

# CLEAR

GROUP: B1-08

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## **Problem statement:**

While most of the Agritech start-ups are focused either on supply chain, focus is now expanding to farm and yield management. The area that still remains unexplored is the "stubble left after grain segregation". Stubble burning is an alarming issue today in North India. We need to design a solution which can streamline and automate the process of stubble collection, transportation to desired location, notifications around stubble pickup and delivery, tracking of stubble disposal in a more environment friendly way. Try solution around automated farm images, forecast the stubble production and help business to identify stubble production and purchase the same and track how stubble is being disposed off or used.

## **Product description:**

As stated in the problem statement, stubble burning is a major concern which isn't addressed properly throughout the country. To reduce this as much as possible and to help people sell it or dispose it properly, we came up with an app which automates the process of stubble collection.

The desired farmer who wants to sell can register to our application and connect with various paper manufacturing companies and sell his stubble at a reasonable price. He can use the help of nearby post office for internet and we will also try to incorporate multi-lingual support by which they can communicate with the industries and make a negotiation easily. The application also provides the farmers with transportation and tracks information about how it is being delivered and what is done with it. It notifies around stubble pickup and delivery times. The industries can see all the stubble sourced farms around them and select them as per their requirement. This way stubble burning would be reduced and also it would be helpful in paper manufacturing.

## **MVP:**

Our MVP is a web application with basic functionalities which includes

1. **Home Page** explaining our services.
2. **Login** for both farmers and industrialists.
3. **Register** for both farmers and industrialists.
4. **Pin code verification** for registration.
5. **Profile/dashboard (industrialists)** to display the details of -
  - a. land area(in acres)
  - b. crop sown
  - c. Pincode
  - d. Address
  - e. Number of days left to pick up the stubble.
  - f. Farmer's contact details with his id
6. **Profile/dashboard (farmers)** to display the details of -
  - a. industry name
  - b. id and contact details of farmer

- c. land details such as crop sown, land(in acres)
- d. Number of days left to pick up the stubble.

## 7. Contact details

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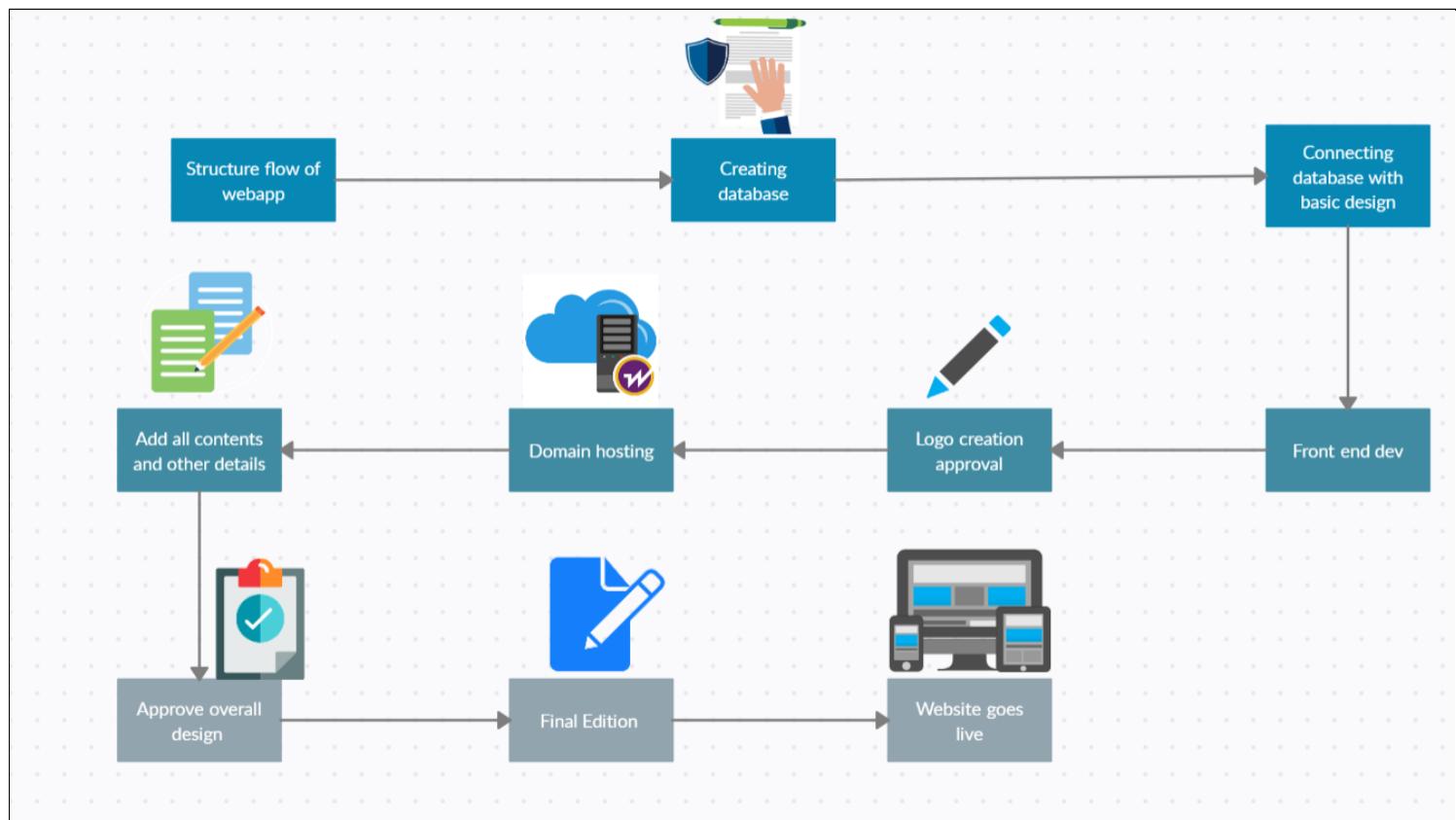
## MVP DEVELOPMENT:

