

## References

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- [3] Maria Rossana C. de Leon, Eugene Rex L. Jalao, A Prediction Model Framework for Crop Yield Prediction
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- [8] S.R. Garner; S.J. Cunningham, G. Holmes, C.G. Nevill-Manning, and I.H. Witten (1995). "Applying a machine learning workbench: Experience with agricultural databases". Proc Machine Learning in Practice Workshop, Machine Learning Conference, Tahoe City, CA, USA. pp. 14–21.

## Appendix A

### Project Plan

ID	Task	Task Name	Duration	Start	Finish	Pred's
1	1	<b>Proposal Writing</b>	<b>17 days</b>	<b>01/01</b>	<b>01/17</b>	
2	1.1	Information Collecting	06 days	01/01	01/06	
3	1.2	Problem Identification	03 days	01/07	01/09	1
4	1.3	Writing Draft Proposal	04 days	01/10	01/13	2
5	1.4	Obtaining Supervisors Ideas	02 days	01/14	01/15	3
6	1.5	Finalizing Proposal	02 days	01/16	01/17	4
7	2	<b>Information Gathering</b>	<b>43 days</b>	<b>01/18</b>	<b>03/02</b>	
8	2.1	Gathering of Sample Data	07 days	01/18	01/25	
9	2.3	Survey Data Analysis	13 days	01/26	02/08	
10	2.4	Building Data Structures	18 days	02/09	02/28	9
11	2.5	Storing Data in Format	03 days	02/29	03/02	10
12	3	<b>Project Analysis and Design</b>	<b>52 days</b>	<b>03/03</b>	<b>04/26</b>	
13	3.1	Requirement Analysis	10 days	03/03	03/13	
14	3.2	Drawing System Diagrams	10 days	03/14	03/24	13
15	3.3	Designing	32 days	03/25	04/26	14
16	4	<b>Implementation</b>	<b>97 days</b>	<b>04/27</b>	<b>08/10</b>	
17	4.1	Coding the simple Web Service	28 days	04/27	05/29	
18	4.2	Initial Site Design Using Joomla	14 days	05/30	06/13	17
19	4.3	Building Models using Weka	35 days	06/14	07/19	18
20	4.4	Testing the Initial System	20 days	07/20	08/10	19
21	5	<b>Submission of Interim Report</b>	<b>38 days</b>	<b>08/10</b>	<b>09/20</b>	
22	5.1	Writing of interim Report	14 days	08/10	08/24	

23	5.2	Preparing of Presentation	05 days	08/25	08/30	22
24	5.3	Conducting the Presentation	01 day	09/20	09/20	23
25	5.4	Obtaining vital Feedback	01 day	09/20	09/20	24
26	<b>6</b>	<b>Implementation Cont.</b>	<b>101 days</b>	<b>09/21</b>	<b>01/01</b>	
27	6.1	Finalizing the Technologies	14 days	09/21	10/04	
28	6.2	Installation of the VM	02 days	10/05	10/06	27
29	6.3	Making Databases	10 days	10/07	10/16	28
30	6.4	Joomla Site Completion	08 days	10/17	10/24	29
31	6.5	Implementing Dynamic Modeling	35 days	10/25	11/30	30
32	6.6	Implementing Dynamic Cleaning	10 days	12/01	12/10	31
33	6.7	User Interface Improvements	08 days	12/11	12/17	32
34	6.8	Testing and Debugging	14 days	12/18	01/01	33
35	<b>7</b>	<b>Evaluation</b>	<b>27 days</b>	<b>01/02</b>	<b>01/29</b>	
36	7.1	Running System Evaluations	10 days	01/02	01/11	
37	7.2	Comments from Supervisor	01 day	01/12	01/12	36
38	7.3	Testing for Dynamic Behavior	08 days	01/13	01/20	
39	7.4	Adding Improvements	08 days	01/21	01/29	38
40	<b>8</b>	<b>Completion</b>	<b>16 days</b>	<b>01/30</b>		
41	8.1	Writing the Final Report	14 days	01/30	02/12	
42	8.2	Submission	01 day	02/16	02/16	41
43	8.3	Final Presentation	01 day			42

### List of coding used in the Dataset

1. District (dist)

- |             |                  |
|-------------|------------------|
| 1 - Matale  | 2 – Nuwara-eliya |
| 3 - Badulla | 4 – Kandy        |

2. Age group (age)

- |                   |                               |                       |
|-------------------|-------------------------------|-----------------------|
| 1 - Age $\leq 35$ | 2 – $35 < \text{Age} \leq 50$ | 3 - $50 < \text{Age}$ |
|-------------------|-------------------------------|-----------------------|

3. Farmer's knowledge regarding agro ecological problems (trn) Soil erosion/excess use of fertilizer and agro chemicals

- |               |                  |                |
|---------------|------------------|----------------|
| 1 – Not known | 2 – Insufficient | 3 – Sufficient |
|---------------|------------------|----------------|

4. Farmers knowledge about use of fertilizer (fert) Mixtures of fertilizers/ pure fertilizer

- |        |               |         |
|--------|---------------|---------|
| 1 – No | 2 – Some time | 3 – Yes |
|--------|---------------|---------|

5. Type of plot(plty)

- |               |              |
|---------------|--------------|
| 1 – High land | 2 – Low land |
|---------------|--------------|

6. Slope of the plot(slt)

- |                |                          |
|----------------|--------------------------|
| 1 – Flat land  | 2 – Less than 45 degrees |
| 3 – 45 Degrees | 4 – Above 45 Degrees     |

7. Soil erosion Intensity(ints)

- |            |             |                |
|------------|-------------|----------------|
| 1 – Excess | 2 – Average | 3 – No erosion |
|------------|-------------|----------------|

