

Alternate Crop Recommendation

SmartAGRI

Team Members -

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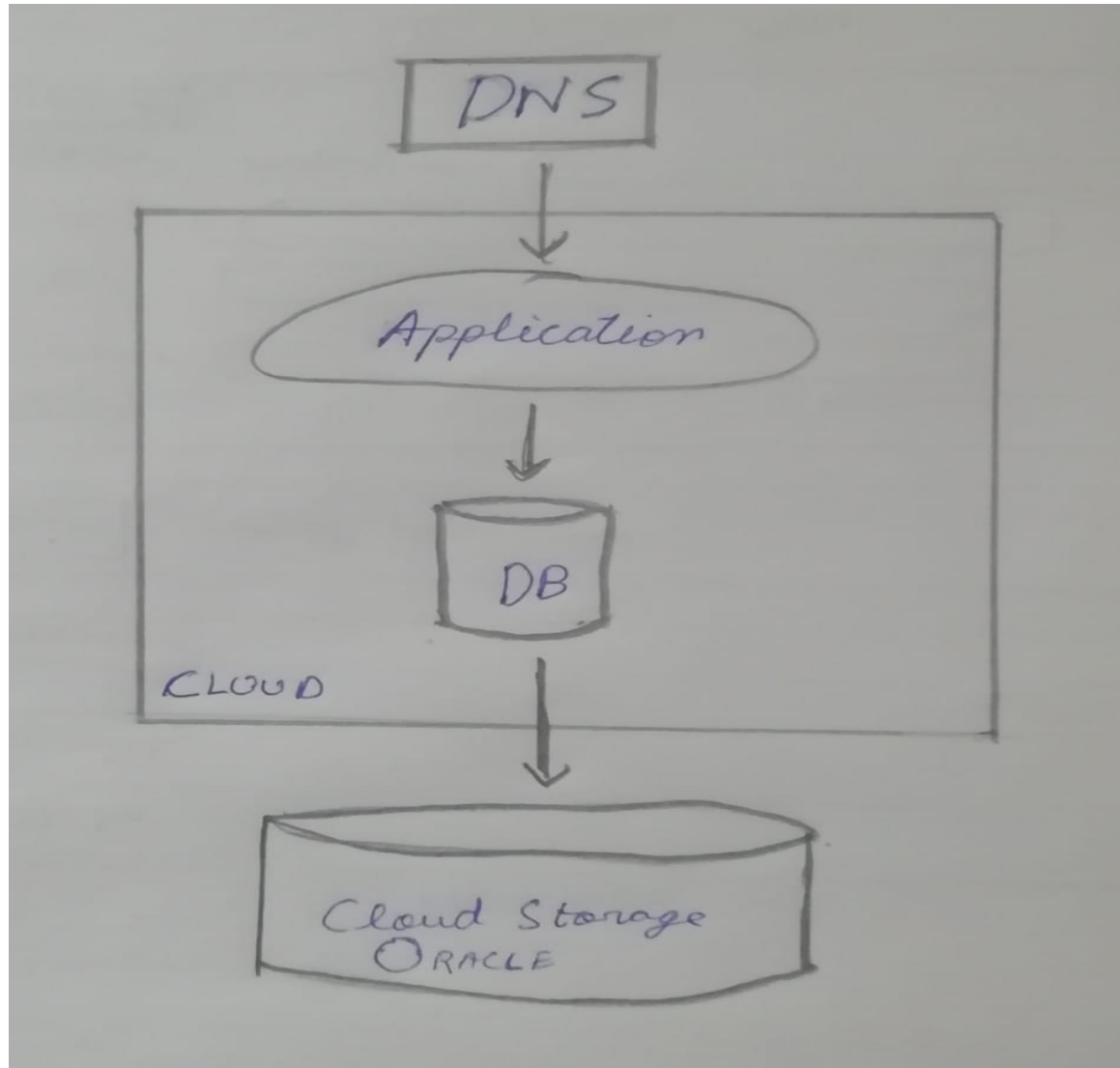


Overview

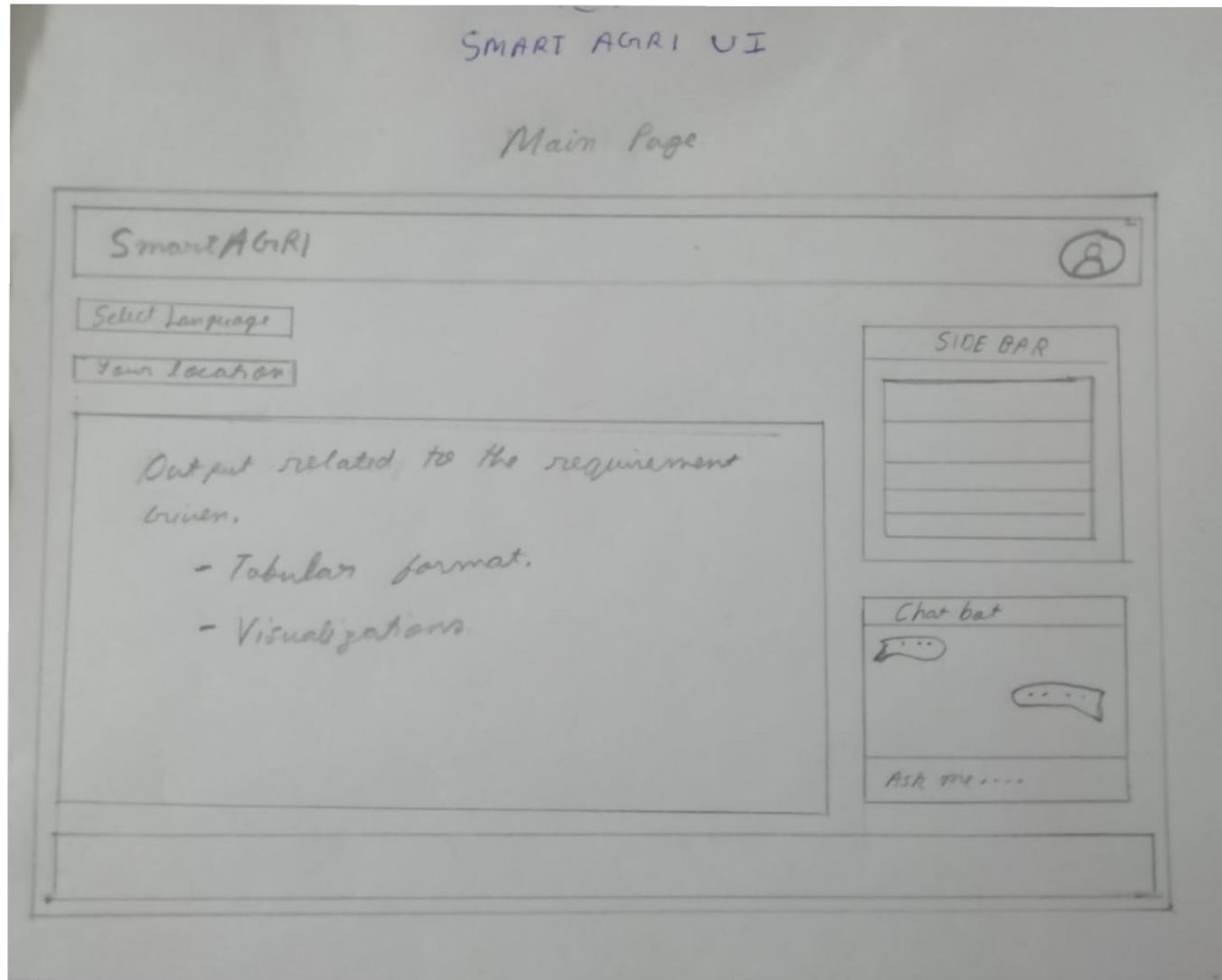
- *The application will help the farmers to improve their profit and yield by understanding the yields of different crops in different areas.*
- *Technologies used: -*
 - *Python (many python libraries)*
 - *HTML, CSS, JavaScript*
 - *Django(Web framework)*
 - *Google translate API*
 - *Dialogflow (Chatbot)*
 - *Oracle Cloud Platform*



