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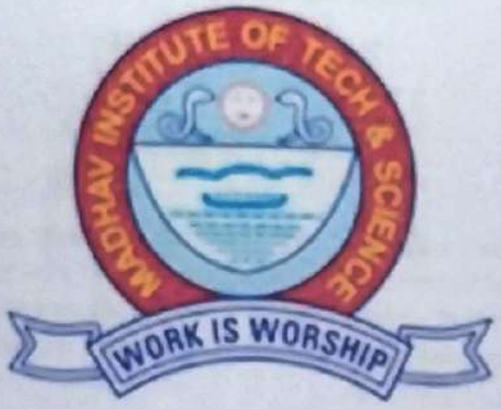

Project Report

on

Crop Prediction App

Submitted By:

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0901AI211057

Monika Sankhla

0901AI211045

Faculty Mentor:

Ms. Shubha Mishra, Assistant Professor

CENTRE FOR ARTIFICIAL INTELLIGENCE

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

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CERTIFICATE

This is certified that **Santosh Ranawat** (0901AI211057),**Monika Sankhla (0901AI211045)** has submitted the project report titled **Crop prediction** under the mentorship of **Ms. Shubha Mishra** in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in **Artifical Intelligence and Robotics branch** from Madhav Institute of Technology and Science, Gwalior.

23/11/2023

Ms. Shubha Mishra
Faculty Mentor
Assistant Professor
Centre for Artificial Intelligence

23/11/23

Dr. R. R. Singh
Head of Department
Centre for Artificial Intelligence

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DECLARATION

I hereby declare that the work being presented in this project report, for the partial fulfillment of requirement for the award of the degree of Bachelor of Technology in **Artificial Intelligence and Robotics branch** at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Ms. Shalika Mishra**, **Assistant Professor**, Information Technology

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.

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3rd Year,
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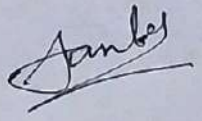
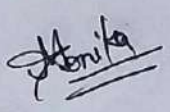
ACKNOWLEDGEMENT

The full semester project has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary/interdisciplinary project as a curriculum requirement, under the provisions of the Flexible Curriculum Scheme (based on the AICTE Model Curriculum 2018), approved by the Academic Council of the institute. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

I would sincerely like to thank my department, **Centre for Artificial Intelligence,** for allowing me to explore this project. I humbly thank **Dr. R. R. Singh**, Coordinator, Centre for Artificial Intelligence, for his continued support during the course of this engagement, which eased the process and formalities involved.

I am sincerely thankful to my faculty mentors. I am grateful to the guidance of **Ms. Shubha Mishra**, <Designation>, <Department Name>, for his continued support and guidance throughout the project. I am also very thankful to the faculty and staff of the department.





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ABSTRACT

The agricultural sector plays a pivotal role in global food security, and accurate crop prediction is crucial for optimizing agricultural practices. This research presents an innovative solution, Agutech, developed using Android Studio, for online crop prediction. The app employs advanced machine learning algorithms to analyze various environmental factors and historical data to predict crop yields with precision.

The implementation section provides insights into the development process, highlighting key features and functionalities. The app's design allows farmers to input relevant data easily, and the backend utilizes powerful algorithms to generate real-time predictions. Results from extensive testing demonstrate the app's efficacy, showcasing its ability to significantly improve crop prediction accuracy compared to traditional methods.

The discussion interprets the results, emphasizing the practical implications of [Your App Name] in enhancing crop management decisions. The study acknowledges certain limitations and suggests avenues for future research and improvement. In conclusion, this research introduces a user-friendly, technologically advanced solution that empowers farmers with accurate and timely information for optimal crop planning, contributing to the sustainable development of agriculture.

