## Kirana Khata

Btech Project Presentation Prof. M. Balakrishnan

Payoj Jain 2011CS10241 Shantanu Dahiya 2011CS10253

# AIM of the Project

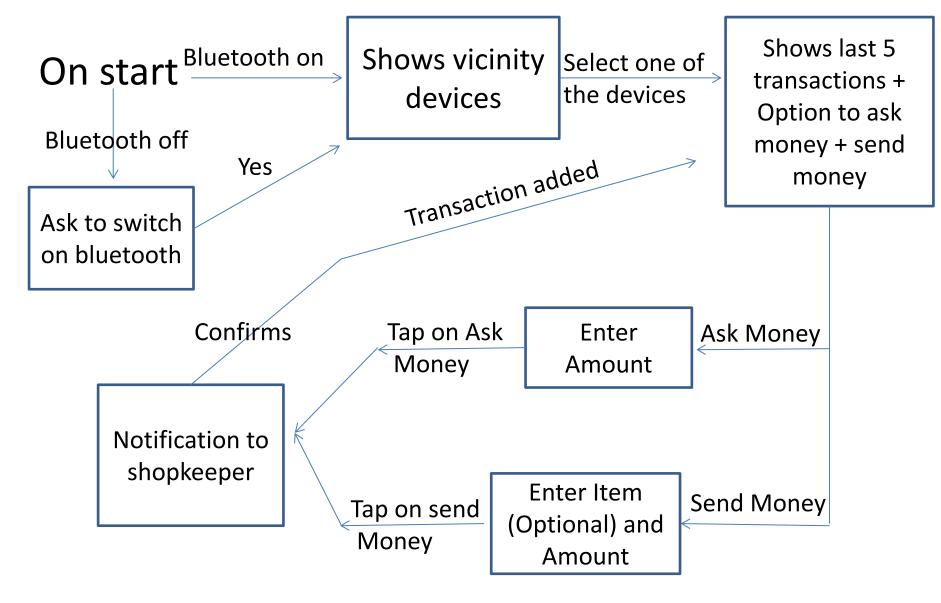
Smoothening the process of paying change either from shopkeeper side or customer side.

- Using Mobile application (Smart Phones)
- Work without net connectivity

## **Features**

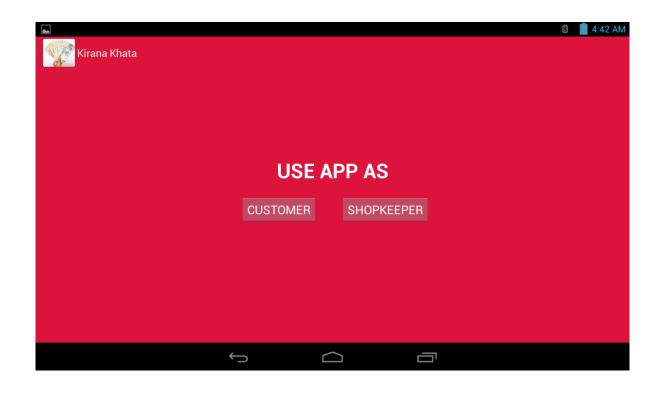
- Easy interface with last 5 transaction on the screen
- Facility for online debit or credit to both customer and shopkeeper
- Bluetooth connectivity
- Secured from shopkeeper, customer and any third party
- One touch transaction on shopkeeper side
- Shopkeeper can see the list of all the customers on one screen

