

Proposal Document

1. Proposal Title.

Title: Secure 360

2. Short Description.

Generally, our idea is all about Improvised security of digital Transactions. We also came up with a security proposal for Data Security to prevent Data loss and unnotified Data Breaches

3. Problem Statement.

Alternate authentication mechanism for digital payments.

Presently, most of the digital payments are authenticated by a Personal Identification Number (PIN)/password/CVV followed by a One-Time Password (OTP) which is received by the remitter over his mobile phone. While the SMS through which the OTP is received is not encrypted, the instances of digital payment frauds where the users are tricked into sharing the OTP have also been observed. As such, an alternate smart secure authentication mechanism may result in more secure digital transactions.

4. Brief Description of Idea.

- Our task is to provide an improvised security and propose an alternate authentication mechanism for digital payments, The existing security methods like PIN/ OTP received by mobile phone which are not encrypted are no safe longer as technology is growing rapidly.
- So, Our Secure 360 authenticator is a specialized app to minimize the frauds and maximize the security. Initially, when a user sign-in in our app, he needs to provide the mobile number which is

already linked with his bank account. Basically, when a user gets into his bank dashboard and initiates payment, An QR code will be generated in Bank phase Dashboard. Our authenticator app generates an 8–12-digit security pin which expires in just 120 sec and get new security pin after 120 sec. Therefore, user needs to type this security pin in dashboard beside QR. Such that if the hidden pin in QR matches with security pin provided by administrator, it proceeds to next step.

- Therefore, our layer of security is QR/Bar Code + Security pin (expires for every 120 sec)

5. Current stage of solution.

It is at development stage and prototype of our app is ready.

6. Expected Result from using proposed Idea.

This app ensures the security of every individual's digital transaction. A 2-layer/2-step verification secures the app. QR code generated, or security pin generated as per our idea will expire for every 120 sec.

7. Briefly outline the critical success factors, and steps, required to bring this idea to life, and a reasonable timeline in which this can be achieved.

Critical success factors:

- By using this product there will be very very less probability that you will face issues with losing your money in any online fraud.
- As we need some special machines to scan the bar code and after that also it has few complications for showing the correct code using that machines also, So our product is safe to use.

Steps to bring this idea to life:

- We need support of every Bank to bring this idea to life.
- Every Corporate/Private Banks must give their utmost support in providing updates/ changes in policy they have made.

Reasonable timeline:

- Timeline to implement this proposal depends on the support.
- Minimum of 6-12 months is needed.

8. Key benefits to the wider community if we were to go ahead to implement your proposed solution.

If we go ahead with the implementation then the main point of data security will be eliminated as here we are storing data in the hash functions where the hash key consists of 128-bit length and to hack into such things it will take billions of years. So the data security issue will be solved.

9. Probable cost of implementation of your solution.

For the implementation of our solution we will be needing a highly skilled team of Android and Web Developers and few highly skilled Ethical Hackers for making our application more secure, which in total may cost around ₹ 1.8 Crore if the Developers work for a period of 1 to 1.5 Year of time.

10. Name of your product.

Secure 360.

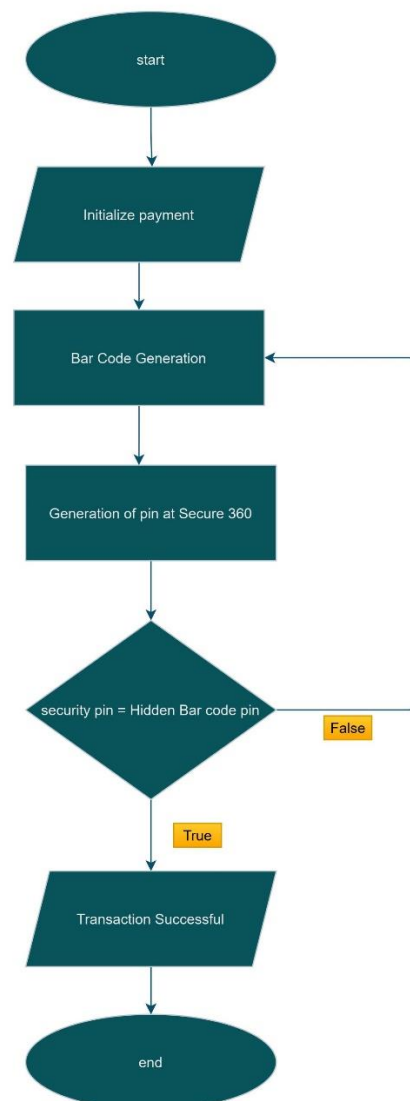
11. Is your submitted proposal/solution already being used in the market?

The Integrated/Exact solution is not currently available in the market.

12. Details of the IT infrastructure (technology / APIs / Application platforms / network application, etc.)

Languages & Technologies : Java, Android Studio, Canva, Figma, Material UI.

13. Describe the process flow/working of your solution in short.



14. What other companies or organizations already offer a similar solution?

We are ready to update/upgrade the security features at any point of time maximizing the security issues and providing high end support of encryption.

15. What differentiates you with your competitors? What is your unique value proposition?

Many teams with our friends/colleagues maybe working on the same idea.

The uniqueness of our idea/solution is that our proposal has dual layer of security, where there are 66^{12} possible generated pins.

16. Details about your core team members, name, designation, experience and their current role and contributions to your team.

Our team consists of two members.

Omkar Ghongade: Developer(Full Development), Web App Design

Sai Tharun Devisetty: Front End Design of the Android App, Documentation Work, Power Point Presentation.

17. Key risks if this idea is implemented and how can they be mitigated?

The key risk which should be taken into consideration is no two people should have same Bar Code and Authentication code in the App as it may lead to some wrong transactions and it can be mitigated by designing the algorithm in such a way that the generated barcode is always unique and is not currently active.

18. Challenges that you anticipate in implementing / providing this solution, and how will you overcome them?

We faced a little difficulty in back end of this project, but **Priyanka Ma'am, Sudheer sir**, and respective club heads have helped us in overcoming them.

19. Value or benefits are you expecting from your participation in the hackathon?

By participation in the hackathon we got to work on the real life project, design it, build the app and also got to know few more new concepts. I think this has given a quite good Idea about what a hackathon really is and has given me motivation to keep on building such real life projects.