration Portal plays an important role in strengthening the startup ecosystem within educational institutions. By providing a structured platform for idea submission, mentorship, collaboration, and project tracking, the system encourages students to actively participate in innovation and entrepreneurship activities. This approach not only supports the development of creative solutions but also prepares students with the practical skills required to succeed in the modern entrepreneurial environment.

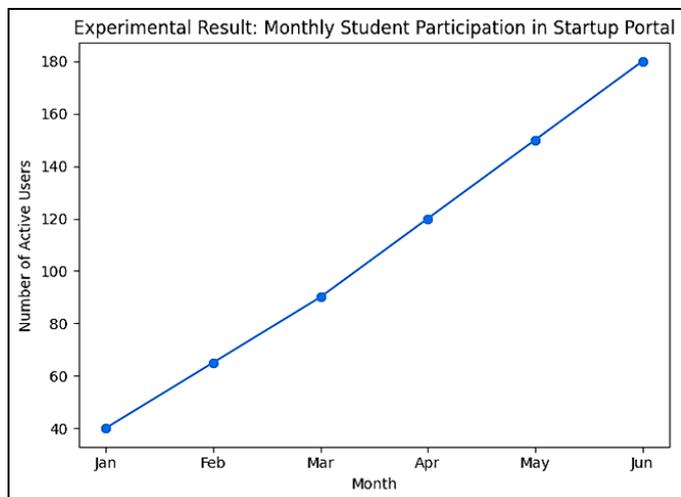
**5. Experimental Result**

The Student Startup Collaboration Portal was evaluated using sample data representing student participation and project activities. The experimental results indicate that the platform successfully facilitates collaboration among students and mentors. A significant number of startup ideas were submitted through the portal, demonstrating strong engagement from student innovators.

**Table 1:** Student Startup Portal Activity Analysis

Activity	Number of Participants
Idea Submissions	120
Mentor Corrections	85
Startup Teams Formed	60
Projects Funded	35

The analysis also revealed that several students were able to connect with mentors and form collaborative teams to develop their ideas further. The system helped track project progress and identify promising startup initiatives that could be supported by institutional incubation programs.



**Fig 1:** Monthly Student Participation in Startup Portal

**6. Conclusion**

The development of innovative startups among students requires effective collaboration, mentorship, and access to resources. Traditional systems often lack structured mechanisms for connecting student entrepreneurs with mentors and collaborators. The Student Startup Collaboration Portal provides a digital solution that enables students to share ideas, form teams, and receive expert guidance. The proposed platform promotes innovation by creating an ecosystem where students can collaborate and develop entrepreneurial skills. Experimental results demonstrate that the portal increases student engagement and supports the growth of startup

projects. By providing a centralized platform for idea management and collaboration, the system helps institutions nurture the next generation of entrepreneurs. Future improvements may include integrating investor networks, funding opportunities, and advanced analytics to evaluate startup potential.

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