

Group 36

Group Members

1. AM.EN.U4AIE20171 Vuppala Naga Sushanth Kumar
2. AM.EN.U4AIE20155 Pappala Kumar Aditya
3. AM.EN.U4AIE20139 Kalla Likhith Sai Eswar

Project Title: Human Centered Design towards blockchain enabled platform for AmritaSREE Self Help Groups

Abstract:

Rural development is one of the essential requirements for developing nations. Numerous women's self-help groups have been formed worldwide to provide them with livelihood opportunities. AmritaSREE, an initiative of Sri Mata Amritanandamayi Devi, stands for Amrita Self Reliance Education and Employment, is a Self-Help Group. Through developing their technical and vocational skills, SHGs help unemployed and economically vulnerable women become self-reliant. The project's goal is to use technology to assist SHGs in leveraging the Internet of Things. The existing working methods of the finances within are done through maintaining logs in physical ledgers such as books and passbooks, which might result in errors and a lack of transparency. This project analyzes the problems the members may encounter and its solutions. Using mobile computing and a human-centered design approach, the project proposes a unique IoT solution for addressing the challenges of the community. The client-server approach can be operated as the framework for the mobile application with the help of the networking framework. The project proposes design of trending blockchain technology to ensure transparency among the users to gain trust and assurance between the groups and group members. Consensus algorithms and smart contracts can be used to increase transparency within the organization. It also provides users with an unparalleled level of accountability because only after validation of action by the users, the details shall be reflected in the database. The finance module of the mobile application ensures perfect accuracy of the finances, thus reducing the burden of administrators by just reviewing the summary reports rather than scrutinizing each individual transaction. Users will be offered the UPI module to make financial transactions and all users can view the up-to-date transaction details of the finances through the mobile application as every detail will be stored in a digital ledger protected with blockchain technology.

Faculty Guide: Mrs Sruthy Anand

Signature: