

HACK NITJ - 2020

- **PROBLEM STATEMENT :** PORTAL FOR FARMERS
- **CATEGORY:** AGRICULTURE AND RURAL DEVELOPMENT
- **ORGANISATION :** CDK GLOBAL
- **PROBLEM CODE:** #RA27
- **TEAM NAME :** HACKING BAD
- **TEAM LEADER NAME :** ARSH GOYAL

Problem Statement Description

- System that provides farmers an interface to sell their produce , and connect with the buyers all over India
- Simple interface that works on mobile, SMS to upload produce details and respond via phone and SMS (taking care of digital divide)
- Interface for anyone to buy the produce/vegetable – initially visit the place and buy or have courier service integrated to deliver the vegetables .
- Technology that can be used as a platform for connecting car buyer to Seller
- Farmers can get a better price for their produce, no additional cost spent in marketing and delivery of goods , however they can choose to charge more by delivering the items themselves

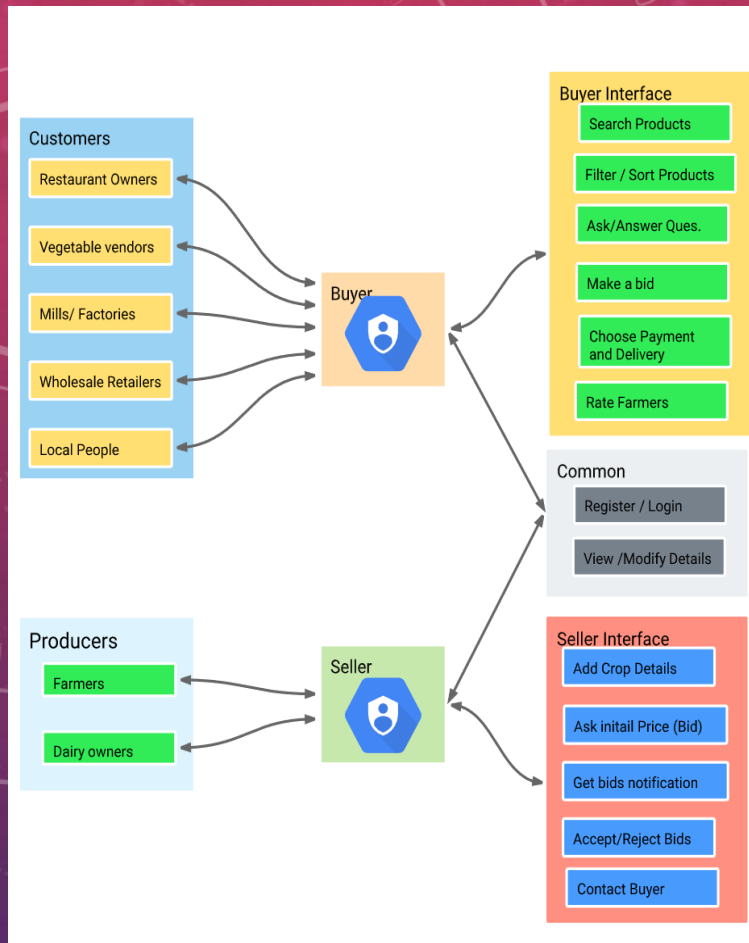
Solution /Approach:

