PoIS Project Proposal

Team Name: *se7en*

Team Members

1. Preet Thakkar (Leader) - 20171068
2. Vaibhav Garg - 20171005
3. Kunal Vaswani - 20171064
4. Neel Trivedi - 20171015
5. Anush Mahajan - 20171020
6. Rizwan Ali - 20171167
7. Anchit Gupta - 20171041

Product

- A full-fledged BlockChain based software web application providing an auctioning platform:
    - We want to ensure complete transparency and security regarding the highest bid and bidder eligibility.
    - The blockchain-based system can ensure transparent and publicly verifiable auctions in IIIT for example in Bakul VolleyBall League.
    - We plan to use the development environment provided by Ethereum for our coding production, and Solidity language to write our Smart Contracts.
    - We will try to incorporate *Elliptic Curve Digital Signature Algorithm* if possible to sign user information in transactions.
- A short video explaining the related information security concepts.
    - We plan to show how blockchain works and how information security plays a critical role.

    - We will also explain what exactly happens when a user places a bid with the bid amount X when the API is called, basically the whole life cycle of the bid.
- A comic strip demonstrating the application benefits.
    - We will think of some small story around the future of auctions which is solely based on blockchain.
    - This can be a political satire.
    - And we will illustrate the scenario using a small comic strip.

Project Title: *BidKaroNa*

Sub-Teams

1. Application Backend: ***Vaibhav, Preet, Anchit, Rizwan***
2. Application Frontend: ***Neel, Kunal, Anush***
3. Comic-Strip: ***Neel, Vaibhav, Anchit***
4. Video: ***Anush, Preet, Kunal, Rizwan***

Timeline

Week Number	**Task**
1	Exploring and learning the basics of BlockChain
2	Application Architecture Design, Video script
3	Basic BlockChain implementation
4	Backend API generation
5	Frontend implementation

6	Integration
7	Filming, Testing
8	Comic Strip

Our Expectations

The current scenario has forced us to discover solutions that exempt mass gatherings of peoples, while simultaneously supporting us to return back to our ‘normal’ lives. Auction Systems is apt for quite a lot of use cases, like the Yard Sale, or Auctioning of Players in Sports, like IPL. A decentralized system, which provides transparency of bid, will force the bidders to make independent decisions, while considering the amount the others will bid. Hence, our focus is to build something that utilizes the concepts of Information Security, to ensure the anonymity of bids, along with complete transparency of results for justifying the outcomes of these auctions.

We also aim to remove the typical race based auction systems with our new decentralised anonymous auction system, where everyone bids while considering the amount other bidders will bid, hence there’s some room for some Game Theory, where one is forced to think how others will bid and then make your bid. This could also lead to a potential benefit of the buyers, as the problem of over-bidding in the auctions is eliminated with the anonymity of the bids.