### PROJECT PLANNING / STRUCTURE :

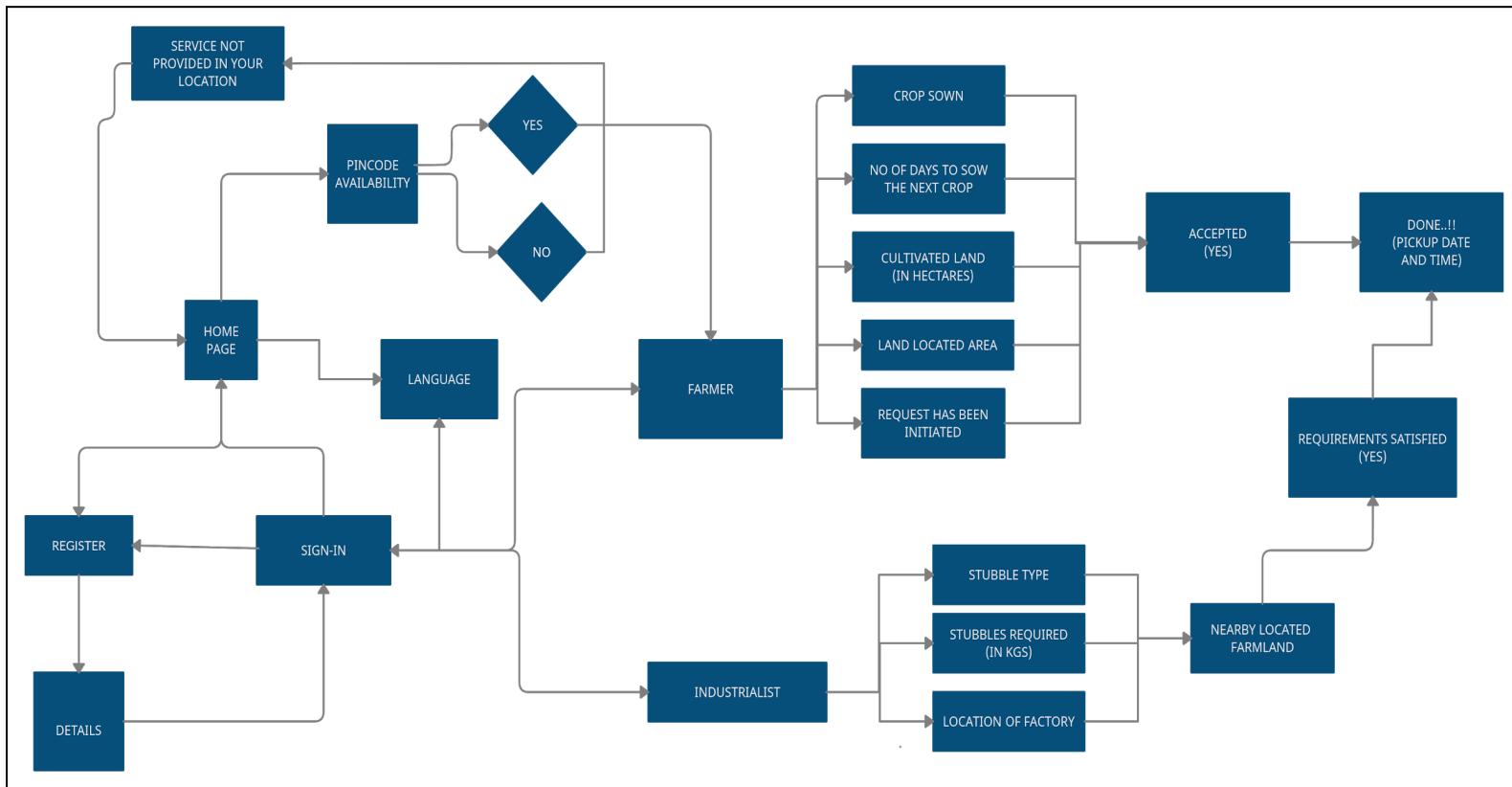
1. Rough framework
2. ER diagrams
3. Stepwise backend development
4. Trial runs for the rough backend (localhost)
5. Front- end customization
6. Register with online cloud storage and do trial runs

### WEEK WISE DEVELOPMENT:

- **Week 1 - Work Plan**



- Week 2 - Week 3 :- Entity-relationship planning & back end mapping



- Week 4 :- Database build

## DATABASE CLEARIR

The screenshot shows the MySQL Workbench interface with the following details:

- Server:** 127.0.0.1
- Database:** clearir2
- Structure:** Tab selected.
- Actions:** Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routine.
- Filters:** Contains a search bar: "Containing the word: [ ]".
- Table List:**

Table	Action	Rows	Type	Collation	Size
farmers	Browse, Structure, Search, Insert, Empty, Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB
industry	Browse, Structure, Search, Insert, Empty, Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB
pincode	Browse, Structure, Search, Insert, Empty, Drop	7	InnoDB	utf8mb4_general_ci	16.0 KiB
<b>3 tables Sum</b>		<b>12</b>	<b>InnoDB</b>	<b>utf8mb4_general_ci</b>	<b>48.0 KiB</b>

## FARMERS TABLE

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	fID 	varchar(20)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	2	fName	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	3	fEmailID	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	4	fpassword	varchar(100)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	5	fcontact	varchar(20)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	6	faddress	varchar(200)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	7	fcrop	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	8	fland	int(20)			No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	9	ftime	int(20)			No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	10	flocation	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	11	fpin	int(6)			No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	12	fcity	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	13	fstatus	int(1)			No	None		 Change  Drop ▾ More	

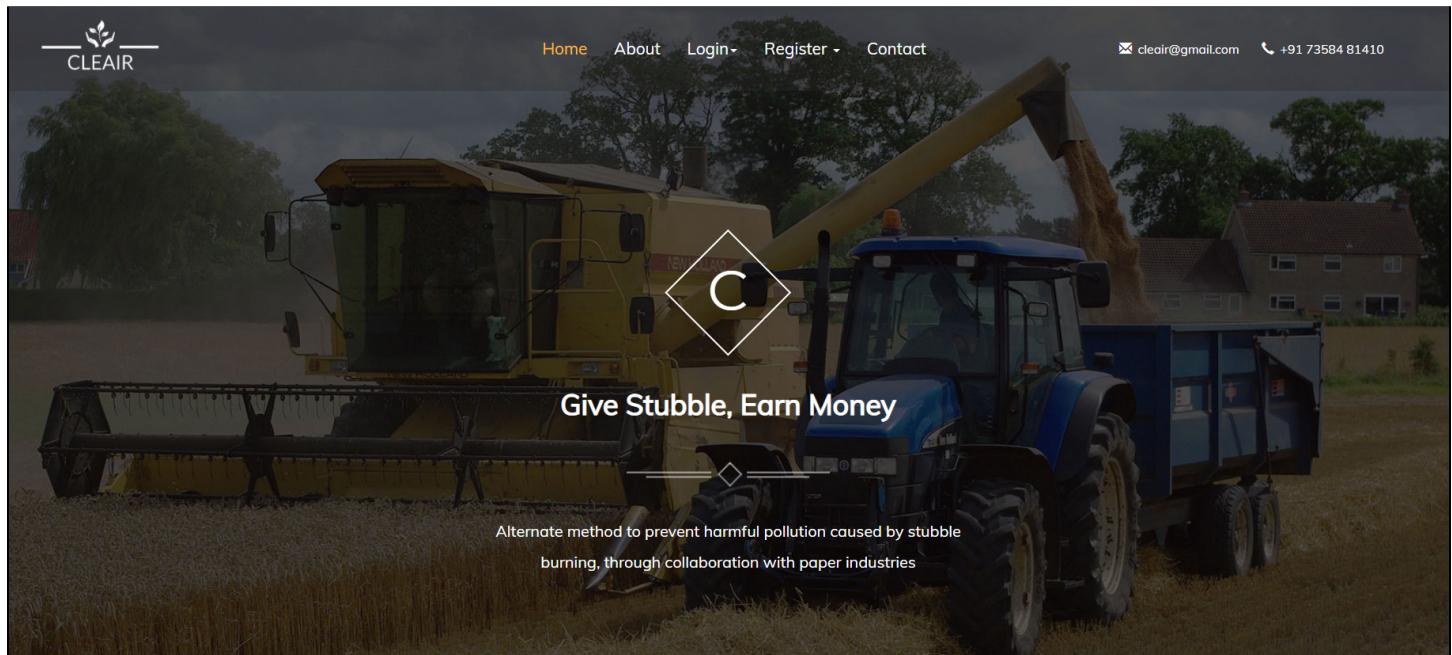
## INDUSTRIALIST TABLE

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	iID 	varchar(20)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	2	iindustry_name	varchar(100)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	3	iEmailId	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	4	ipassword	varchar(100)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	5	icontact	varchar(20)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	6	istubble type	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	7	istubble req	int(5)			No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	8	ilocation	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	9	icity	varchar(50)	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	10	ipin	int(6)			No	None		 Change  Drop ▾ More	
<input type="checkbox"/>	11	fid	text	utf8mb4_general_ci		No	None		 Change  Drop ▾ More	

## PINCODE TABLE

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	pin	int(6)			No	None		 Change  Drop ▾ More	