# **Work Flow**

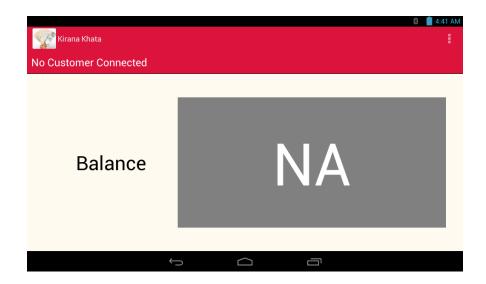


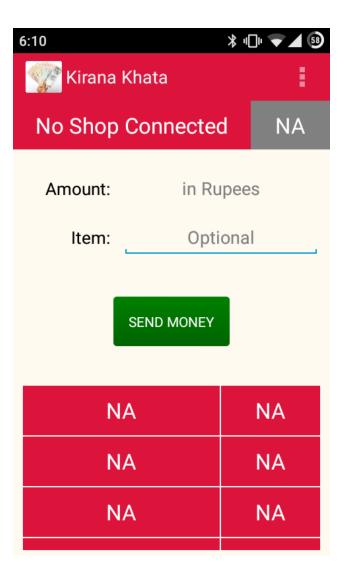
# How does Kirana Khata Work?

### **On Start**



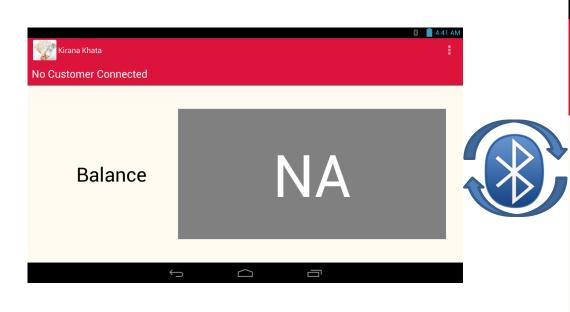
### Shopkeeper's Tablet

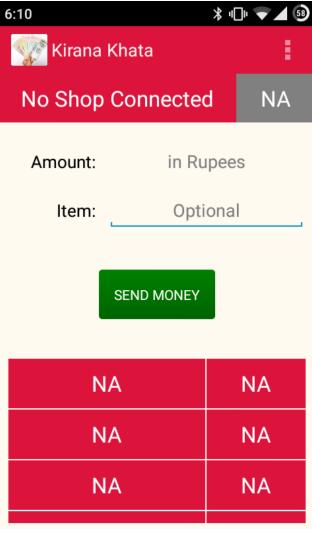




### **Bluetooth Connection**

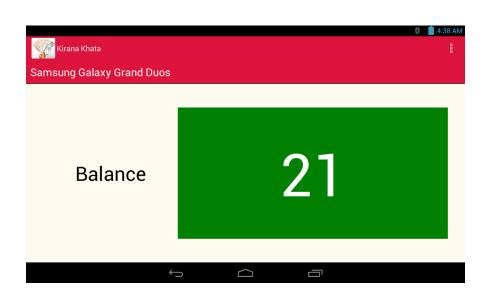
Shopkeeper's Tablet

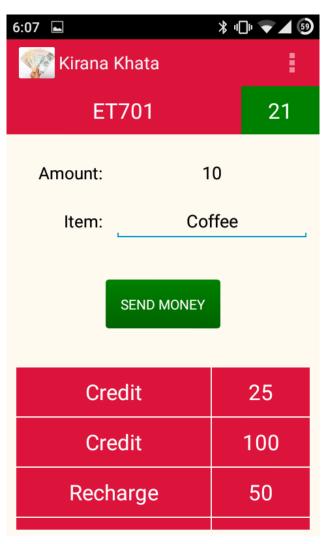




## Connection Established

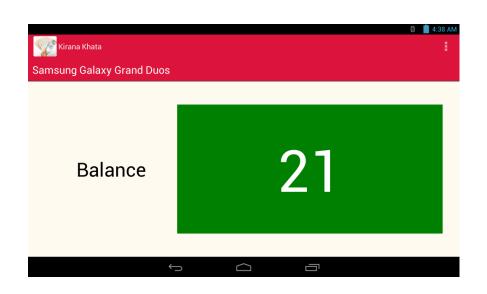
### Shopkeeper's Tablet

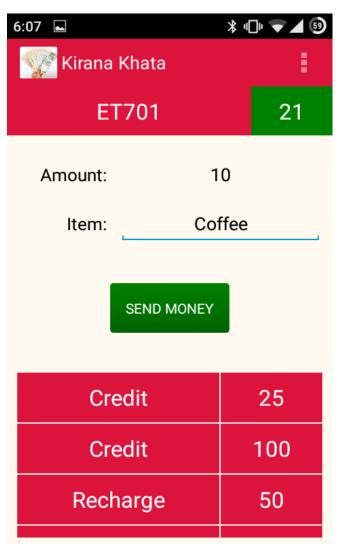




# **Adding Transaction**

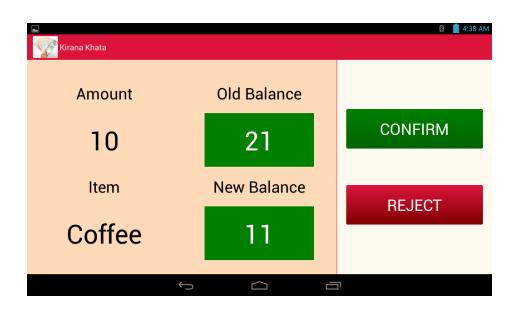
### Shopkeeper's Tablet

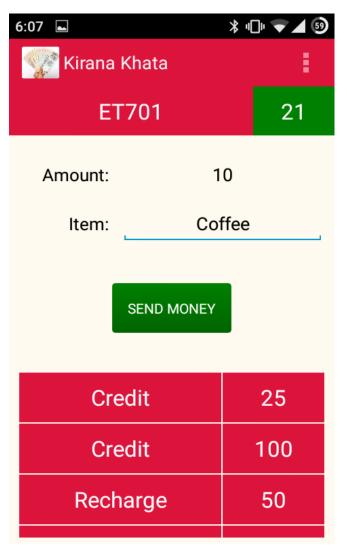




## Verification

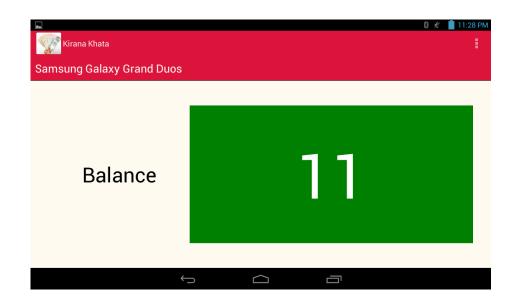
### Shopkeeper's Tablet

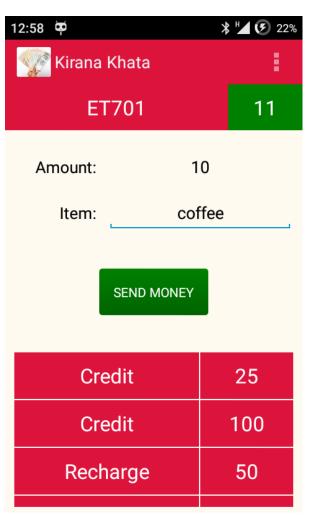




# Adding the transaction in the list

### Shopkeeper's Tablet





## How we started

- Defining the problem statement
- Coming up with a solution which is cheap, easy to implement and can be easily accessed by the common people
- Defining specifications for the application
- Came up with the work flow of the application
- Refining and optimising the steps involved in the transactions

## How we started

- Creating a basic app
- Testing for bugs and connectivity issues alpha testing
- Implemented the project in a general store for beta testing
- Improved UI as suggested by the shopkeeper

## Observations

- Average time taken to do a normal money exchange (having change issues) is over 30 seconds
- Average time taken for one transaction using Kirana Khata is less than 15 seconds (assuming the devices were already paired in the past)
- Shopkeeper preferred the app over maintaining a separate register for running accounts
- Simple interface of the app makes it easy for the shopkeeper to understand the system

## **Problems Faced**

Bluetooth connection issue – Connection lost after 1 transaction

 Database of shopkeeper's side updates but not from customer's side or vice versa

Connection from one side but not from the other

# Advantages

- Easy book keeping
- No change problem

**Before** 

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# After

# Disadvantages

Shopkeeper needs to have a separate device for this system

# **Future Improvements**

- More work can be done to replace the change system in a locality or college campus
- Password protected
- Alternate methods other than bluetooth since bluetooth is not very reliable in connectivity