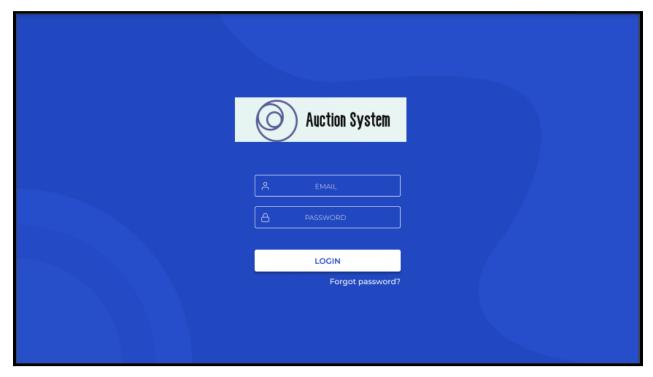
CSE528 - IBC Group Project Decentralized Auction System

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2018348	2018251	2018269

As mentioned in the previous report, we now started working on the possible UI/UX of the application. We used Figma for this particular task and apart from this we also made some changes to the code with a newer version of Solidity. The UI developed on Figma will be our guide tool for developing the final application on Truffle using ReactJS.

Figma UI Snapshots



This is the initial dashboard of the application which the user will use to log into his account.



This is the profile page of the application which is unique to each individual user. Here the user will be able to set up a new auction, view his existing auctions, place bids on others' auctions and also view his previous bids.

← NEW AUCTION			
	TITLE	ENTER TITLE OF THE AUCTION	
	STARTING PRICE	ENTER STARTING PRICE	
	IPFS HASH	ENTER THE IPPS HASH	
	STARTING DATE	ENTER DATE IN DD/MM/YYYY FORMAT	
	STARTING TIME	ENTER TIME IN HH:MM FORMAT	
	ENDING DATE	ENTER DATE IN DD/MM/YYYY FORMAT	
	ENDING TIME	ENTER TIME IN HH:MM FORMAT	
CREATE AUCTION			

This is the auction initialization screen that the user will access to set up a new auction. The input fields will define the input parameters of the constructor for a new auction.



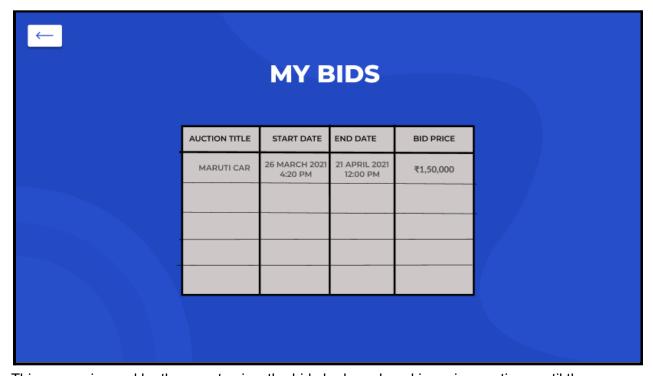
This screen is for the user to view his ongoing auctions and also is given an option to cancel them if they want to.



This is the ongoing auctions screen where the user can view the auctions going on and decide on which auction he/she wants to bid on.

← PLACE A BID		
	TITLE	НР ГАРТОР
	STARTING PRICE	₹ 45,000
	IPFS HASH	QMPHPS1P3JAWI53Q5QQINAUPHITQA3
	STARTING DATE	01 NOVEMBER 2021
	STARTING TIME	5:20 PM
	ENDING DATE	01 JANUARY 2021
	ENDING TIME	5;20 PM
	ENTER BIDDING AMOUNT	PLACE BID

This screen is used for the user to place a bid in the field mentioned besides the place bid button, where the user will declare the amount he wants to bid for the auction.



This screen is used by the user to view the bids he has placed in various actions until then.

Plan for the Future

Now, we will start developing the mentioned UI on ReactJS. Truffle framework will help us to connect smart contract(completed) with the javascript.

All the updated code is placed in the below-mentioned Github repository. The UI is also present in the below-mentioned Figma link.

Github repo:

https://github.com/navneet-ag/Auction-System

Figma Link

https://www.figma.com/file/I391YXnD5LcCaxLP3qNXFA/IBC auction system?node-id=0%3A1

Contributions:

Navneet Agarwal - Developing Figma UI, Code Update Nitin Gupta - Developing Figma UI, Code Update Swastik Jain - Developing Figma UI, Code Update

References:

- Omar, I., Hasan, H., Jayaraman, R., Salah, K. and Omar, M., 2021. Implementing decentralized auctions using blockchain smart contracts. *Technological Forecasting and Social Change*, 168, p.120786.
- Li, Honglei, and Weilian Xue. "A Blockchain-Based Sealed-Bid e-Auction Scheme with Smart Contract and Zero-Knowledge Proof." Edited by Leandros Maglaras. Security and Communication Networks 2021 (May 19, 2021): 1–10.
- Qusa, Hani, Jumana Tarazi, and Vishwesh Akre. "Secure E-Auction System Using Blockchain: UAE Case Study," 1–5, 2020.
- Lee, Cheng-Chi & Ho, Pi-Fang & Hwang, Min-Shiang. (2009). A secure e-auction scheme based on group signatures. Information Systems Frontiers. 11. 335-343. 10.1007/s10796-008-9094-3.
- W. Chen and F. Lei, "A Simple Efficient Electronic Auction Scheme," *Eighth International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT 2007)*, 2007, pp. 173-174, doi: 10.1109/PDCAT.2007.60.
- H. S. Galal and A. M. Youssef, "Verifiable sealed-bid auction on the Ethereum blockchain," in Proceedings of the 2018 Financial Cryptography, pp. 265–278, Springer, Nieuwpoort, Curaçao, March 2018
- Qusa, Hani & Tarazi, Jumana & Akre, Vishwesh. (2020). Secure E-Auction System Using Blockchain: UAE Case Study. 1-5. 10.1109/ASET48392.2020.9118213.