RewardWallet

By Nathan Tannar, Mandy Xiao, Molly Bin

What

A system that keeps track of transactions users make at a business to allocate rewards to a customer's profile based on how the business customizes their distribution model.

Why

By creating the hardware needed by a business, a mobile app for the user and a cloud system to bring it all together, RewardWallet gives business owners an end-to-end solution for adding a customizable digital loyalty system to their store.

Conclusion

RewardWallet provides an intricate yet affordable solution for small and medium businesses that lack the infrastructure for developing their own reward system. This easily integratable solution will revolutionize the relationship between businesses and their customers.

Flow Chart

1.POS/ External Device	Sends POST request to RewardBeamer to initiate a transaction
2. RewardBeamer	Sends POST request to the Cloud API
3. Cloud API	Creates a transaction for the business
4. RewardBeamer	Configures the NFC controller to act as a serial tag
5. Mobile App	Sends a POST request with the transaction token ID to the Cloud API
6. Cloud API	Determine the amount of points to allocate. Sends an update point balance to the user and closes the transaction.
7. Mobile App	Receives updated point balance

Future Work

1. A maps section which will indicate to users participating businesses in the area.
2. Allow customers to use their points to redeem rewards or discounts from stores.
3. QR codes will be added as an alternative means to redeem points.
4. Mobile ordering will be available.
5. We will also create an iPad application for businesses.
6. Advanced reward distribution models