

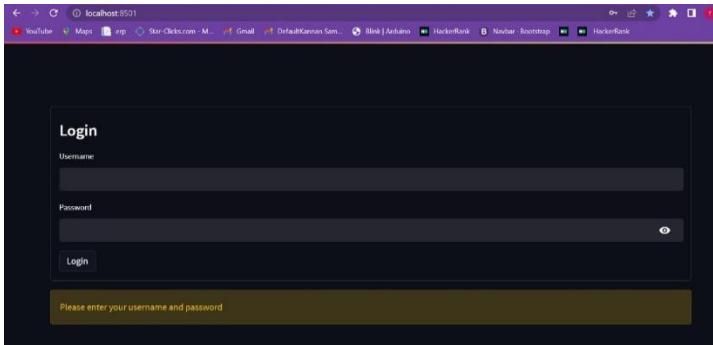
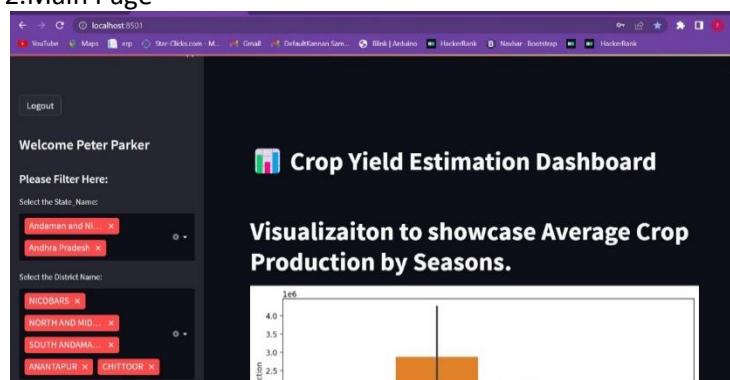
Project Development Phase

Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID17856
Project Name	Project - Estimation The Crop Yield Using Data Analytics
Maximum Marks	10 Marks

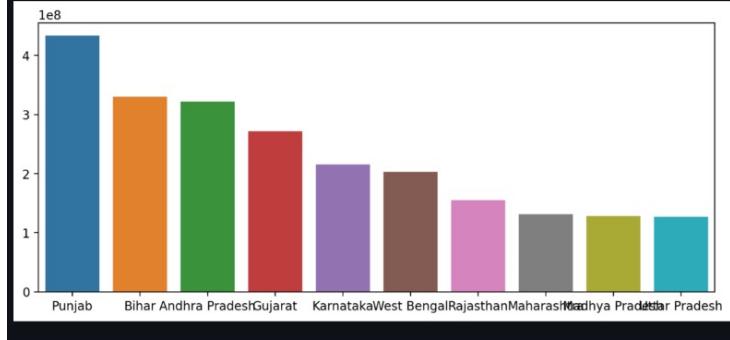
Model Performance Testing:

The project team shall fill in the following information in the model performance testing template.

S.No.	Parameter	Screenshot / Values
1.	Dashboard design	<p>1. Login Page</p>  <p>2. Main Page</p> 

		<p>3.Side panel</p>																										
2.	Data Responsiveness	<p>1.Sample Visualizations</p> <p>Production by Seasons.</p> <table border="1"> <thead> <tr> <th>Season</th> <th>Production (approx.)</th> </tr> </thead> <tbody> <tr> <td>Kharif</td> <td>0.0</td> </tr> <tr> <td>Whole Year</td> <td>2.8</td> </tr> <tr> <td>Autumn</td> <td>0.0</td> </tr> <tr> <td>Rabi</td> <td>0.0</td> </tr> </tbody> </table> <p>Yearly usage of Area in Crop Production.</p> <table border="1"> <thead> <tr> <th>Crop Year</th> <th>Production Area (approx.)</th> </tr> </thead> <tbody> <tr> <td>1997.5</td> <td>20000</td> </tr> <tr> <td>2000.0</td> <td>30000</td> </tr> <tr> <td>2002.5</td> <td>10000</td> </tr> <tr> <td>2005.0</td> <td>20000</td> </tr> <tr> <td>2007.5</td> <td>200000</td> </tr> <tr> <td>2010.0</td> <td>10000</td> </tr> <tr> <td>2012.5</td> <td>20000</td> </tr> </tbody> </table>	Season	Production (approx.)	Kharif	0.0	Whole Year	2.8	Autumn	0.0	Rabi	0.0	Crop Year	Production Area (approx.)	1997.5	20000	2000.0	30000	2002.5	10000	2005.0	20000	2007.5	200000	2010.0	10000	2012.5	20000
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in Crop Yield Production by Area.