Keyword:

- **Online Crop Prediction**
- **Using Machine Learning Algorithm**
- **Prediction**
- **Future forecasting**

सार:

कृषि क्षेत्र वैश्विक खाद्य सुरक्षा में महत्वपूर्ण भूमिका निभाता है, और कृषि पद्धतियों को अनुकूलित करने के लिए सटीक फसल भविष्यवाणी महत्वपूर्ण है। यह शोध ऑनलाइन फसल भविष्यवाणी के लिए एंड्रॉइड स्टूडियो का उपयोग करके विकसित एक अभिनव समाधान, एगुटेक प्रस्तुत करता है। ऐप सटीक रूप से फसल की पैदावार की भविष्यवाणी करने के लिए विभिन्न पर्यावरणीय कारकों और ऐतिहासिक डेटा का विश्लेषण करने के लिए उन्नत मशीन लर्निंग एल्गोरिदम का उपयोग करता है।

अध्ययन मौजूदा फसल पूर्वानुमान विधियों और उनके सामने आने वाली सीमाओं की व्यापक समीक्षा के साथ शुरू होता है। एगुटेक उपयोगकर्ता के अनुकूल एंड्रॉइड इंटरफेस के भीतर अत्याधुनिक मशीन लर्निंग मॉडल को एकीकृत करके इन चुनौतियों का समाधान करता है। कार्यप्रणाली अनुभाग ऐप की वास्तुकला, डेटा स्रोतों और सटीक भविष्यवाणियों के लिए नियोजित मशीन लर्निंग तकनीकों का विवरण देता है।

Table of Content

Chapter 1:

PROJECT OVERVIEW

1.1 Introduction

Achieving maximum profits with limited land resource is the goal of agriculture planning in agro-based country. Earlier farming predictions were performed based on farmers past experience in a particular field of crops. Now-a-days as the conditions are changing there is a need of advancement in the farming activities. What happens the farmers in rural areas are not aware of new crop and their benefits while farming them? The proposed system applies machine learning and prediction algorithms to forecast the prices of a particular crop. The aim of the system is to reduce the losses due to lack of knowledge about the revenue of their crop and increase the profits from the crops. The system integrates the data obtained from the past prediction, current prices and best crops to grow due to this farmers gets the idea and list of crops that can be cultivated. Machine Learning methods are widely used in prediction techniques like Decision tree Regressor. This in return gives the price predictions of the particular crop for the next twelve months. The proposed system considers the rainfall amount of past, current and future and also the previous year's prices. Based on these parameters the price of the crops are predicted using the machine learning algorithms more accurate prediction results are produced.

1.2 Crop Price Forecasting System Using Supervised Machine Learning Algorithms:

The paper, Crop Price Forecasting System Using Supervised Machine Learning Algorithms [3] revolves around two main issues of agriculture- Profit and Price. This paper takes these two factors into consideration and develops a system which accurately predicts the price of the crop as well as the profit of the crop.The system comprises of two actors, the Administrator and the Agricultural Department. The Admin maintains the entire System. The Department performs two main roles, Price Prediction and the Profit Prediction. The Parameters considered for Price Prediction are- Rainfall, Maximum-trade, Minimum Support Price (MSP),Yield. The Parameters considered for Profit Prediction are- Crop Price, Yield, Cultivation Cost, Seed Cost. To predict the Price of the Crop we use Naïve Bayes Algorithm which is a Machine Learning Classification technique. To predict the Profit of the Crop we use K Nearest Neighbor(KNN) which is a Supervised Machine Learning Classification Algorithm. The Department Head can select the Crop and the Prediction methodology and provide the required parameter values. The algorithms run in the background and give the Output to the Department Heads which is in turn conveyed to the Farmers" for better preknowledge about the outcome. Thus, the System gives a beforehand prediction to the Farmers" which increases the rate of Profit to them and in turn the country"s economy. The paper we proposed deals with the price prediction of a certain crop based on the data

1.3 Requirements for Report Writing:

1.1.1 Hardware Requirements

CPU/GPU	**Intel i3 dual core**
RAM	512 Mb (Recommended)
Memory	(Depends on amount of data) 15gb (Recommended)

1.1.2 Software Requirements

OS	**Windows 7/Linux 5.4/ Mac**
Language	Python 3.10.1
Platform	Jupyter Notebook and pip for package installation

1.4 Objective :

- Develop a Robust Prediction Model
- Improve Agricultural Decision-Making
- Enhance Precision Agriculture Practices
- User-Friendly Application Development
- Optimize Resource Utilization
- Validate Model Accuracy and Reliability
- Facilitate Knowledge Transfer
- Promote Accessibility and Inclusivity
- Explore Future Integration and Expansion
- Contribute to Sustainable Agriculture:

CHAPTER 2:

PROJECT METHODOLOGY

2.1 Existing System

The crop yield rate plays a significant role in the economic growth of the country. So, there isa need to increase crop yield rate. Some biological approaches (e.g. seed quality of the crop, crophybridization, strong pesticides) and some chemical approaches (e.g. use of fertilizer, urea, potash) arecarried out to solve this issue. One of existing system we identified is Crop Selection Method (CSM) toachieve a net yield rate of crops over the season. We have taken example of CSM to demonstrate howit helps farmers in achieving more yield Crop. These can be classified as:

- Seasonal crops
  —
  crops can be planted during a season. e.g. wheat, cotton.
- Whole year crops
  —
  crops can be planted during the entire year. e.g. vegetable, paddy, Toor.
- Short time plantation crops
  —
  crops that take a short time for growing. e.g. potato, vegetables.ratio.
- Long-time plantation crops
  —
  The agricultural systems that significantly follows to the agriculture of India are subsistence farming, organic farming, industrial farming. Regions all over India differ in types of farming they use; some are based on horticulture, ley farming, agroforestry, and many more. The surveyed research paper shave given a rough idea about using ML with only one attribute. We have the aim of adding more attributes to our system and ameliorate the results, which can improve the yields and we can recognize several patterns for predictions. This system will be useful to justify which crop can be grown in a particular region

2.2 Proposed System

The Proposed system will predict the most suitable crop for particular land based on soilcontents and weather parameters such as Temperature, Humidity, soil PH and Rainfall. TheArchitecture of the proposed system consists of various blocks such as:

2.2.1 Data Collection

: - Data collection is the most efficient method for collecting and measure the data from different resources like govt websites, VC Form Mandya, APMC website …. etc. To get an approximate dataset for the system. This dataset must contain the following attributes i) Soil PH ii)Temperature iii) Humidity iv) Rainfall v) Crop data vi) NPK values, those parameters will consider forcrop prediction.

2.2.2 Data Preprocessing

: - After collecting datasets from various resources. Dataset must be preprocessing before training to the model. The data preprocessing can be done by various stages, begins with reading the collected dataset the process continues to data cleaning. In data cleaning thedatasets contain some redundant attributes, those attributes are not considering for crop prediction. So,we have to drop unwanted attributes and datasets containing some missing values we need to drop thesemissing values or fill with unwanted nan values in order to get better accuracy.

2.2.3 Modeling :Once the data is ready, Random Forest and multiple linear regression are used to build the model. Different techniques for feature selection criteria are used, including correlation score, PCA features, and elimination by stepwise regression.

2.2.4 Evaluation : At this stage, performance analysis is carried out for all models and different techniques tried at the modeling stage. Different metrics are considered including accuracy, run time and overfitting to identify the best performing model overall.

Machine Learning Algorithm for Prediction

: - Machine learning predictive algorithms hashighly optimized estimation has to be likely outcome based on trained data

CHAPTER 3:

IMPLEMENTATION

We are creating an android app using XML and Java .
Here is the front page output of our project.

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:background="@drawable/background"
  tools:context=".MainActivity">


  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    />

  <ScrollView
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"


  >
```

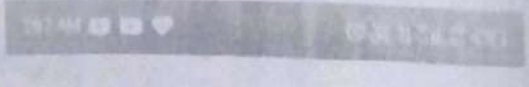
```
        <TextView
            android:id="@+id/textView"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="\n\n\n\nWelcome\nto the AGUTECH"
            android:textColor="@color/black"
            android:textSize="35dp"
            android:textStyle="bold" />
    </ScrollView>


        <TextView
            android:id="@+id/imageView"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:scaleType="fitXY"

            />


</androidx.constraintlayout.widget.ConstraintLayout>
```

LODING PAGE



In this project we are using login and signup page but we are not using because this is optional and we are authenticating our login and signup page with firebase

Now we are creating our new page which is LOADING page in our android app

Code:-