8. Season (sesn)

1 – Maha

2 – Yala

3- Intermediate

9. Cultivated crop (crop)

1 – Potatoes

2 – Beans

3 – Carrot

4 – Cabbage

10. Extent cultivated in Ac (extn)

1 – Extent < 0.25

2 –  $0.25 \leq \text{Extent} < 0.5$

3 –  $0.5 \leq \text{Extent} < 0.75$

4 –  $0.75 \leq \text{Extent} < 1$

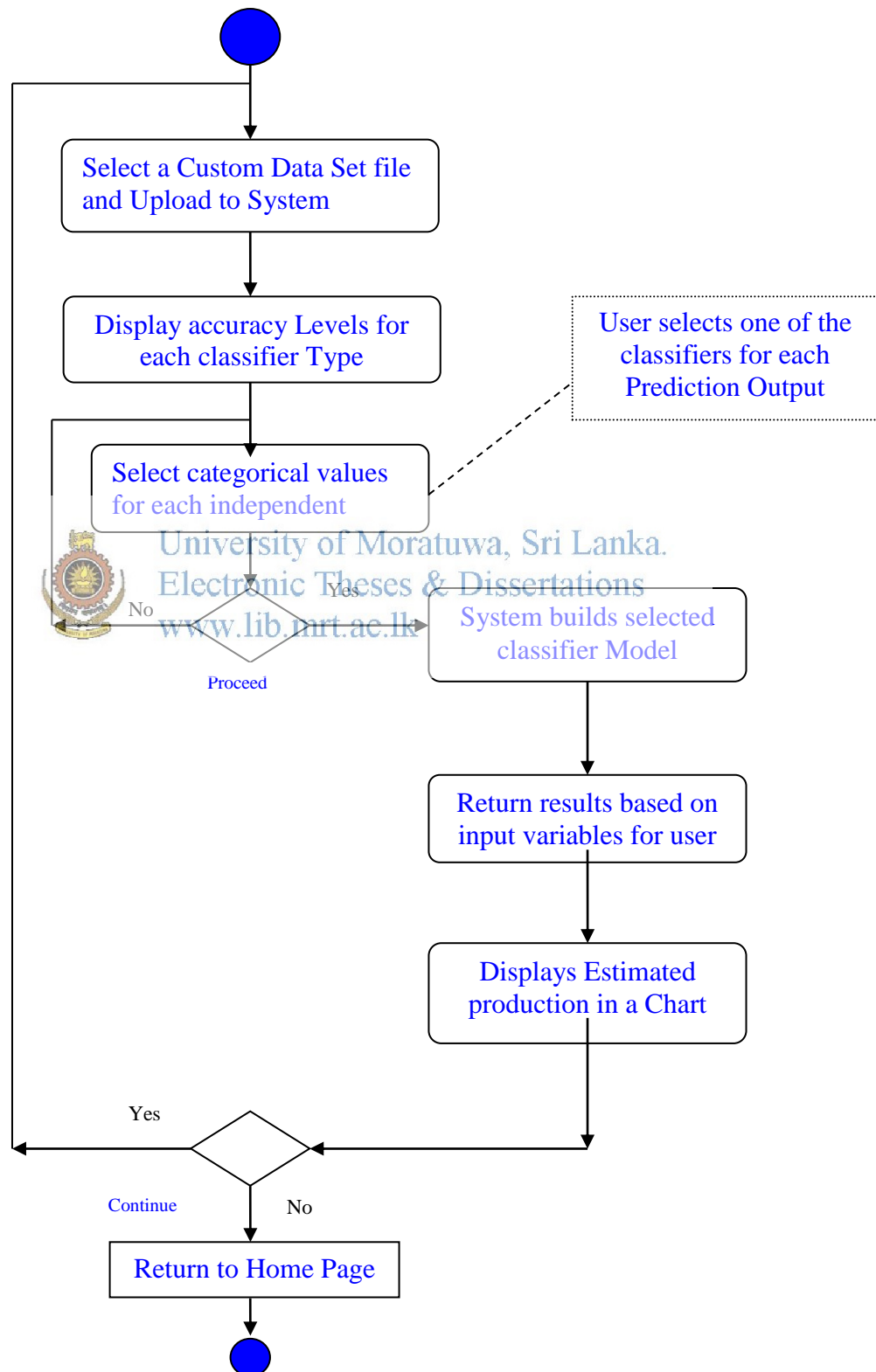
5 – 1.0 or above



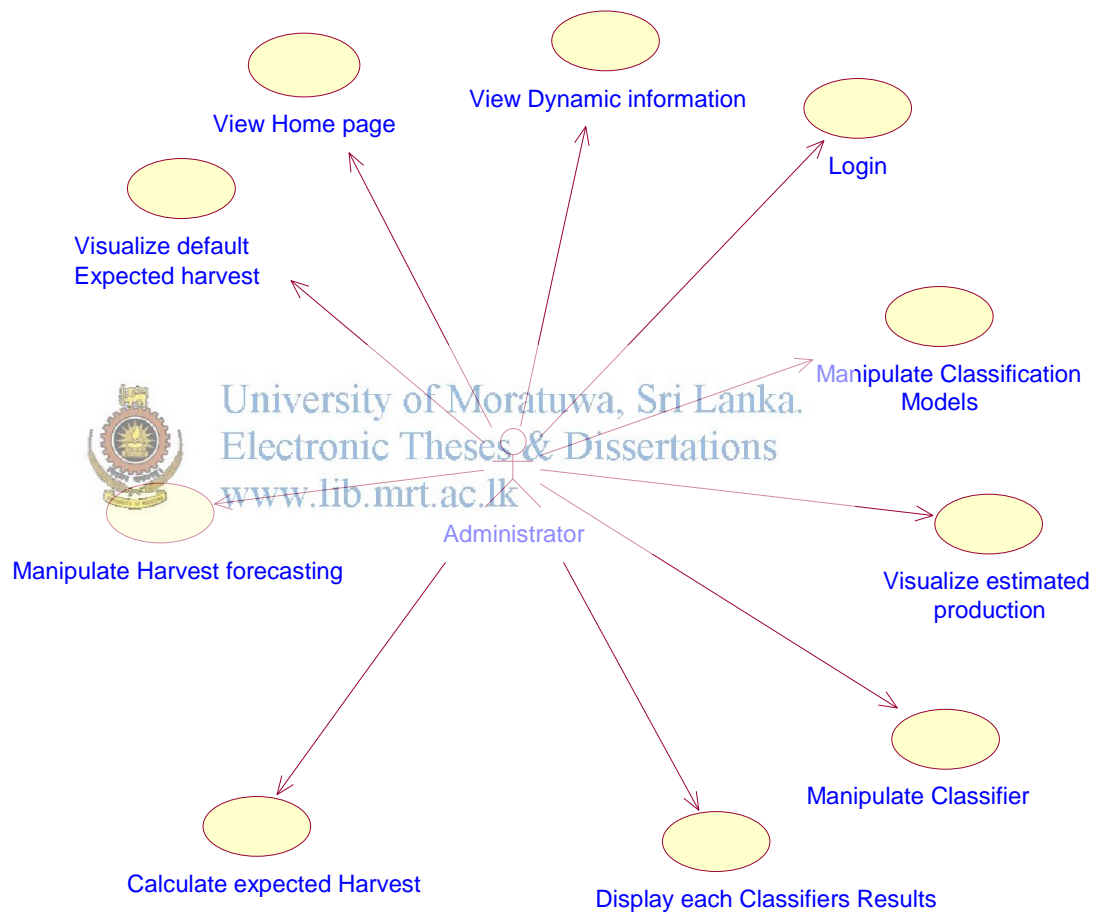
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## Use cases and Activity diagrams