The user can see the sample visualization.

2. Data Upload

Estimation Of Crop Yield Analysis

This is the CROP YIELD ANALYSIS SITE .

Awaiting for CSV file to be uploaded.

1. Upload your CSV data

Upload your input CSV file

Drag and drop file here
Limit 200MB per file + CSV

Browse files

Of Crop Yield Analysis

CROP YIELD ANALYSIS SITE .

A CSV file has been uploaded.

1. Upload your CSV data

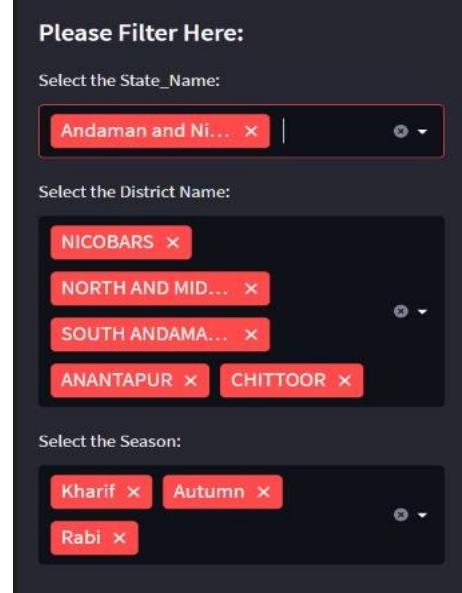
Upload your input CSV file

Drag and drop file here
Limit 200MB per file + CSV

Browse files

The User can upload their dataset to perform visualization.