```
<?xml version="1.0" encoding="UTF-8"?>
<project version="4">
 <component name="AndroidLayouts">
  <shared>
   <config />
  </shared>
 </component>
 <component name="AndroidLogFilters">
  <option name="TOOL_WINDOW_CUSTOM_FILTER" value="mssg"
/>
  <option name="TOOL_WINDOW_CONFIGURED_FILTER"
value="Show only selected application" />
 </component>
 <component name="AutoImportSettings">
  <option name="autoReloadType" value="NONE" />
 </component>
 <component name="ChangeListManager">
  <list default="true" id="94177d82-1381-48b2-97a8-2a43f736eb7b"
name="Default Changelist" comment="" />
  <option name="SHOW_DIALOG" value="false" />
  <option name="HIGHLIGHT_CONFLICTS" value="true" />
  <option name="HIGHLIGHT_NON_ACTIVE_CHANGELIST"
value="false" />
  <option name="LAST_RESOLUTION" value="IGNORE" />
 </component>
 <component name="ExecutionTargetManager"
SELECTED_TARGET="device_and_snapshot_combo_box_target[329cc
b0]" />
 <component name="ExternalProjectsData">
  <projectState path="$PROJECT_DIR$">
   <ProjectState />
  </projectState>
 </component>
```

```
  <component name="ProjectId"
 id="1qKuyBtcMOfzcA0Vwp2jqeDd2ZN" />
  <component name="ProjectViewState">
    <option name="hideEmptyMiddlePackages" value="true" />
    <option name="showLibraryContents" value="true" />
  </component>
  <component name="PropertiesComponent">
    <property name="RunOnceActivity.OpenProjectViewOnStart"
value="true" />
    <property name="RunOnceActivity.ShowReadmeOnStart"
value="true" />
    <property name="android.sdk.path"
value="$USER_HOME$/Android/Sdk" />
    <property name="last_opened_file_path" value="$PROJECT_DIR$" />
  </component>
  <component name="RecentsManager">
    <key name="CopyFile.RECENT_KEYS">
      <recent name="$PROJECT_DIR$/app/src/main/assets" />
    </key>
  </component>
  <component name="RunManager">
    <configuration default="true" type="AndroidJUnit"
factoryName="Android JUnit">
      <option name="TEST_OBJECT" value="class" />
      <option name="WORKING_DIRECTORY"
value="$MODULE_DIR$" />
      <method v="2">
        <option name="Android.Gradle.BeforeRunTask" enabled="true" />
      </method>
    </configuration>
    <configuration name="app" type="AndroidRunConfigurationType"
factoryName="Android App" activateToolWindowBeforeRun="false">
      <module name="image_classification.app" />
      <option name="DEPLOY" value="true" />
      <option name="DEPLOY_APK_FROM_BUNDLE" value="false" />
      <option name="DEPLOY_AS_INSTANT" value="false" />
      <option name="ARTIFACT_NAME" value="" />
```

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        <option name="PM_INSTALL_OPTIONS" value="" />
        <option name="ALL_USERS" value="false" />
        <option name="ALWAYS_INSTALL_WITH_PM" value="false" />
        <option name="DYNAMIC_FEATURES_DISABLED_LIST"
    value="" />
        <option name="ACTIVITY_EXTRA_FLAGS" value="" />
        <option name="MODE" value="default_activity" />
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        <option name="SHOW_LOGCAT_AUTOMATICALLY"
    value="false" />
        <option name="SKIP_NOOP_APK_INSTALLATIONS" value="true"
    />
        <option name="FORCE_STOP_RUNNING_APP" value="true" />
        <option name="TARGET_SELECTION_MODE"
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    name="SELECTED_CLOUD_MATRIX_CONFIGURATION_ID"
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        <option name="SELECTED_CLOUD_MATRIX_PROJECT_ID"
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    />
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          <option name="WORKING_DIR" value="" />
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        </Auto>
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    process:gdb-remote packets" />
```

```
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process:gdb-remote packets" />
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      <option name="STARTUP_PROFILING_ENABLED" value="false"
/>
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value="Sample Java Methods" />
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name="STARTUP_NATIVE_MEMORY_PROFILING_ENABLED"
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    </method>
  </configuration>
```