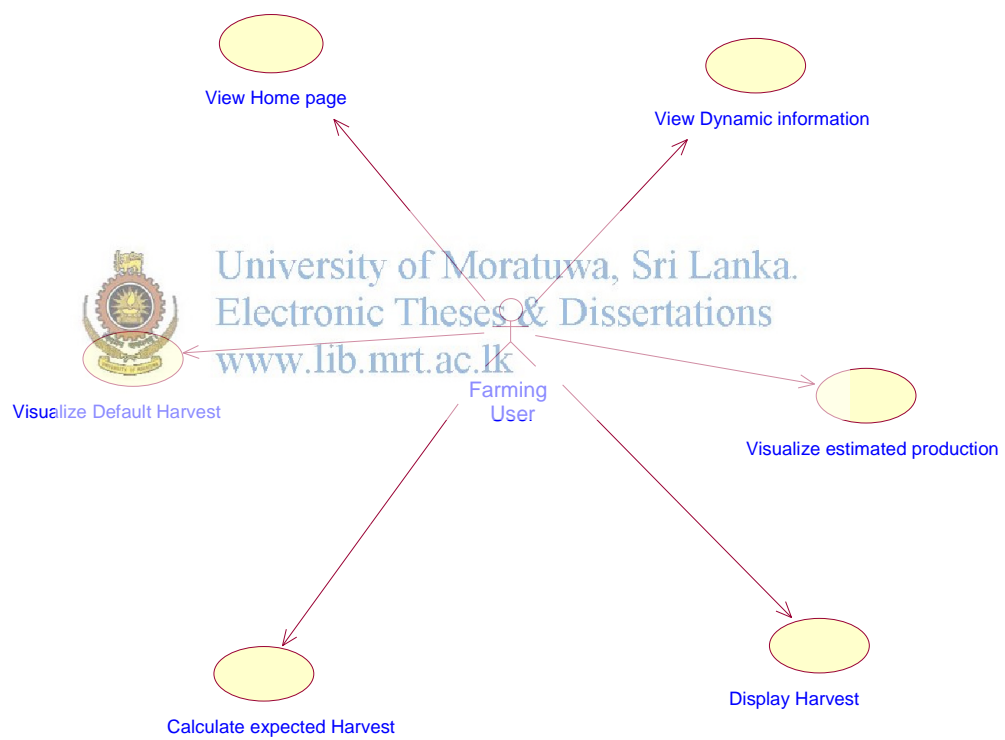
Figure G.1 – Production Estimation Process



**Figure G.2 – Administrator functionalities Use Case diagram**

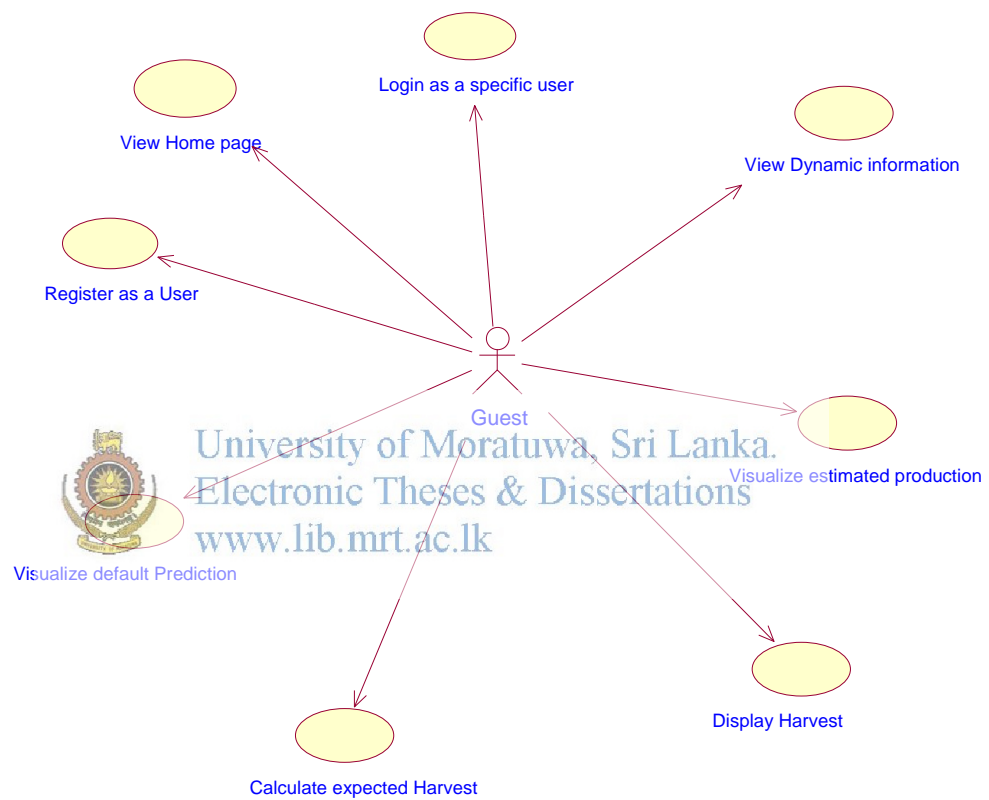


**Figure G.3 -Farming community functionalities Use Case diagram**





**Figure G.4 -General client functionalities Use Case diagram**



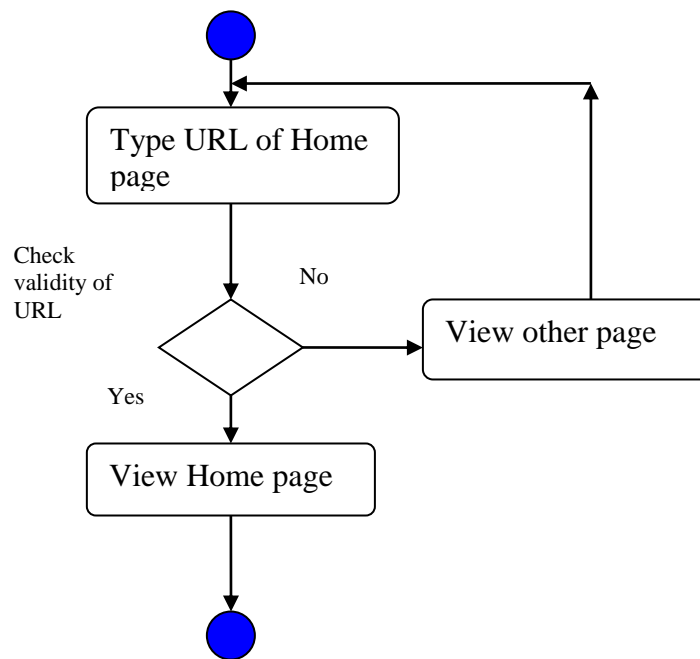
## Description of Use Cases

The administrator functionalities use cases have been described below.

