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Ideable - An online platform for Inventors and Investors

Kazi Nayeem Hossain[1], Arnob Mallick[2], Hasibul Hassan Sarker[3], A. H. M. Saiful Islam[4]
Department of Computer Science and Engineering, Notre Dame University Bangladesh.

Corresponding Author
Email Id: *shahadatnayeem23@gmail.com*

ABSTRACT
Nowadays, everyone has an idea. Everyone's ideas should be given any consideration, regardless of how big or tiny these may be. Some ideas, however, never get the chance to be implemented since there aren't enough platforms, resources, or funding available. In the lesser developed country, it is more prevalent that peoples' ideas are forgotten. This is where our web application "Ideable" comes in. It is a platform where they can represent their ideas and get the proper validation it de serves without any hassle. There are two types of users. One can post about their idea (Inventor) and another one can invest in the ideas they like (Investor). First of all, both users' needs to register by supplying their names, email, and password. By registering both users can freely roam this platform on their respective pages. After registration registering can see the ideas in their feeds if they like an idea, they can send an email to the inventor's email informing the inventor that there is a possible investor who wants to invest in their idea. This paper is basically representing a platform for inventors and investors where they can communicate and make ideas come to life

Keywords: *idea, inventor, investor, PHP, MySQL.*

INTRODUCTION

Ideable is a platform for those who wish to bring their dreams to life, and for those who wish to help make that happen. Our platform consists of two kinds of users, inventors and investors. People who have ideas in their head but don't have the resources or money to develop them are inventors. Investors provide inventors with resources, finance, etc. This is not a philanthropic or fundraising web site, instead, it is an opportunity for inventors and investors to connect directly to ensure a transparent agreement.

Related Work

There is some platform that work something like ours but there is no online platform available what does exactly what we do. Some of our closest related works are Kickstarter, Fundraiser and Dumari.

Kickstarter : Kickstarter[6] is a platform for fundraising a project from various categories. Their main attraction point is they have huge amount of varieties so that people of any kind of projects can come to their platform. But their varieties are also limited to arts. Their categories are Arts, Music, Cartoons etc. User can upload his needs for almost anything related to art. People even asks for their school fees or money to publish their books etc. Kickstarter charges a fees if the goal is fulfilled by the deadline. One cannot raise funds for charity or social work. The people who invest is called backers and the people who uploads for funding is called creators. It is clearly written that creators cannot offer equity to get

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funding. It means the people that will invest will have to invest without getting any profit. This is a system to help other people so that they can do something with their projects without getting anything in return to the backers. This is only limited to creative works like arts, mu sic, films etc. These kinds of works get investments from potential investors in day-to-day life. As there are a lot of investors who wants to invest on these types of works, a creator can do scams in this plat form where instead of having proper investments, he can ask for money and people who needs the money genuinely will be neglected.

FundRazr : FundRazr[8] is one of the best fundraising platform that works on 40+ countries around the world. It is an easy-to-use platform which is popular among most of the people. Shows the FundRazr Website. When someone wants to up load his/her needs, they call it 'campaign'. A campaign can be started without any fees. A campaign can get some funding and anyone can fund any campaign, there are no limitations while giving funds. Provides helps from itself to grow. This is more likely a platform for growing businesses. FundRazr provides engagement for a campaign and provides tools so that a business can grow. It also has systems for a campaign of social causes. People can fund if they feel related to the cause. This makes FundRazr vulnerable because nowadays no one wants to spend money without getting profits. FundRazr controls the whole funding system. Anyone can donate or fund on anything but that will go through FundRazr and they get a fees for that. So, the person who needs it does not get the full amount of money and the person who is donating will not be officially a part of it.

Dumari : Dumari[2] is the closest related plat form of ideable. It was created with a vision of helping startups so that they can create a meaningful impact on society. Their motto is making a meaningful impact, not about making meaning less profits. People can donate with monthly subscriptions so that one project can get funding every month. Dumari only accepts startups that has some social cause, most of their startups are from rural areas of Africa They provides a dumari card that is given to every member who join Dumari for funding startups. When a user joins dumari, he has to choose a monthly amount that will be cut from his bank account as a donation for the project the user chooses. This is not a good system of funding because no one in the world remains financially stable throughout his entire life. If there are a month when the user needs money but before cancelling the dumari subscription, dumari cuts the amount from his bank then the user will fall into a problem which obviously no one wants. Dumari is limited to startups that has some social cause. Because of this, some startups that can change the world are not in the list of dumari. There is not a big amount of startups that has social causes so even if dumari could help but it is not able to due to the limitations.

METHODOLOGY

We had seen on local newspaper and on TV news that even in rural areas, there are people with great minds but they cannot use their mind to develop the surroundings because they don't have the support. Ideable is the platform to help them to
develop the world. If we look at James Dyson, [4] the founder of Dyson group, we can see that at first when he had the revolutionary idea of vacuum cleaner, he could not implement that

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idea on market until one Japanese company called Apex [1] came and funded his project. Apex is a subsidiary of the large Japanese company called Nippon Gakki.