KrishiHub

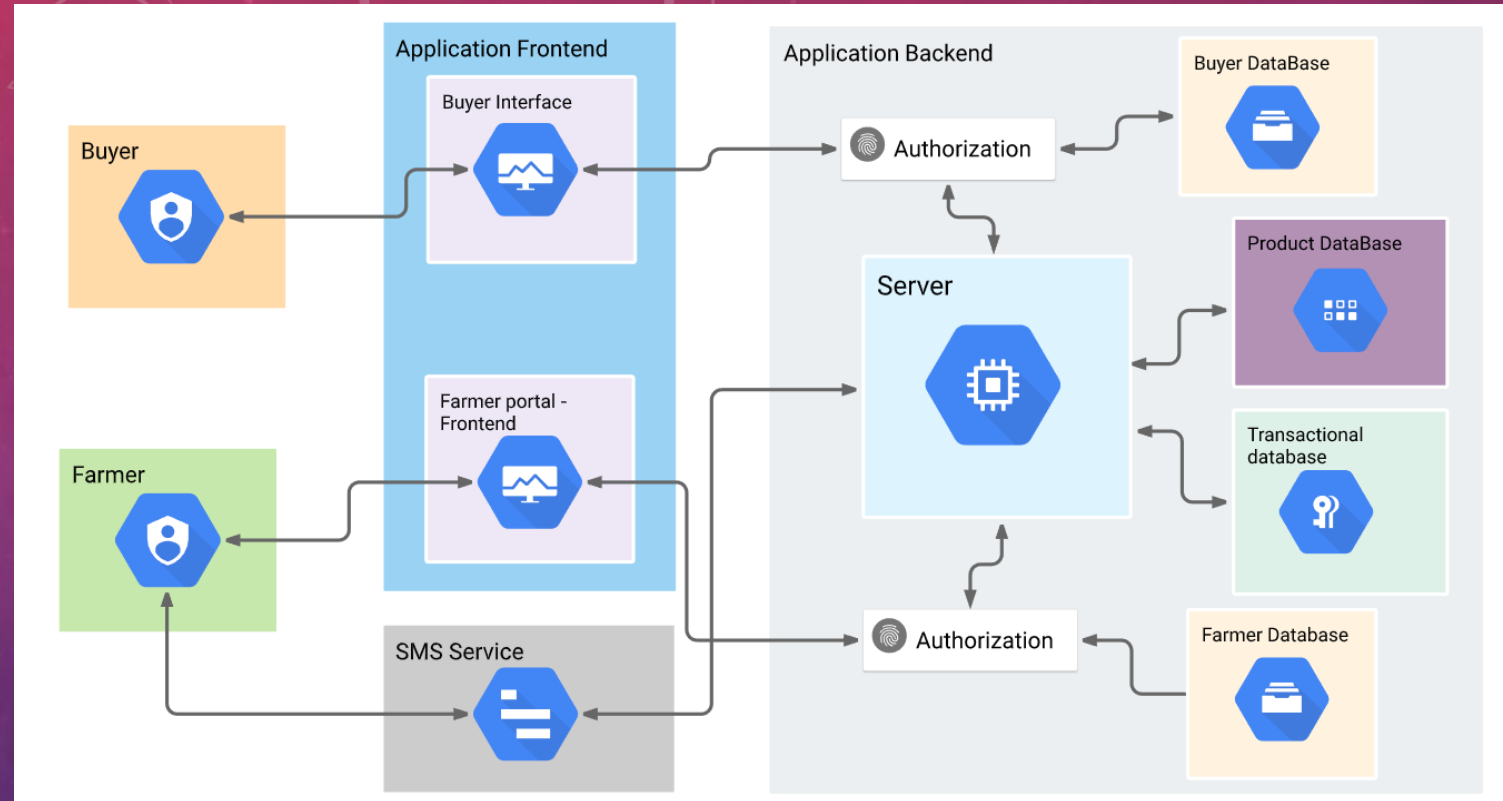
A PLATFORM FOR FARMERS

- A **Digital Solution** that brings together Farmers and Buyers at a common E-marketplace .
- A **Farmer's Platform** where they can sell their produce connecting with **buyers** all over India supported with an **SMS service** for farmers to update the details of their crops from their verified mobile number .
- It aims to empower **small** and **medium** scaled farmers of India to reach customers all over the **country** and sell their produce at **best prices** by irradiating the role of **middlemen** .
- A **Buyer's Platform** where they can buy **Agricultural Commodities** from all over India .
- **E-commerce** is revolutionizing the way we all shop in India and we aims to bring the same revolution for farmers enabling them to live with pride and make extra income .