### Use Case 01 – View Home Page


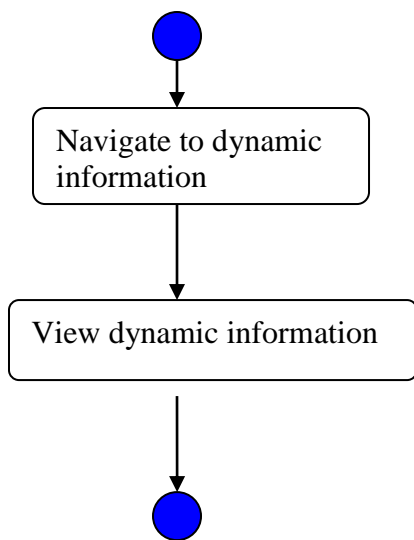
Use Case Name	View Home Page		Administrator Functionalities
Priority	High		
Primary Business Actor	Administrator		
Brief Description	User Navigate to the web site's home page		
Pre-Condition	User should have the Internet facility		
Basic Flow	1	User type URL of home page	
	2	View home page	
Alternative Flows	1	User type URL of home page	
	2	URL is incorrect	
	3	Navigate to an incorrect page	
Relationships	N/A		
Use-Case Diagram	<pre>graph LR     Admin[Administrator] --&gt; ViewHome([View home page])</pre> <p>The diagram shows an actor labeled 'Administrator' connected by an arrow to a use case labeled 'View home page'.</p>		
Special Requirements	N/A		
Post-Conditions	N/A		

Activity  
Diagram

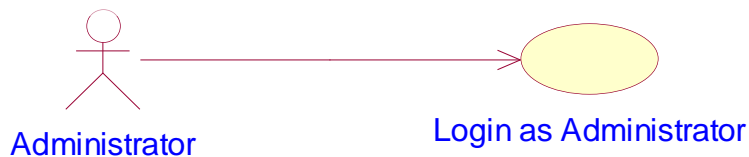


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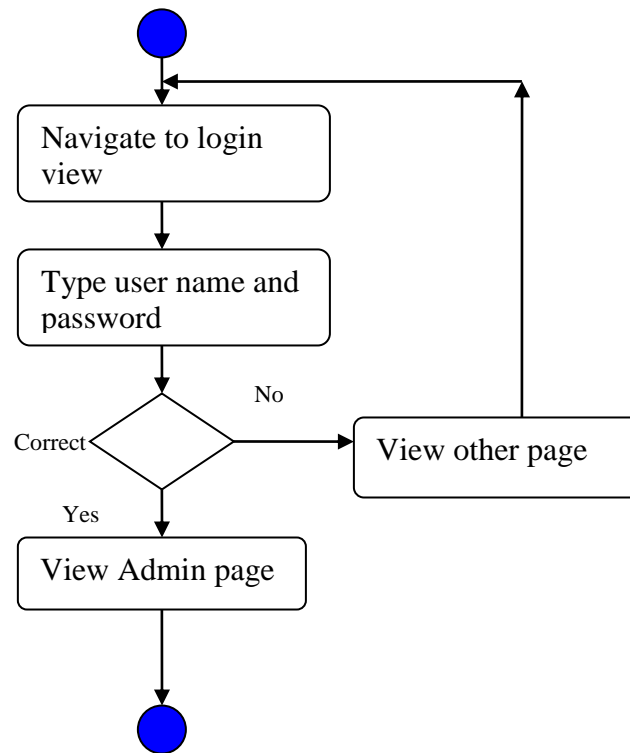
## Use Case 02 – View Dynamic Information

Use Case Name	View Dynamic Information		Administrator Functionalities
Priority	High		
Primary Business Actor	Administrator		
Brief Description	User Navigate to the dynamic information page		
Pre-Condition	User should be in the site		
Basic Flow	1	Click the Dynamic information link	
	2	View dynamic information	
Alternative Flows	N/A		
Relationships	N/A		
Use-Case Diagram			
Special Requirements	N/A		
Post-Conditions	N/A		
Activity Diagram			

### Use Case 03 – Login

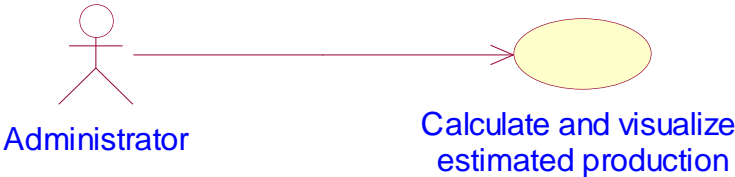
Use Case Name	Login as Administrator		Administrator Functionalities
Priority	High		
Primary Business Actor	Administrator		
Brief Description	User Navigate to the web site's login screen		
Pre-Condition	User should be in the home page		
Basic Flow	1	Click the Administrator login link	
	2	Type user name and password	
	3	Successfully login to the administrator view	
Alternative Flows	1	Click the Administrator login link	
	2	Type user name and password	
	3	Login is a failure	
Relationships	N/A		
Use-Case Diagram			
Special Requirements	Lower cases be used		
Post-Conditions	N/A		