3.Filters

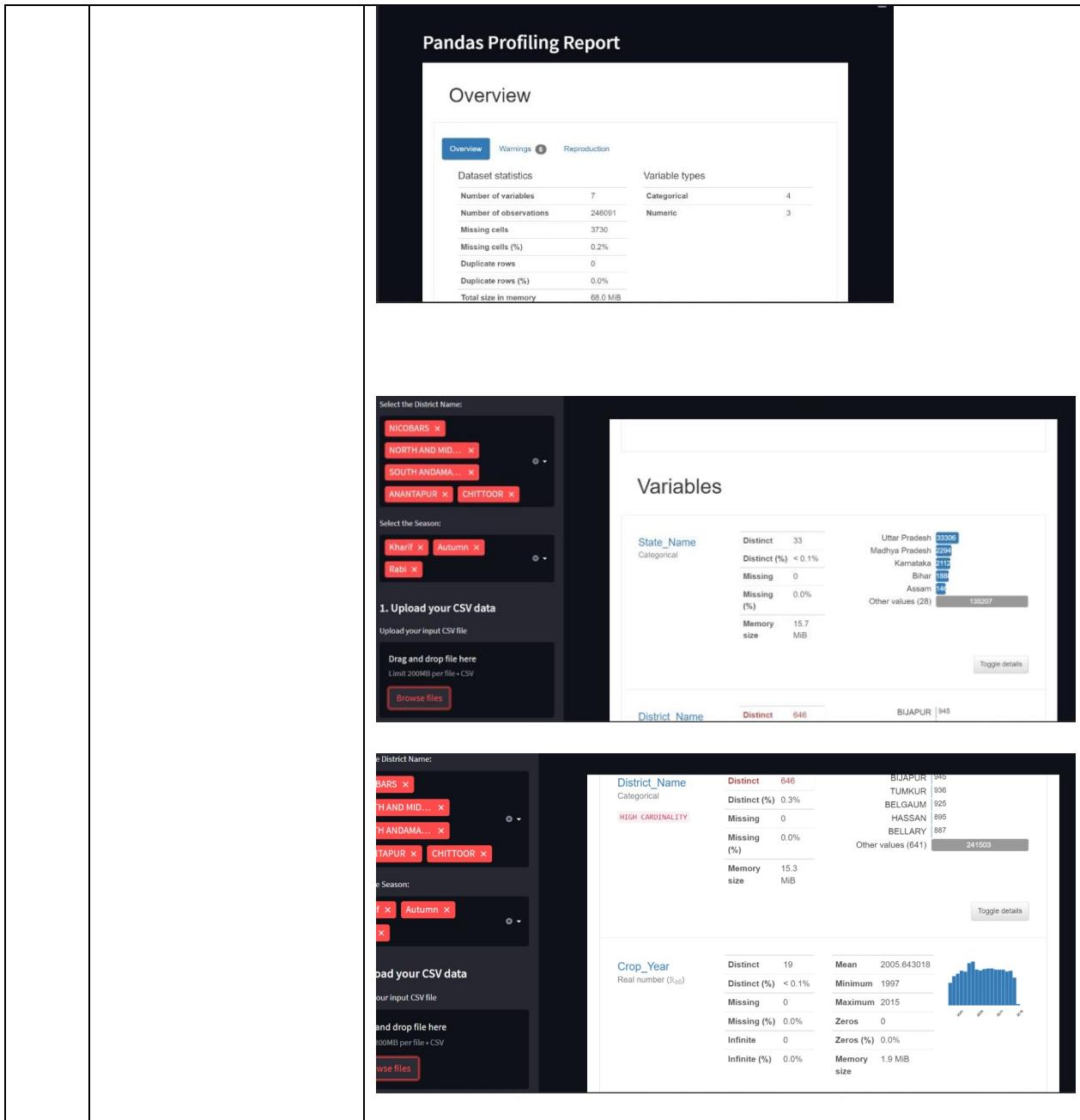


The user can select the filters to perform the respective visualization.

Once the dataset is uploaded we can see the description of the dataset.

The screenshot shows a web application interface titled "Input DataFrame". On the left, there is a sidebar with filter options: "Select the District Name" (with "NICOBARS", "NORTH AND MID...", "SOUTH ANDAMA...", "ANANTAPUR", and "CHITTOOR" listed), "Select the Season" (with "Kharif", "Autumn", and "Rabi" listed), and a section for "1. Upload your CSV data" which includes a file input field and a "Browse files" button. On the right, there is a table titled "Input DataFrame" with the following columns: State_Name, District_Name, Crop_Year, Season, Crop, Area, and Production. The table contains 11 rows of data:

State_Name	District_Name	Crop_Year	Season	Crop	Area	Production
2 Andaman and Nicobar Islands	NICOBARS	2000	Kharif	Rice	102.0000	323.i
3 Andaman and Nicobar Islands	NICOBARS	2000	Whole Year	Banana	176.0000	641.i
4 Andaman and Nicobar Islands	NICOBARS	2000	Whole Year	Cashewnut	720.0000	185.i
5 Andaman and Nicobar Islands	NICOBARS	2000	Whole Year	Coconut	18,168.0000	65,100,000.i
6 Andaman and Nicobar Islands	NICOBARS	2000	Whole Year	Dry ginger	36.0000	100.i
7 Andaman and Nicobar Islands	NICOBARS	2000	Whole Year	Sugarcane	1.0000	2.i
8 Andaman and Nicobar Islands	NICOBARS	2000	Whole Year	Sweet potato	5.0000	15.i
9 Andaman and Nicobar Islands	NICOBARS	2000	Whole Year	Tapioca	40.0000	169.i
10 Andaman and Nicobar Islands	NICOBARS	2001	Kharif	Arecanut	1,254.0000	2,081.i
11 Andaman and Nicobar Islands	NICOBARS	2001	Kharif	Other Kharif pulses	2.0000	1.i