Tools: We developed this system using HTML, CSS, Javascript, MySQL and PHP. MySQL is our database and PHP is our backend programming language. Others are for the front-end part. [9] In 1986, Apex funded Dyson for his vacuum cleaner and from that time Dyson is a popular British technology company for household appliances. According to Forbes, Dyson has generated 13.2 Billion Dollars revenue right now. This was only possible because of the initial funds by Apex.

ideable Working Process: There are two types of users who can register on ideable. The types are inventor and investor. Inventor can upload his idea with the necessary details and can check who is interested on his idea for further communicating. Investor can show the ideas listed on ideable and invest on any idea(s) he wants. At first user has to register with some basic information. Both investor and inventor have to register because without log in, user cannot perform any action. While logging in, if a user provides some wrong credentials, then it will not log in. PHP validates the whole data given by any user.

After logging in, inventor can upload his idea and check if any investor wants to see his idea, then he can share password with him and after sharing password, if the investor wants to invest then the inventor will be notified by email. On the other hand, after logging in, an investor can see all the ideas available on ideable. User can see the ideas by categories too. Initially, the investor will only see the thumbnail picture, name and some minor details about the idea. If he wants to know the whole idea then he needs to ask for a password to the inventor, after sharing password he can see the whole idea and invest if he wants. He can also report the idea if he finds the idea inappropriate or can ask for a review to a third-party company.

Privacy: In most of the platforms currently available, anyone can log in and check the information available on that platform. Those seeking help have their information public, automatically. A lot of people can't put their ideas on those platforms due to this particular reason. But *ideable* doesn't work that way. One investor cannot view all the details unless the inventor gives the permission. So, the information is always protected. *Protection*:

When an investor views an idea, he is able to implement it on his own because he has the necessary funds. The idea is not protected at all on the majority of the website. But on *ideable*, when an investor registers, an NDA(Non-Disclosure Agreement) [5] is signed automatically that says, From this date the user is registering, he/she cannot use any information of any ideas from this platform for his/her own benefit. So even an investor does something like that, then the inventor can claim his originality even if the inventor does not have any patent or copyright on his idea.

Transparency : On most platforms, the platform acts as an intermediary that users cannot contact themselves. If someone wants to invest, he will give money to that platform, then that platform will give that money to the inventor. Therefore, users cannot know who they are working with. But on *ideable*, the two users can contact each

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other directly. All investments are made by the user himself so that the user can have full knowledge of the person he is dealing with.

System Design: Our system deals with two different types of users. The types are *Inventor* and *Investor*. We can get a clear knowledge of how the user(s)uses our platform from the use case diagram given in Figure 1.

Use Case Diagram: Use case diagrams depict how actors interact with the use case in order to illustrate key system functions. The use cases that are involved in defining a system's fundamental operations are shown in the use case diagram. This use case diagram provides a visual representation of how the components of our project interact with one another. It stands for the steps taken in system analysis to recognize, define, and arrange sys tems. The following use case diagram in Figure 1 shows the working process of ideable.

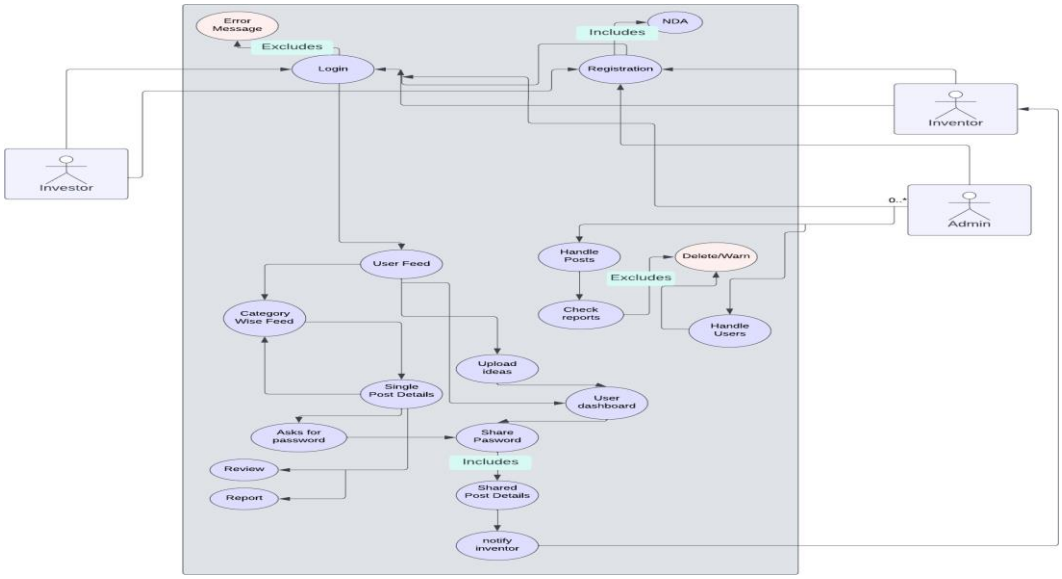

Fig.1:-*Use Case Diagram of ideable*

Functionalities of the system: investor can create an account and then search for ideas he wants to invest on. Initially, the investor will only see the thumbnail picture, name and some minor details about the idea. If he wants to know the whole idea then he needs to ask for a password to the inventor, after sharing password he can see the whole idea and invest if he wants. He can also report the idea if he finds the idea inappropriate or can ask for a review to a third-party company.