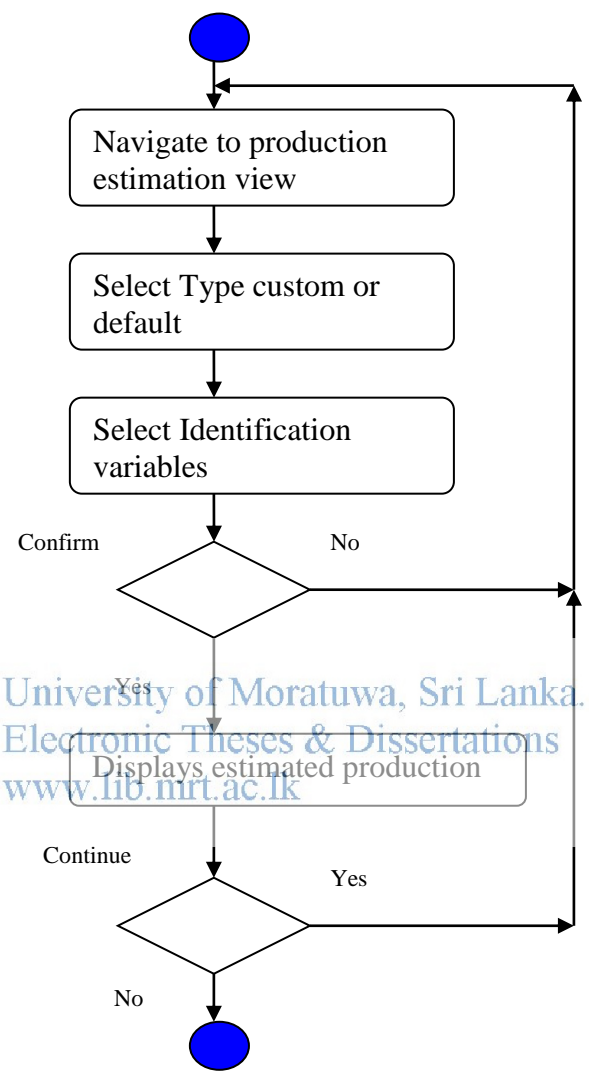
Activity  
Diagram



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#### Use Case 04 – Calculate and visualize estimated production

Use Case Name	Calculate and visualize estimated production		Administrator Functionalities
Priority	High		
Primary Business Actor	Administrator		
Brief Description	User Navigate to production estimated Regression models view		
Pre-Condition	User should be in the home page		
Basic Flow	1	Click the Production estimated view	
	2	Select identification variables	
	3	Select classifier type	
	4	View the estimated production	
Alternative Flows	1	Click the Upload File	
	2	Select classifier type	
	3	Select categories for independent variables	
	4	Failure, unsuccessful selection	
Relationships	N/A		
Use-Case Diagram	 <pre> graph LR     Admin[Administrator] --&gt; UC((Calculate and visualize estimated production)) </pre>		
Special Requirements	User may have understanding of categorical variables		

Post-Conditions	User may be verified with practical situation
Activity Diagram	 <pre> graph TD     Start(( )) --&gt; Navigate[Navigate to production estimation view]     Navigate --&gt; SelectType[Select Type custom or default]     SelectType --&gt; SelectVars[Select Identification variables]     SelectVars --&gt; Confirm{ }     Confirm -- Confirm --&gt; ConfirmOut(( ))     Confirm -- No --&gt; ConfirmOut     ConfirmOut --&gt; Start     Confirm -- Yes --&gt; Displays[Displays estimated production]     Displays --&gt; Continue{ }     Continue -- Continue --&gt; ContinueOut(( ))     Continue -- Yes --&gt; ContinueOut     ContinueOut --&gt; Start     Continue -- No --&gt; End(( ))   </pre> <p>The activity diagram illustrates the process of production estimation. It begins with a start node (blue circle) leading to the activity 'Navigate to production estimation view'. This is followed by 'Select Type custom or default' and 'Select Identification variables'. A decision diamond follows, with a 'Confirm' path leading to a loop back to the start and a 'No' path leading to the same loop. The 'Yes' path leads to 'Displays estimated production'. Another decision diamond follows, with a 'Continue' path leading to a loop back to the start and a 'Yes' path leading to the same loop. The 'No' path leads to the end node (blue circle).</p>



## Database and tables

### Cropinfo\_Data DataBase

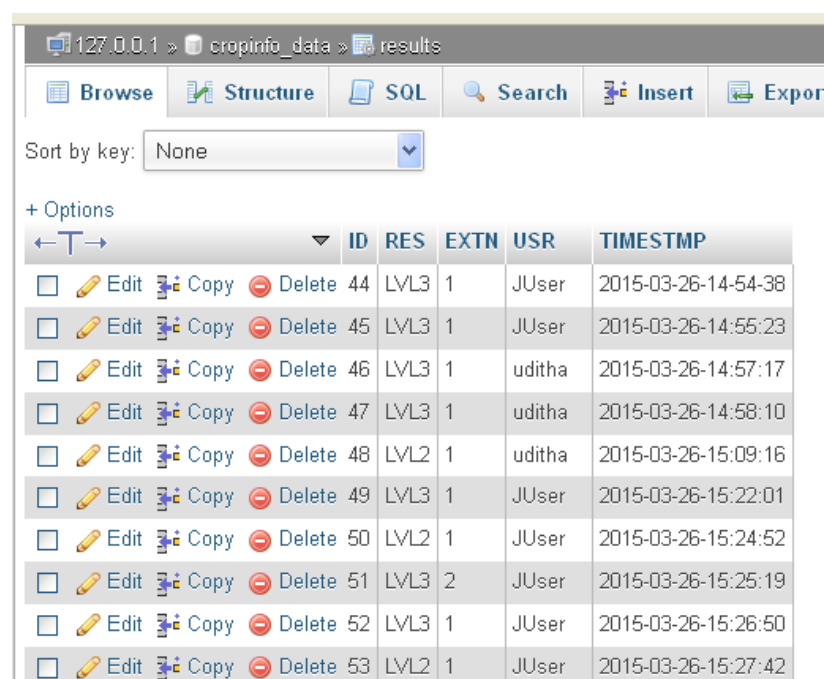
This is the main database that stores the information generated and modeled by the system. There are two main tables in this database.

#### 1. Results Table (Model Builder Web Service)

This table stores the results for each users request for a crop prediction separately with a time stamp and a separate column for the particular users land extent.