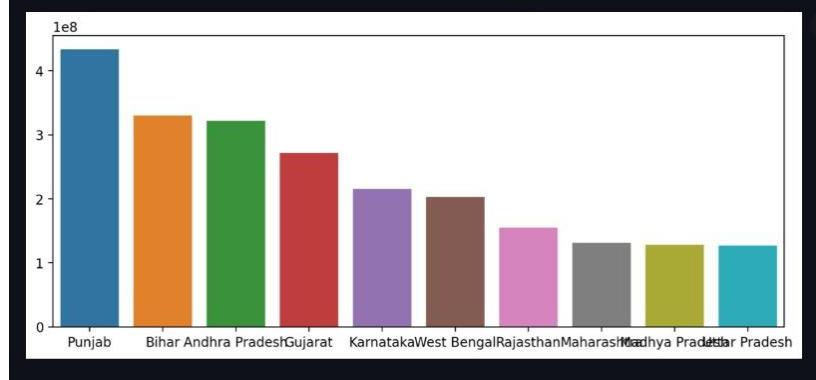


		<p>Memory size 15.4 MiB</p> <table border="1"> <thead> <tr> <th>Area</th> <th>Distinct</th> <th>38442</th> <th>Mean</th> <th>12002.82086</th> </tr> </thead> <tbody> <tr> <td>Real number (5,20)</td> <td>Distinct (%)</td> <td>15.6%</td> <td>Minimum</td> <td>0.04</td> </tr> <tr> <td>SKEWED</td> <td>Missing</td> <td>0</td> <td>Maximum</td> <td>8580100</td> </tr> <tr> <td></td> <td>Missing (%)</td> <td>0.0%</td> <td>Zeros</td> <td>0</td> </tr> <tr> <td></td> <td>Infinite</td> <td>0</td> <td>Zeros (%)</td> <td>0.0%</td> </tr> <tr> <td></td> <td>Infinite (%)</td> <td>0.0%</td> <td>Memory</td> <td>1.9 MiB</td> </tr> <tr> <td></td> <td>size</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Production Real number (5,00)</p> <table border="1"> <thead> <tr> <th>Production</th> <th>Distinct</th> <th>51627</th> <th>Mean</th> <th>582503.4423</th> </tr> </thead> <tbody> <tr> <td>Real number (5,00)</td> <td>Distinct (%)</td> <td>21.3%</td> <td>Minimum</td> <td>0</td> </tr> </tbody> </table>	Area	Distinct	38442	Mean	12002.82086	Real number (5,20)	Distinct (%)	15.6%	Minimum	0.04	SKEWED	Missing	0	Maximum	8580100		Missing (%)	0.0%	Zeros	0		Infinite	0	Zeros (%)	0.0%		Infinite (%)	0.0%	Memory	1.9 MiB		size				Production	Distinct	51627	Mean	582503.4423	Real number (5,00)	Distinct (%)	21.3%	Minimum	0
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3.	Amount Data to Rendered (DB2 Metrics)	<p>The User's login details are maintained in the Database Which is accessed only by the admin</p> <p>Overview crop + Add Query Fetch Settings</p> <table border="1"> <thead> <tr> <th>key</th> <th>name</th> <th>password</th> </tr> </thead> <tbody> <tr> <td>Shamyu</td> <td>sanyuktha kani</td> <td>sam28</td> </tr> <tr> <td>pparker</td> <td>Peter Parker</td> <td>abc123</td> </tr> <tr> <td>rmiller</td> <td>Rebecca Miller</td> <td>def456</td> </tr> </tbody> </table> <p>The visualization is based on the data uploaded and the filters selected.</p>	key	name	password	Shamyu	sanyuktha kani	sam28	pparker	Peter Parker	abc123	rmiller	Rebecca Miller	def456																																	
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4.	Utilization of Data Filters	<p>The Filters are based on</p> <p>1.State Name</p>																																													

		<p>Welcome Peter Parker</p> <p>Please Filter Here:</p> <p>Select the State_Name:</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc; border-radius: 5px;"> Andaman and Ni... X Andhra Pradesh X ⊗ ▾ </div> <p>2.District Name</p> <p>Select the District Name:</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc; border-radius: 5px;"> NICOBARS X NORTH AND MID... X SOUTH ANDAMA... X ANANTAPUR X CHITTOOR X ⊗ ▾ </div> <p>3.Season</p> <p>Select the Season:</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc; border-radius: 5px;"> Kharif X Autumn X Rabi X ⊗ ▾ </div>								
5.	Effective User Story	No of Scene Added - 5								
6.	Descriptive Reports	<p>No of Visualizations - 5</p> <p>1.Bar Graph</p> <table border="1"> <thead> <tr> <th>Season</th> <th>Production</th> </tr> </thead> <tbody> <tr> <td>Kharif</td> <td>~28,000</td> </tr> <tr> <td>Autumn Season</td> <td>~5,000</td> </tr> <tr> <td>Rabi</td> <td>~8,000</td> </tr> </tbody> </table> <p>Crop production based on the season The following graph shows when the most crops are produced based on the seasons from the graph we can deduce that most crops are produced in the Kharif season followed by rabi and</p>	Season	Production	Kharif	~28,000	Autumn Season	~5,000	Rabi	~8,000
Season	Production									
Kharif	~28,000									
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autumn. The attributes considered are Production and season from the dataset.