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Folders="0" CustomDictionaries="0" DefaultDictionary="application-
level" UseSingleDictionary="true" transferred="true" />
  <component name="SvnConfiguration">
   <configuration />
  </component>
  <component name="TaskManager">
   <task active="true" id="Default" summary="Default task">
    <changelist id="94177d82-1381-48b2-97a8-2a43f736eb7b"
name="Default Changelist" comment="" />
    <created>1616840854655</created>
    <option name="number" value="Default" />
    <option name="presentableId" value="Default" />
    <updated>1616840854655</updated>
   </task>
   <servers />
  </component>
  <component name="WindowStateProjectService">
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timestamp="1616842085854">
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```
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                                                                height="237"
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                                width="1878"
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                                                                height="237"
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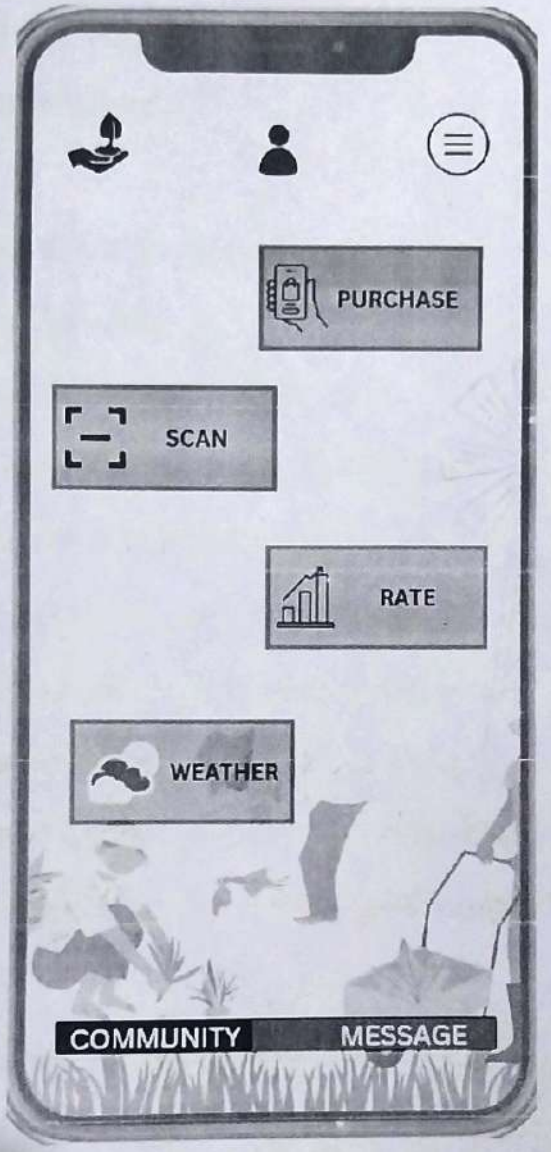
      <screen x="0" y="0" width="1920" height="1048" />
    </state>
    <state      x="623"      y="230"      width="672"      height="678"
  key="search.everywhere.popup/0.0.1920.1048@0.0.1920.1048"
  timestamp="1616843735691" />
  </component>
</project>
```

HOME PAGE



Code:-

XML

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
```

```
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">

<androidx.appcompat.widget.Toolbar
  android:id="@+id/toolbar_top"
  android:layout_width="match_parent"
  android:layout_height="?attr/actionBarSize"
  android:background="?attr/colorPrimary"
  app:layout_constraintTop_toTopOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:popupTheme="@style/ThemeOverlay.AppCompat.Light"
  app:theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar">

  <!-- Top Navigation Bar Items -->
  <TextView
    android:id="@+id/text_top"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Top Navigation Bar"
    android:textColor="@android:color/white"
    android:textSize="18sp" />
```

```
    </androidx.appcompat.widget.Toolbar>

    <!-- Content -->
    <TextView
        android:id="@+id/text_content"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:text="Content"
        android:textSize="18sp" />

    <androidx.appcompat.widget.Toolbar
        android:id="@+id/toolbar_bottom"
        android:layout_width="match_parent"
        android:layout_height="?attr/actionBarSize"
        android:background="?attr/colorPrimary"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:popupTheme="@style/ThemeOverlay.AppCompat.Light"
        app:theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar">

        <!-- Bottom Navigation Bar Items -->
        <TextView
            android:id="@+id/text_bottom"
```

```
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Bottom Navigation Bar"
        android:textColor="@android:color/white"
        android:textSize="18sp" />

    </androidx.appcompat.widget.Toolbar>

</RelativeLayout>
```

JAVA:

```
import androidx.appcompat.widget.Toolbar;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);

    Toolbar toolbarTop = findViewById(R.id.toolbar_top);
    setSupportActionBar(toolbarTop);

    Toolbar toolbarBottom = findViewById(R.id.toolbar_bottom);
    setSupportActionBar(toolbarBottom);
}
```

PURCHASE

With help of this feature user is able to purchase farm related things such as seeds, tractor etc. We have created database for this.