Inventor can create an account to upload his idea and to check if someone wants to invest on it. After logging in, inventor can upload his idea and check if any investor wants to see his idea, then he can share password with him and after sharing password, if the investor wants to invest then the inventor will be notified by email.

While signing up as an investor, user automatically signs an NDA (Non-Disclosure Agreement) with ideable that the user cannot use or implement any information or idea by or for himself.

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When an investor logs in, he can see all the ideas without any filters. He can only see title, thumb nail picture and some details at first. To see the full details, he has to get permission from the inventor.

If an investor wants to see the details, then he has to get permission from the inventor and the permission is given by sharing password. Though it is not a password which is for input, rather it is just a form of permission. Only when the inventor shares the password, the investor can see the post details If the investor has the permission, then he can see all the information of that post.

If the investor finds an idea inappropriate then he can also report that idea and the admin will check and perform necessary actions.

If the investor cannot judge or verify the authenticity or the process of the idea then he can ask for a review to some third-party groups to check and verify the idea. The third-party companies do not have any connection with ideable

An investor can comment on an idea and the comment is public. He can comment only if he has the permission from the inventor to see the idea fully.

If the investor wants then he can invest on the idea and after clicking the invest button, the invent tor will be notified for the further communication.

Web Server : Apache Web Server [3] is known for its rich set of features, including support for multiple operating systems, a modular architecture, and extensibility through third-party modules. It also includes a robust set of security features, such as SSL/TLS encryption, HTTP authentication, and access control.

Database: MySQL [7] is a popular opensource relational database management system (RDBMS) used by many organizations and individuals around the world. It provides a powerful and flexible plat form for managing large amounts of data and has a rich set of features that make it a popular choice for web developers and data analysts.

Data storage and retrieval : ideable contains a huge amount of data that has to be processed to run the system. All the different types of data of various kinds of ideas are stored in ideable database. As MySQL is designed to store and retrieve large amounts of data quickly and efficiently and it uses a relational model, which means that data is organized into tables with columns and rows, MySQL is the perfect choice.

Scalability : MySQL is highly scalable and can handle large datasets with ease. It supports partitioning, clustering, and replication, which makes it ideal for use in high traffic web applications like ideable.

Security: MySQL provides a range of security features to protect your data from unauthorized access, including user authentication, data encryption, and SSL/TLS support.

LIMITATIONS

Since money is involved, there can be problems. First of all, it is not possible for a system to detect or verify if an investor has funds in their bank account to invest. There may be a risk of fraud/scam but to avoid this the idea is to warn users, especially inventors, at every step to personally verify investors before dealing with certain confidential or secret information. The same applies

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to investors.

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CONCLUSION

By creating this paper, we are trying to show the world that we are trying to bring about change. Because we genuinely believe that there are many people who can change the world with their ideas. Initially, we did not add any payment methods or registration system because our main goal was to help people in need. We hope that with this online platform, many people will see a glimmer of hope and many people will also contribute to changing the environment of the world.

REFERENCES

1. Altman, W. (2010). Dyson and the vacuum in development. *Engineering & Technology*, *5*(13), 66-69.
2. "Crowdfunding Platform—Founded: 2022—1150 Employees—https://dumari.nl/aboutdumari/". In: (2022)
3. Hu, Y., Nanda, A., & Yang, Q. (1999, February). Measurement, analysis and performance improvement of the Apache web server. In *1999 IEEE International Performance, Computing and Communications Conference (Cat. No. 99CH36305)* (pp. 261-267). IEEE.
4. Jones, O., & Conway, S. (2004). The international reach of entrepreneurial social networks: The case of James Dyson in the UK. *International entrepreneurship in small and medium size enterprises. Edward Elgar, Cheltenham, op. cit*, 87-106.
5. Klee, M. M. (2000). The importance of having a non-disclosure agreement. *IEEE engineering in medicine and biology magazine*, *19*(3), 120.
6. Mitra, T., & Gilbert, E. (2014, February). The language that gets people to give: Phrases that predict success on kickstarter. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 49-61).
7. AB MySQL. "MySQL". In: (2001).
8. Rok, N. (2018). Crowdfunding Platform| Vancouver, BC| Founded: 2008| 11-50 Employees| https://fundrazr. com/-COMPANY OVERVIEW-SENIOR MANAGEMENT.
9. Takeda, Y. (2020). Enduring Effects of Nationalistic Ideology on Strategy Formation Process: The Case of Nippon Gakki. In *Academy of Management Proceedings* (Vol. 2020, No. 1, p. 15067). Briarcliff Manor, NY 10510: Academy of Management..

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