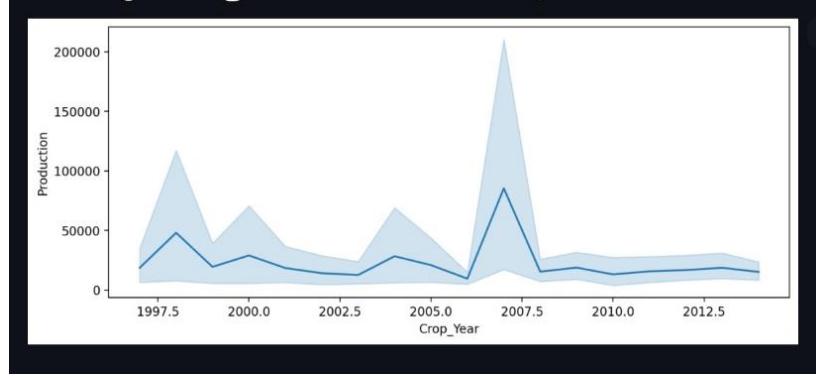
2. Histogram



Crop production based on the district

This graph depicts crop production based on the location and the production from the dataset and infers that Punjab produces the maximum yield

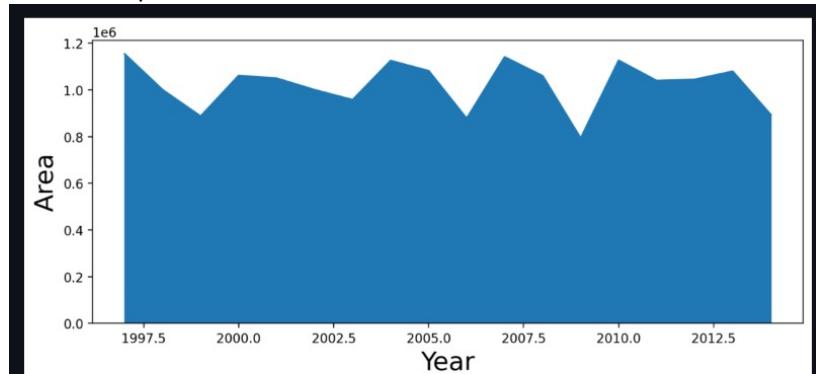
3. Line Graph



Yearly Usage of area in crop production

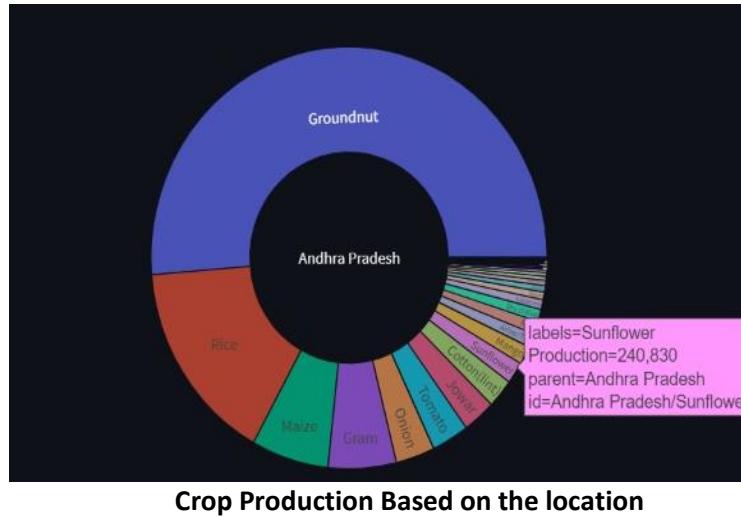
From the graph, we can conclude that the maximum area consumed for agriculture is in 2007

4.Area Graph



Area consumption by Year

5.Pie Chart



Crop Production Based on the location