- Week 5 - Week 7: Homepage & contact front end



## Contact Us

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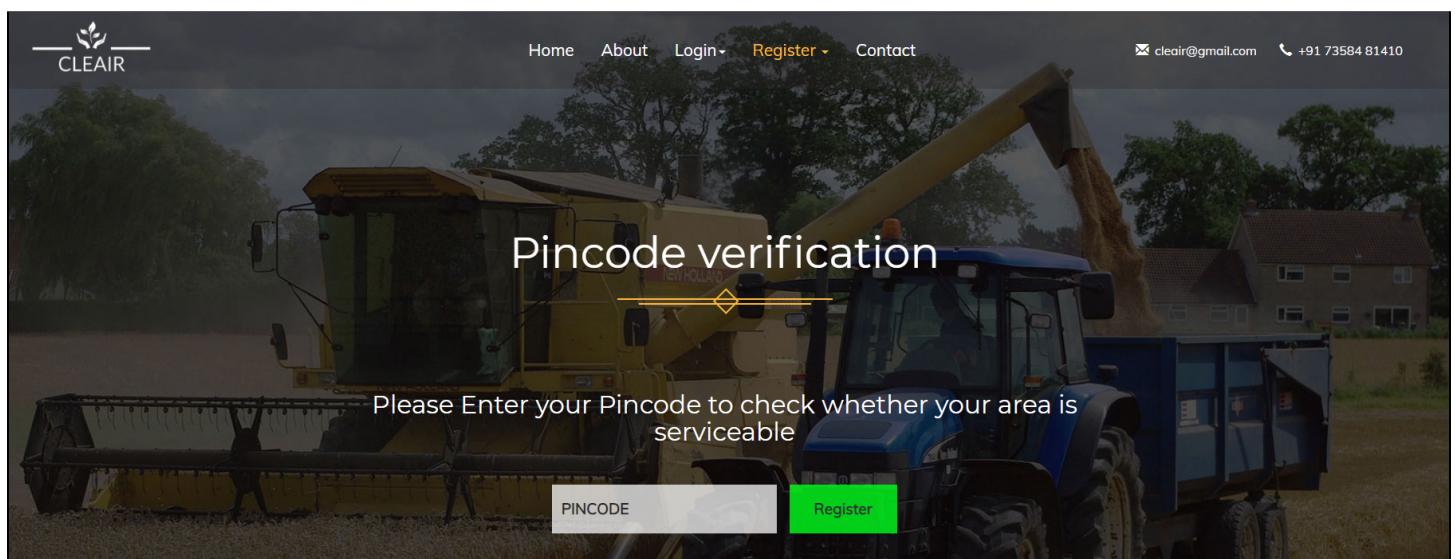
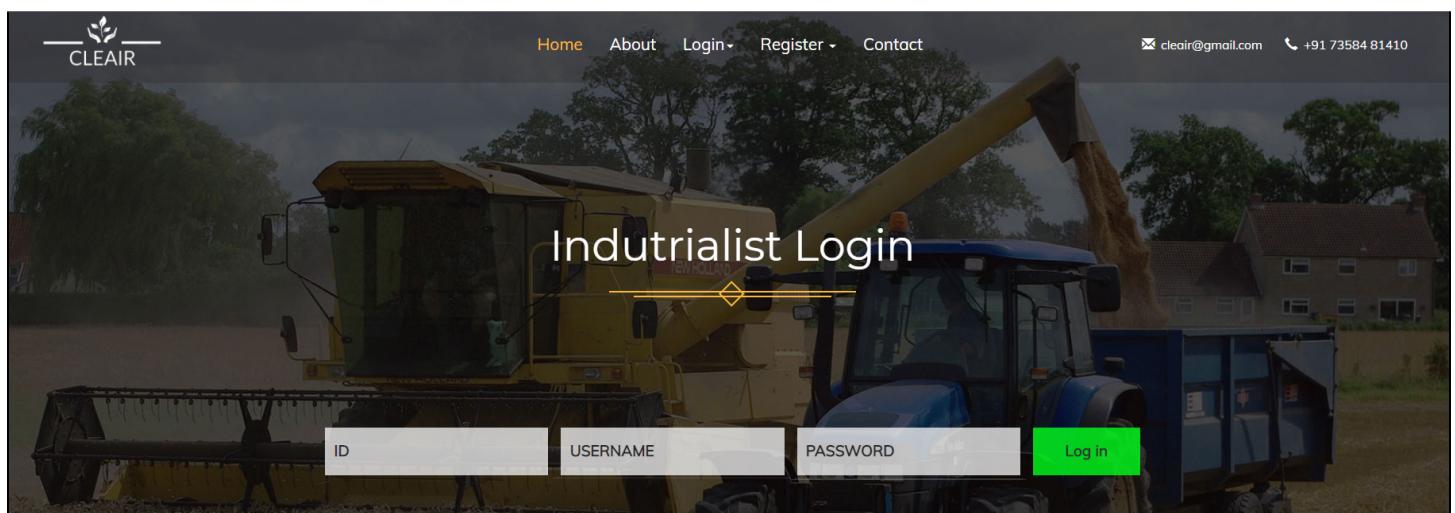
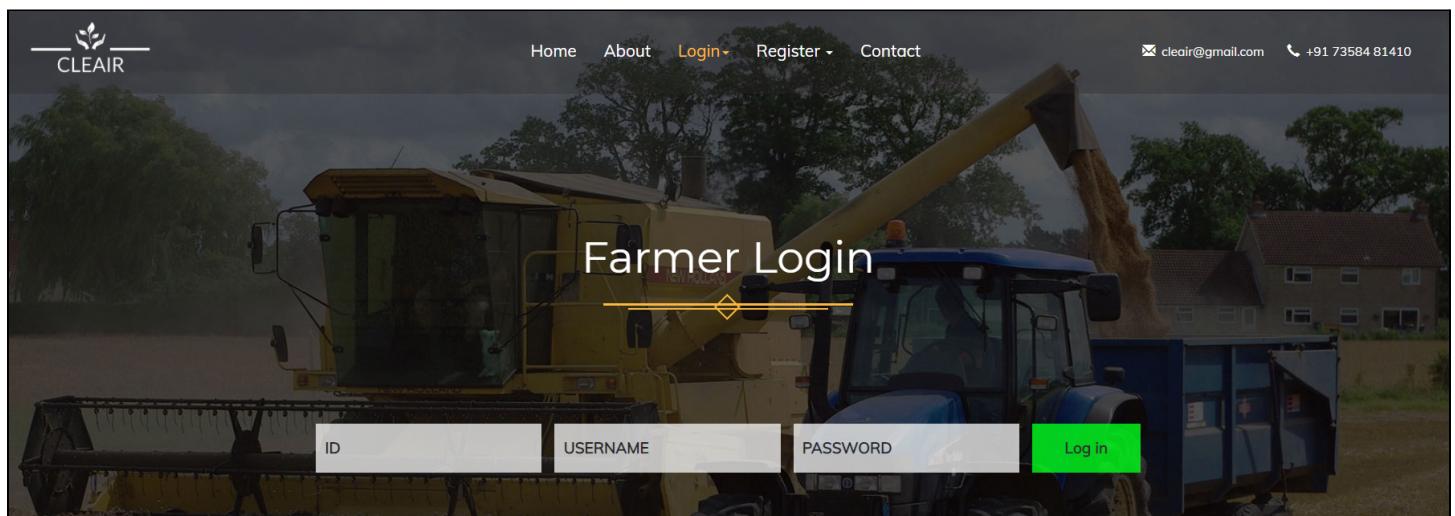
Name