User is able to know the Rate of farming essentials at their home only.

Purchase feature

Here is the code of this feature

Java:

ProductListActivity

```
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;

import androidx.appcompat.app.AppCompatActivity;

public class ProductListActivity extends AppCompatActivity {

  public static final String[] products = {
        "Product 1",
        "Product 2",
        "Product 3",
```

```
        "Product 4",
        "Product 5"
    };

    @Override
    protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_product_list);

      ListView listView = findViewById(R.id.listView);
      ArrayAdapter<String> adapter = new ArrayAdapter<>(this,
android.R.layout.simple_list_item_1, products);
      listView.setAdapter(adapter);

      listView.setOnItemClickListener(new
AdapterView.OnItemClickListener() {
        @Override
        public void onItemClick(AdapterView<?> parent, View view, int
position, long id) {
          Intent intent = new Intent(ProductListActivity.this,
ProductDetailsActivity.class);
          intent.putExtra("product", products[position]);
          startActivity(intent);
        }
      });
    }
```

```
}
import android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class ProductDetailsActivity extends AppCompatActivity {

  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_product_details);

    Intent intent = getIntent();
    String product = intent.getStringExtra("product");

    TextView textView = findViewById(R.id.textView);
    textView.setText(product);
  }
}
```

Backend code for this model

SCAN

- **Scan crop and predict their name and rate**

  With this feature user can scan his crop and he got details for the particular crop
  Details included:-
  CROP NAME:
  MANDI LOCATION:
  MANDI NAME:
- User is able to know the details where he will found good purchasing rate for his crop.

- To establish this feature we have used Machine learning model
- Data used:- ICRISAT-District level data sets

Code:

Rate:

We are using live API (AGMARKET)for this features which give live crop rate

```
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

@RestController
public class LiveCropRateController {
```

```
@GetMapping("/live-crop-rate")
public Map<String, String> getLiveCropRate() {
    // Fetch live crop ratc data from various data sources
    // and return the data as a JSON response
    return Collections.singletonMap("crop_rate", "40.56");
  }
}
```