#	Name	Type	Collation	Attributes	Null	Default	Extra
1	ID	int(11)	latin1_swedish_ci		No	None	AUTO_INCREMENT
2	RES	varchar(100)	latin1_swedish_ci		No	None	
3	EXTN	varchar(100)	latin1_swedish_ci		No	None	
4	COMMENTS	varchar(100)	latin1_swedish_ci		No	None	



	ID	RES	EXTN	USR	TIMESTMP
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	44	LVL3	1	JUser	2015-03-26-14:54:38
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	45	LVL3	1	JUser	2015-03-26-14:55:23
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	46	LVL3	1	uditha	2015-03-26-14:57:17
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	47	LVL3	1	uditha	2015-03-26-14:58:10
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	48	LVL2	1	uditha	2015-03-26-15:09:16
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	49	LVL3	1	JUser	2015-03-26-15:22:01
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	50	LVL2	1	JUser	2015-03-26-15:24:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	51	LVL3	2	JUser	2015-03-26-15:25:19
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	52	LVL3	1	JUser	2015-03-26-15:26:50
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	53	LVL2	1	JUser	2015-03-26-15:27:42

## 2. Dynamic Table (Model Builder Web Service)

In this table the accuracy levels for each classification model is stored separately with a column for a timestamp to uniquely identify the request to build models (or a particular file upload)

127.0.0.1 » cropinfo\_data » dynamic

[Browse](#)
[Structure](#)
[SQL](#)
[Search](#)
[Insert](#)
[Export](#)
[Import](#)

#	Name	Type	Collation	Attributes	Null	Default	Extra
<input checked="" type="checkbox"/> 1	ID	int(11)			No	None	AUTO_INCREMENT
<input type="checkbox"/> 2	BAYES	double			No	None	
<input type="checkbox"/> 3	J48	double			No	None	
<input type="checkbox"/> 4	SMO	double			No	None	
<input type="checkbox"/> 5	IBK	double			No	None	
<input type="checkbox"/> 6	COMMENTS	varchar(1000)	latin1_swedish_ci		No	None	

127.0.0.1 » cropinfo\_data » dynamic

[Browse](#)
[Structure](#)
[SQL](#)
[Search](#)
[Insert](#)
[Export](#)
[Import](#)

Sort by key:

+ Options

	ID	BAYES	J48	SMO	IBK	COMMENTS
<input type="checkbox"/> Edit  Copy  Delete	9	53.71	97.68	45.71	92.11	15-03-85 22:40:00
<input type="checkbox"/> Edit  Copy  Delete	10	53.71	97.68	45.71	92.11	15-03-85 22:40:40
<input type="checkbox"/> Edit  Copy  Delete	11	53.71	97.68	45.71	92.11	15-03-85 22:41:08
<input type="checkbox"/> Edit  Copy  Delete	12	53.71	97.68	45.71	92.11	15-03-85 22:44:24
<input type="checkbox"/> Edit  Copy  Delete	13	53.71	97.68	45.71	92.11	15-03-85 22:45:25
<input type="checkbox"/> Edit  Copy  Delete	14	53.71	97.68	45.71	92.11	15-03-85 22:45:44
<input type="checkbox"/> Edit  Copy  Delete	15	53.71	97.68	45.71	92.11	15-03-85 22:47:36
<input type="checkbox"/> Edit  Copy  Delete	16	53.71	97.68	45.71	92.11	15-03-85 22:49:14
<input type="checkbox"/> Edit  Copy  Delete	17	53.71	97.68	45.71	92.11	15-03-85 22:55:18
<input type="checkbox"/> Edit  Copy  Delete	18	53.71	97.68	45.71	92.11	15-03-85 23:11:13
<input type="checkbox"/> Edit  Copy  Delete	19	53.71	97.68	45.71	92.11	15-03-85 23:11:51
<input type="checkbox"/> Edit  Copy  Delete	20	53.71	97.68	45.71	92.11	15-03-85 23:13:34

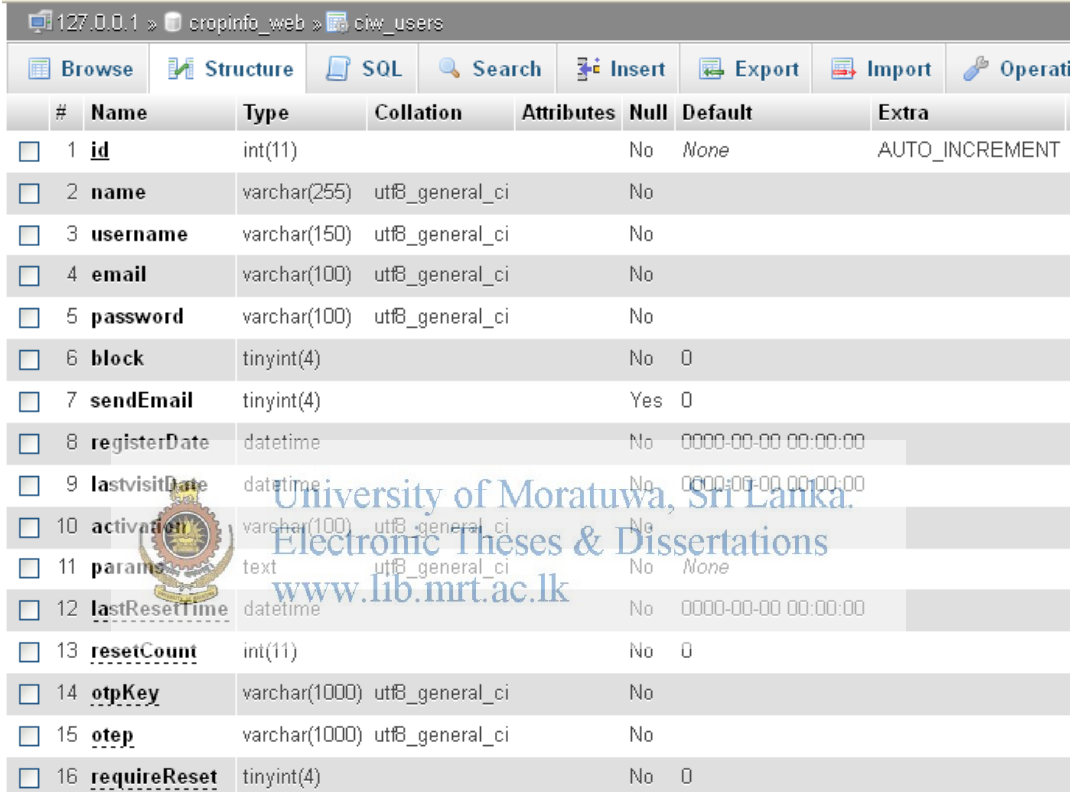
Check All / Uncheck All With selected:
 Change
 Delete
 Export