Email

Message

**Submit**

- **WEEK 8 - WEEK 10 :** Login & registration along with pin code verification backend and front end



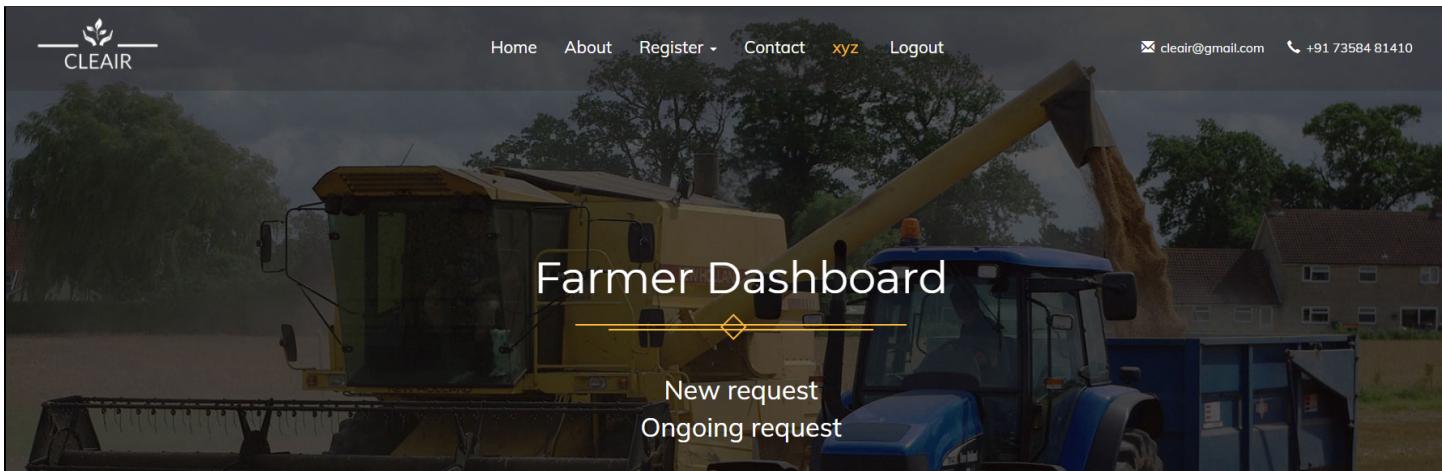
## Farmer Signup

  
  
  
  
  
  
**Register**

## Industrialist Signup

  
  
  
  
  
  
  
**Register**

- **WEEK 11 - WEEK 12 :** Dashboard for farmer and industrialist with required features