High Level Design



UI Design



UI Design

Login Page

Log In

Username

Password

Login Forgot password

Register

Username

Email

Password

Confirm Password

Sign up

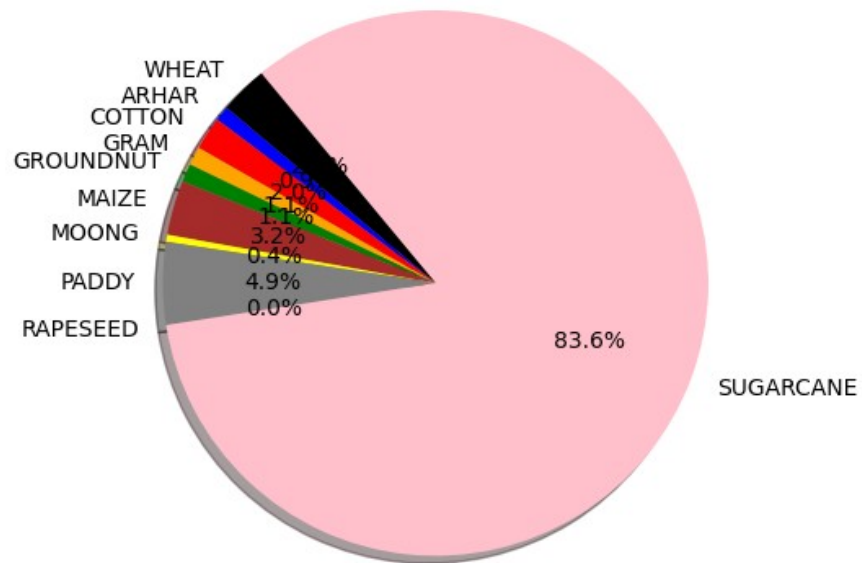
Registration Page

The image shows a hand-drawn UI design for a login and registration page. The design is divided into two main sections: 'Login Page' and 'Registration Page'. The 'Login Page' section includes a 'Log In' title, a 'Username' label with a text input field, a 'Password' label with a text input field, and two buttons: 'Login' and 'Forgot password'. The 'Registration Page' section includes a 'Register' title, a 'Username' label with a text input field, an 'Email' label with a text input field, a 'Password' label with a text input field, a 'Confirm Password' label with a text input field, and a 'Sign up' button. The design is simple and uses hand-drawn lines and text.

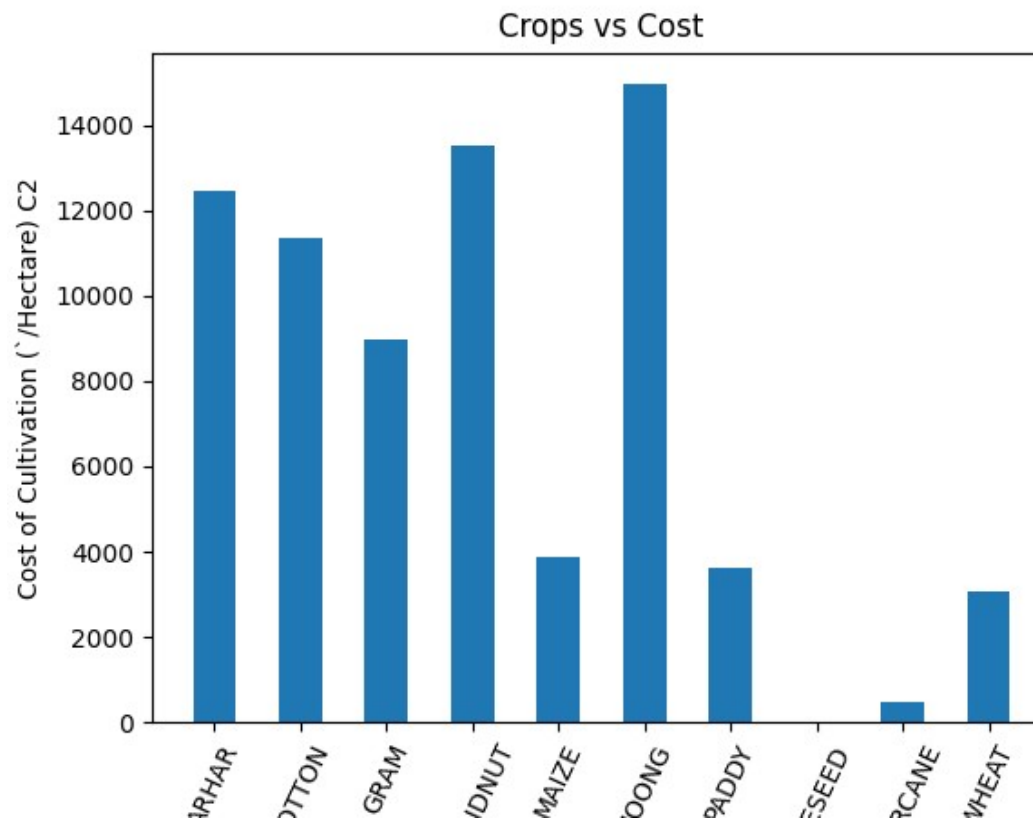
ML Algorithms

- K Nearest Neighbor
- Multi Linear Regression
- The ML Algorithm used is the K-nearest neighbor because it is a classification algorithm, helps us to suggest the type of crop with more yield, with more accuracy than other classification algorithms.

Yield & Cost-Profit



Yield & Cost-Profit



Encoding done for crops

<u>Crop</u>	<u>code</u>
Ashar	1 0 0 0 0 0 0 0 0 0
Cotton	0 1 0 0 0 0 0 0 0 0
Gram	0 0 1 0 0 0 0 0 0 0
Groundnut	0 0 0 1 0 0 0 0 0 0
Maize	0 0 0 0 1 0 0 0 0 0
Moong	0 0 0 0 0 1 0 0 0 0
paddy	0 0 0 0 0 0 1 0 0 0
Rapesad	0 0 0 0 0 0 0 1 0 0
Sugar cane	0 0 0 0 0 0 0 0 1 0
wheat	0 0 0 0 0 0 0 0 0 1

Unique Features

1. Simple Login System
2. Multilingual Application
3. Chatbot
4. Responsive Web Application



Conclusion

From our perspective, the application will help the farmers by helping them to select a proper crop which is lower in terms of investment and more in terms of yield and profit.



Thank you



Any Questions ?