Show : Start row: 0 Number of rows: 30 Headers every 100 rows

## Cropinfo\_Web DataBase

### 1. User Registration Table (Web Interface)

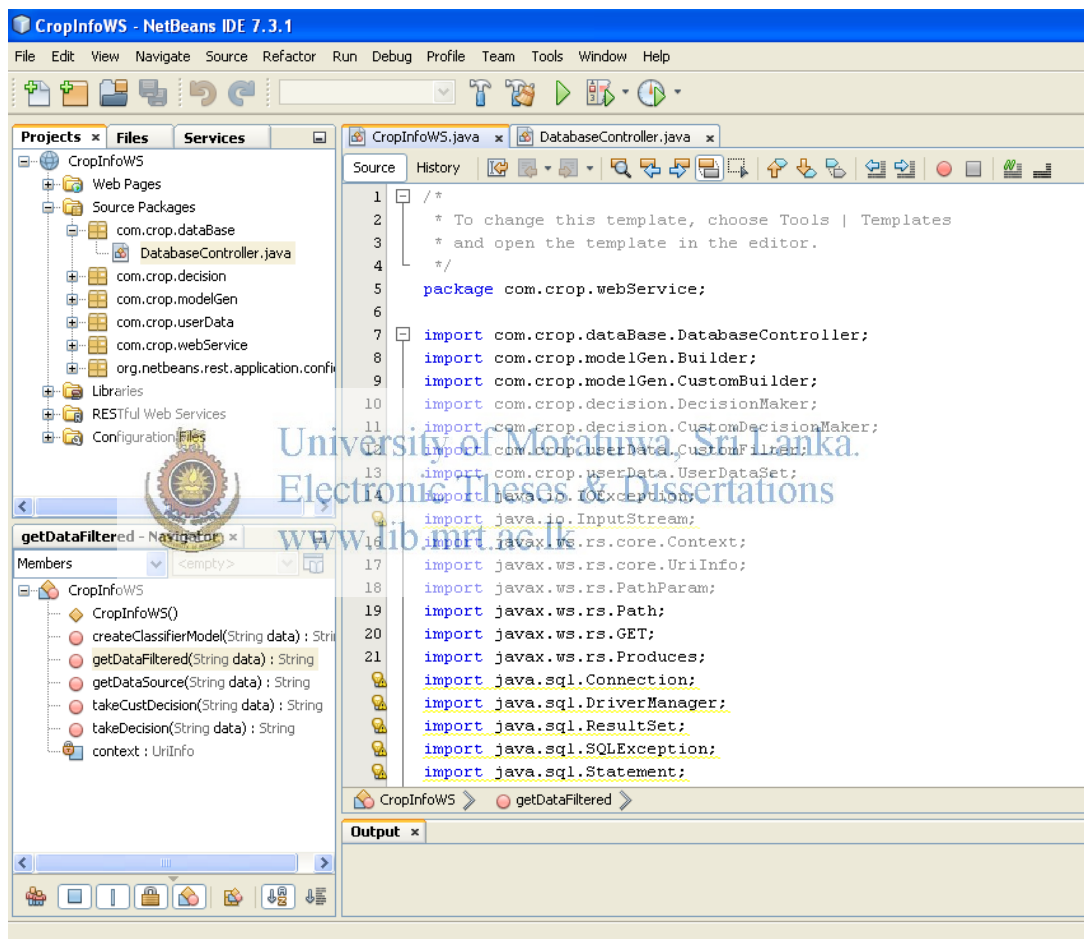
Mainly stores the data relevant to the users registered in the website. There are three main user categories namely registered, super user and guest (public).



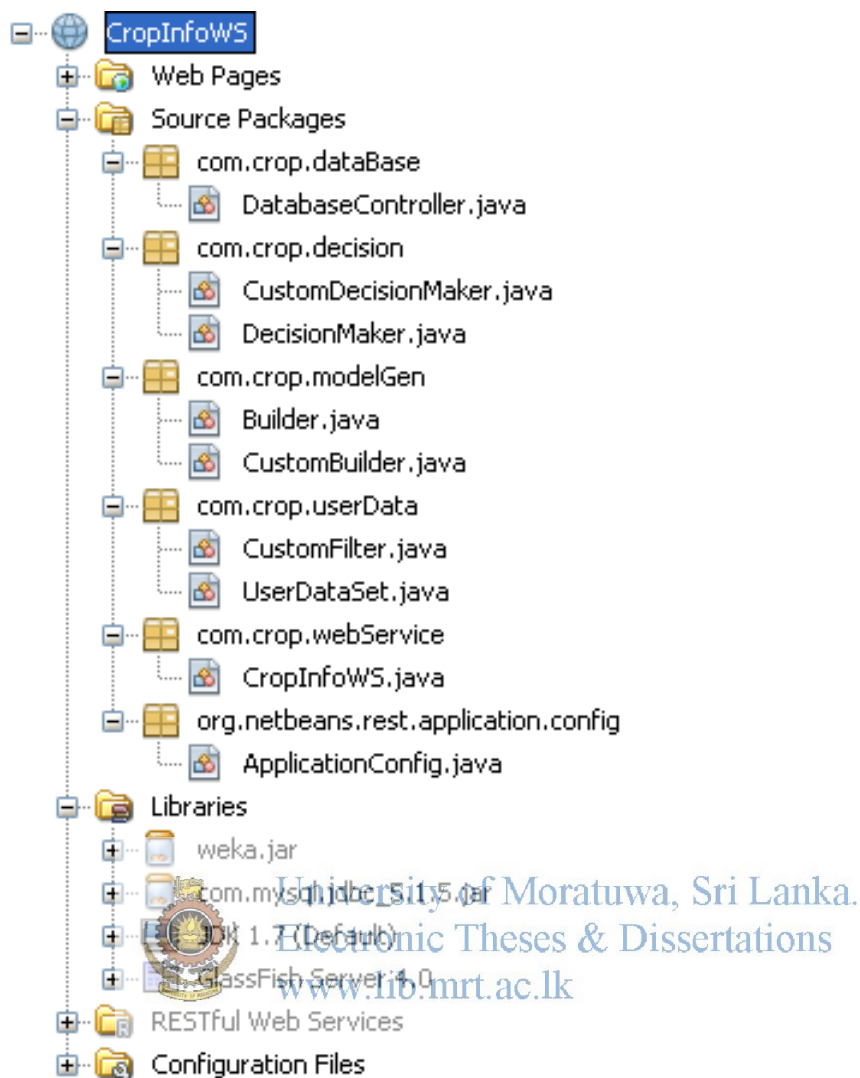
#	Name	Type	Collation	Attributes	Null	Default	Extra
<input type="checkbox"/> 1	<u>id</u>	int(11)			No	None	AUTO_INCREMENT
<input type="checkbox"/> 2	<u>name</u>	varchar(255)	utf8_general_ci		No		
<input type="checkbox"/> 3	<u>username</u>	varchar(150)	utf8_general_ci		No		
<input type="checkbox"/> 4	<u>email</u>	varchar(100)	utf8_general_ci		No		
<input type="checkbox"/> 5	<u>password</u>	varchar(100)	utf8_general_ci		No		
<input type="checkbox"/> 6	<u>block</u>	tinyint(4)			No	0	
<input type="checkbox"/> 7	<u>sendEmail</u>	tinyint(4)			Yes	0	
<input type="checkbox"/> 8	<u>registerDate</u>	datetime			No	0000-00-00 00:00:00	
<input type="checkbox"/> 9	<u>lastvisitDate</u>	datetime			No	0000-00-00 00:00:00	
<input type="checkbox"/> 10	<u>activation</u>	varchar(100)	utf8_general_ci		No		
<input type="checkbox"/> 11	<u>params</u>	text	utf8_general_ci		No	None	
<input type="checkbox"/> 12	<u>lastResetTime</u>	datetime			No	0000-00-00 00:00:00	
<input type="checkbox"/> 13	<u>resetCount</u>	int(11)			No	0	
<input type="checkbox"/> 14	<u>otpKey</u>	varchar(1000)	utf8_general_ci		No		
<input type="checkbox"/> 15	<u>otep</u>	varchar(1000)	utf8_general_ci		No		
<input type="checkbox"/> 16	<u>requireReset</u>	tinyint(4)			No	0	