This page shows the "New Request" form. It has five input fields: "ID", "Crop Sown", "Land Sown (In Acres)", "Days For Next Plantation", and "Location (Eg. Avadi)". A green "Confirm" button is at the bottom. The background image is the same as the homepage.

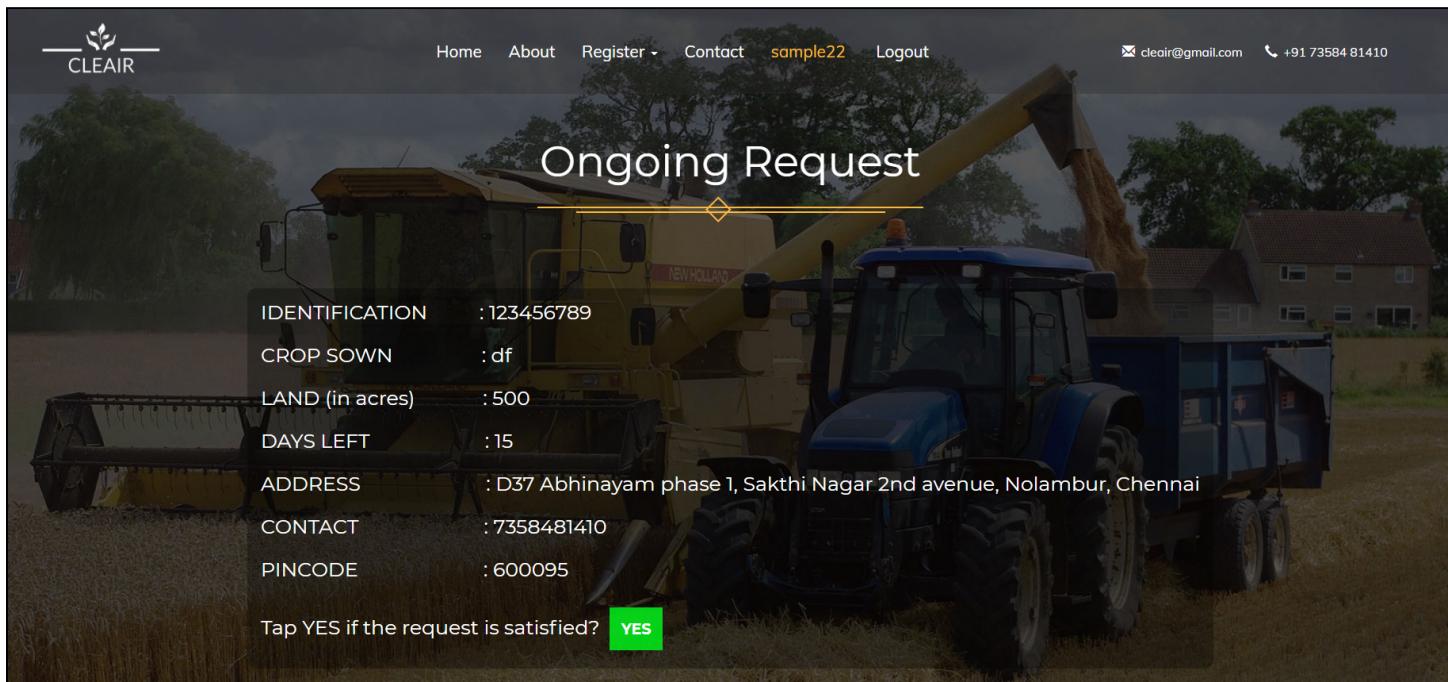
ID
Crop Sown
Land Sown (In Acres)
Days For Next Plantation
Location (Eg. Avadi)