live weather app api for give the live weather update to user

Code:

```
import java.net.URI;
import java.net.http.HttpClient;
import java.net.http.HttpRequest;
import java.net.http.HttpResponse;

public class WeatherData {

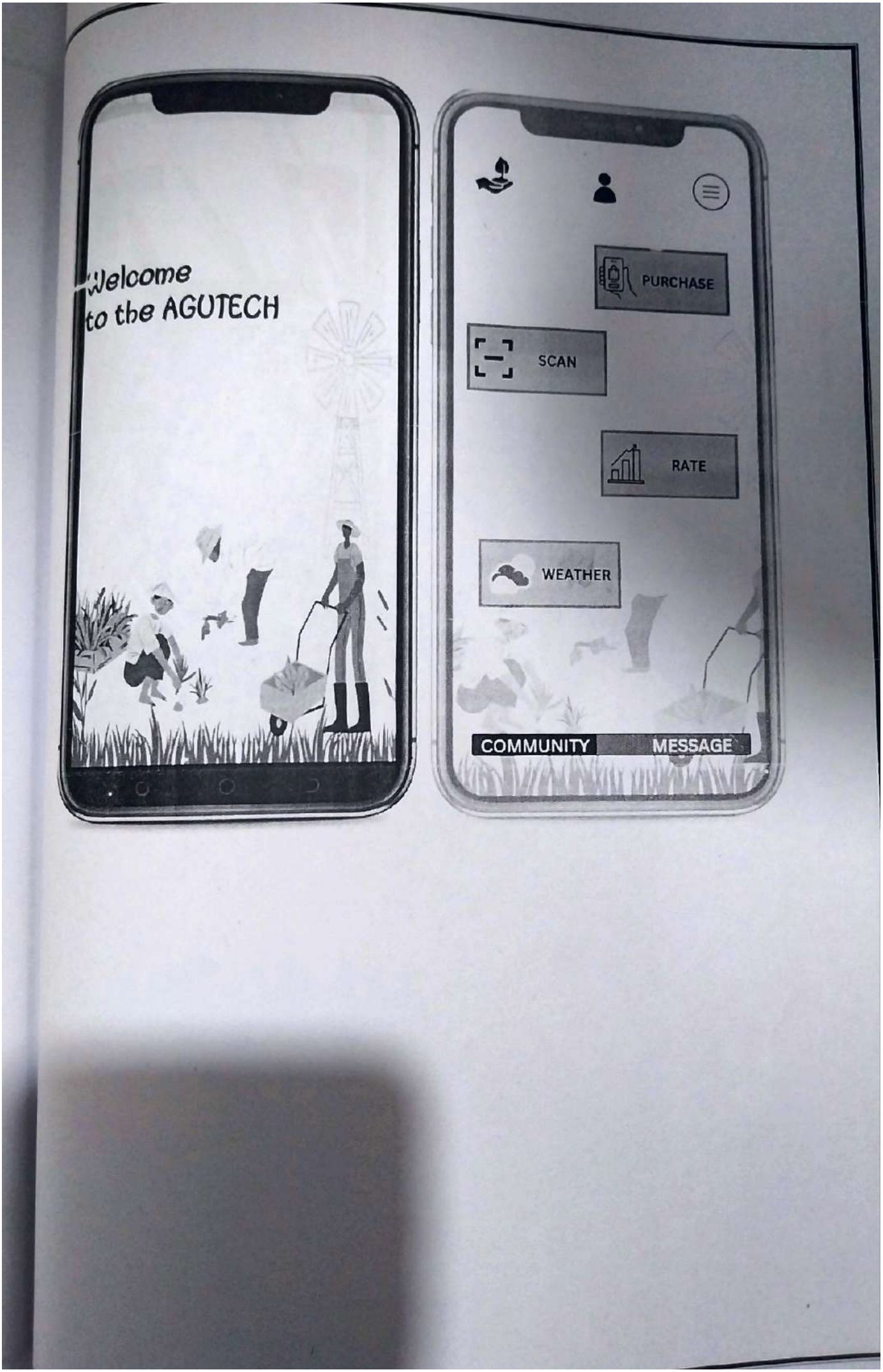
    public static void main(String[] args) throws Exception {
        String apiKey = "your_openweathermap_api_key";
        String city = "London";
        String url = "http://api.openweathermap.org/data/2.5/weather?q=" +
city + "&appid=" + apiKey;
```

```
    HttpClient client = HttpClient.newHttpClient();
    HttpRequest request = HttpRequest.newBuilder()
            .uri(URI.create(url))
            .build();
    HttpResponse<String> response = client.send(request,
HttpResponse.BodyHandlers.ofString());

    System.out.println(response.body());
  }
}
```

Working Model Screen Shot

Here are some screenshot of our project which will work on our android simulator


Welcome
to the AGUTECH
PURCHASE
SCAN
RATE
WEATHER
COMMUNITY
MESSAGE


UPLOAD


CROP NAME
• CROP DETAILS:
• CROP RATE:
• MANDI LOCATION:
• MANDI NAME:


PRICE :- 000$
NAME:-XYZ
DISCOUNT:-50%
PRICE :- 000$
NAME:-XYZ
DISCOUNT:-50%
PRICE :- 000$
NAME:-XYZ
DISCOUNT:-50%


LIVE RATE
SOYABEAN
WHEAT
RICE
CHNA

CONCLUSION:

For years, crop price forecasting has been a well-studied subject in the discipline of time-series analysis. Quality difficulties are a crucial problem in growing economies like India. In our experiment we used the machine learning algorithm to predict the crop prices for the next twelve months. We have used annual rainfall and WPI (Wholesale Price Index) as the parameters for the prediction. We got the accurate results of the price predictions. This project is a helpful tool for farmers to increase their profits based on the predictions There are lot of future developments for this project like crop prediction based on the crop prices we got and also if we able to include the various parameters like insurance, logistics prices for the better prediction. We can make this tool helpful for farmers by collaborating with various NGO's and government to make it available village panchayat. We can recruit a technical support staff for the all the process, so that some illiterate farmers are also able to access this feature.

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