Use Cases :



Flow Diagram :



Technologies:

➤ Server-Side :

- Django

➤ Database :

- Postgre SQL

➤ Frontend :

- HTML5,CSS3
- JavaScript
- Bootstrap

➤ SMS Service :

- Twilio

FARMER'S PLATFORM :

KrishiHub

- A Simple **Web interface** that even works well on **mobile devices** for farmers from where they can upload their crop details and select bids to sell their crops all over India .
- Farmers from all over India will be able to **register** on the platform.
- If farmers have any product they want to sell they will share with us all the information on **specifications** and the **prices** they are offering as well as the optional logistics .
- We already have most **common agricultural products** listed (**140 +**) and if you have another product to sell you can always **contact us** through the Platform .
- With this farmers can **directly sell** agricultural commodities without need of **Intermediaries** .
- It Avoids the price of intermediation and help farmers to **increase their margins** .
- **Multilingual platform** so that farmers can comfortably use it in their regional Language .

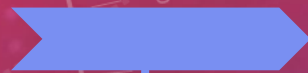
Procedure :

Register/Login



Farmer Registers on the portal with his **complete details** and is ready to **sell** .

Add Crop



Farmer adds Crops (**SMS**) he want to sell with **complete details** and the same is listed for buyers .

Evaluate Bids



Compare various prices **offered** by buyers and **selects** among them .

Confirmation from buyer



Buyer **Confirms** the purchase and decides upon **Delivery** and **Payment**

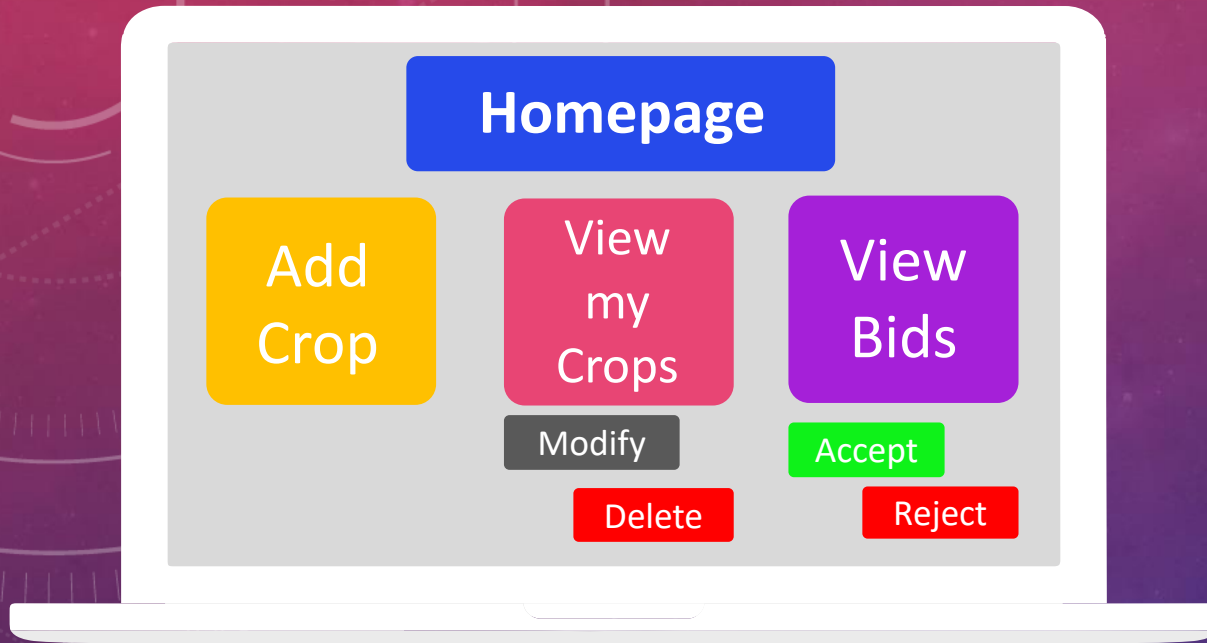
Crop Sold



Details like Pickup, Delivery Address are confirmed and **transaction** is complete .