**Confirm**

This page displays the "Ongoing Request" details. It lists several pieces of information in a table format, overlaid on the background image of the harvesting scene:

FARMER ID	: 123456789
CROP SOWN	: df
LAND (in acres)	: 500
Days left	: 15
LOCATION	: punjab
INDUSTRIALIST ID	: 741852963
INDUSTRY NAME	: Sample22
CONTACT	: 7358481410

## INDUSTRIALIST ONGOING PICKUPS



The background image shows a blue tractor with a trailer and a yellow harvester in a field. The harvester has "NEW HOLLAND" written on it. In the background, there are houses and trees under a cloudy sky.

**Ongoing Request**

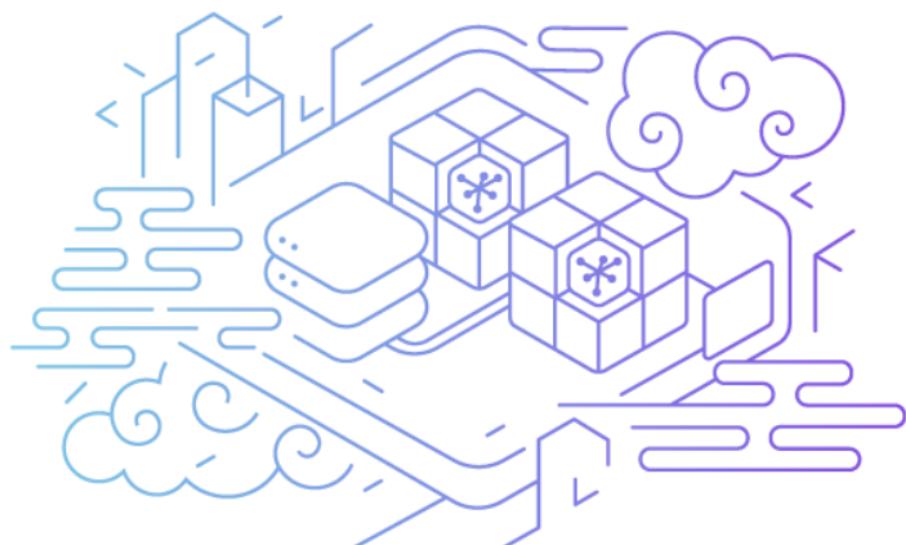
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IDENTIFICATION	:	123456789
CROP SOWN	:	df
LAND (in acres)	:	500
DAYS LEFT	:	15
ADDRESS	:	D37 Abhinayam phase 1, Sakthi Nagar 2nd avenue, Nolambur, Chennai
CONTACT	:	7358481410
PINCODE	:	600095

Tap YES if the request is satisfied? **YES**

## PRODUCT PACKAGING & COMMUNICATIONS FOR FINAL PRODUCT:

1. Hosting the final product in HEROKU website



2. Implementation of real-time Map/Geo tracking of the transportation of the stubble.



# Google Maps

3. Communications within the product is same as backend map -