- **KrishiHub** makes **Easier**, **Faster** and **More Transparent** to buy and sell **Agricultural Commodities** with this easy yet effective Procedure.
- It's many features include suggesting Minimum Price based upon **MSP** decided by Government of India .

- On the homepage farmers can select **Add a crop** option and fill in the **specific details** related to goods they are offering and **optional logistics** (if they want to **deliver themselves** or use our **logistic services**) and **Submit** it and,
- Buyers will then be able to **analyze** their proposal and **bid** upon them .



MSP
Minimum Support Price
Details

Sell at Price , Location and
Buyer of your Choice

Multilingual , Simple and
Easy to use

- Among other options the farmer have, they can view the details of all their previous crops up on sale and can **Modify** / **Delete** them based upon their **local sales** .
- For all his listed offerings farmers can view all the bids offered by interested buyers and can decide upon to **Accept** or **Reject** a bid.

SMS SERVICE

- After farmer has registered on web portal , He/ She can use the SMS service to upload crop details he want to sell and,
- Will be able to use the same to respond to bids by interested buyers .

01

OTP message for verification of phone no. and ,
Crop Upload Template .

02

Add crop message by farmer with all relevant information , via editing the **Template** message .

03

Various Bids message to farmer with **BidId** to select a specific Bid and **Respond** via SMS .

04

Confirmation message with complete **payment** ,**delivery** Details .

- Upon **Successful registration** the farmer will receive a **template message** with all required fields , and farmer can **use/edit** the same template message to **upload crop details** .
- Farmers can select a particular bid via responding in SMS with **CropId** and **BidId** .

BUYER'S PORTAL

- A Web Platform through which buyers can buy Agricultural Commodities from all over India .
- It accommodates direct transactions between buyers and sellers. All intermediators are eliminated and you can buy directly from the farm .

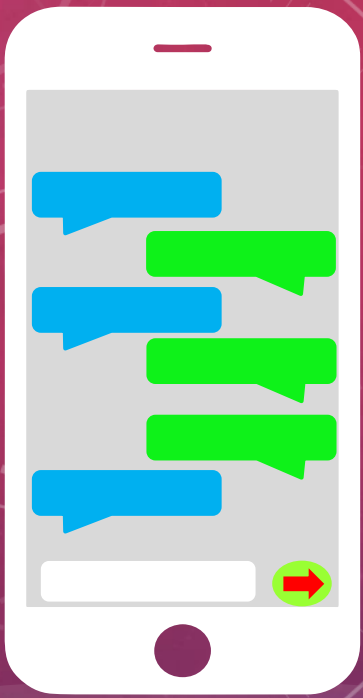
Search:



- Buyer can directly **Search** for the commodity that he wishes to buy on the web platform and select among listed options.



- Buyer after selecting his desired product can **Bid** on it with his **Offered Price** .
- After which all the bids for a crop will go the farmer to select the best from them .



- Buyer and Farmer out to use our web **messaging** platform to **Negotiate Price**, clear doubts .
- Farmer can also message buyer regarding payment and Delivery Classifications .
- After a Bid has been selected the buyer will proceed to **checkout** with complete details about **Payment** , **Pickup** or **Delivery** , **Delivery Address** etc. .
- After it a **transactionId** will be allocated to buyer through which it can trace status of its purchase and track its whereabouts .

Buyers will have additional features like :



- Buyer can mark items as **Favorites** which he may want to buy in future or order repeatedly like Wheat , Rice etc. .



- Buyer can trace the status of their purchase via **transactionId**

Categories

Price

**Sort and
Filter**

Rating

Quality

- Buyer's can **Sort** and **Filter** products based upon various **parameters** to make search results more Relevant and purchase easier .



- Buyers having any trouble can go through the **FAQ's section** and **contact us** for Help .

Dependencies:

- Secure Payment Gateway.
- Delivery service to deliver the produce .
- SMS provider .
- Web Portal Hosting Services.
- MSP (Minimum Support Price) Data.