## Java Classes and Methods

The project mainly consists of a web service written in Java and the following are the main classes in the project and their methods. The figure below shows an instance of the NetBeans IDE with the web service project (CropInfoWS) and the structure of the project and its packages.



The figure below shows the class and package hierarchy and the project resources of the web service in tree from.



## List of Java Classes

- |    |                          |   |
|----|--------------------------|---|
| 01 | ApplicationConfig.java   | Configuration settings of the Web service.  |
| 02 | DataBaseController.java  | Connect to the System Database(s) and make Database Instances and Connections for the use of other Classes and Methods. |
| 03 | DecisionMaker.java       | Returns a crop prediction Level based on user inputs and default classifier model.                                      |
| 04 | CustomDecisionMaker.java | Returns a crop prediction Level based on user inputs and user selected classifier model.                                |
| 05 | CustomFilter.java        | Creates a filtered instance of a given dataset(uploaded file). The filtering options are set inside the class           |

06	Builder.java	To create a model of a classifier
1	buildObj()	Builds a Bayes classifier for the default data file
07	CustomBuilder.java	To create a classifier model selected by the user
1	buildObj()	Builds a Custom classifier for the default data file
08	UserDataSet.java	Dynamically creates classifier models for a data file uploaded by the user
1	readDataFile()	Read the uploaded data file
2	simpleClassify()	Build Classifier Models
3	calculateAccuracy()	Calculate the accuracy of each model
4	Results()	Output the results for each model
09	CropInfoWS.java	Communicate with the web application through a RESTful Web Service
1	takeDecision()	Generate prediction from Default Classifier Model
2	CustomDecision()	Generate prediction from user selected dataset and its build Classifier Model
3	getDataSource()	Upload and use user input custom Dataset
4	getClassifierName()	Generate classifier for user selected Type
10	Resources and Libraries used	weka.jar ( weka libraries) Mysql_jdbc.jar ( JDBC drivers library)

## Web service Class

```
/*
 * The main web service providing the predictions
 * with connected DB
 */
package com.crop.webService;

import com.crop.dataBase.DatabaseController;
import com.crop.modelGen.Builder;
import com.crop.modelGen.CustomBuilder;
import com.crop.decision.DecisionMaker;
import com.crop.decision.CustomDecisionMaker;
import com.crop.userData.CustomFilter;
import com.crop.userData.UserDataSet;
import java.io.IOException;
import javax.ws.rs.core.Context;
import javax.ws.rs.core.UriInfo;
import javax.ws.rs.PathParam;
import javax.ws.rs.Path;
import javax.ws.rs.GET;
import javax.ws.rs.Produces;
import java.text.DateFormat;
import java.text.SimpleDateFormat;
import java.util.Date;

@Path("/cropinfo/root")
public class CropInfoWS {

    @Context
    private UriInfo context;

    public CropInfoWS() {
    }

    @GET
    @Produces("text/plain")
    @Path("/filter/{data}")
    // Method for filtering the provided Data Set
    public String getDataFiltered(@PathParam("data") String data) throws IOException,
    Exception {

        // copyright Code

    }
```



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```

@GET
@Produces("text/plain")
@Path("datasrc/{data}")
// Use the uploaded DataSet and Evaluate each classification model
public String getDataSource(@PathParam("data") String data) throws IOException,
Exception {

```

// copyright Code

```

}

```

```

@GET
@Produces("text/plain")
@Path("cremodel/{data}")
// Creates a new classifier model and Saves it in the disk for result prediction
public String createClassifierModel(@PathParam("data") String data) throws IOException,
Exception {

```

// copyright Code

```

}

```

```

@GET
@Produces("text/plain")
@Path("makedec/{data}")
// This Method retrieves the decision for submitted params
public String takeDecision(@PathParam("data") String data) throws IOException,
Exception {

```

// copyright Code

```

}

```

```

@GET
@Produces("text/plain")
@Path("custdec/{data}")
// This Method retrieves the decision for submitted params
public String takeCustDecision(@PathParam("data") String data) throws IOException,
Exception {

```

// copyright Code

```

}

```



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```
package com.crop.decision;

import java.io.BufferedReader;
import java.io.FileInputStream;
import java.io.InputStream;
import java.io.ObjectInput;
import java.io.ObjectInputStream;
import weka.classifiers.bayes.NaiveBayes;
import weka.core.Attribute;
import weka.core.FastVector;
import weka.core.Instance;
import weka.core.Instances;

/**
 *
 * @author Uditha
 */
public class DecisionMaker {
    private static final String SEPARATOR = "_";

    /**
     * This method takes the params submitted by the user
     * puts them in to a sample instance of the same data set and evaluates
     * the sample data set with the trained model of a given classifier
     */
    public static String makeDecision(String data){

// copyright Code

    }
```

```
package com.crop.modelGen;

import java.io.BufferedReader;
import java.io.FileOutputStream;
import java.io.FileReader;
import java.io.IOException;
import java.io.ObjectOutputStream;
import weka.classifiers.Classifier;
import weka.classifiers.bayes.NaiveBayes;
import weka.core.Instances;

/**
 *
```

```

* @author Uditha
*/
public class Builder {

    /*
    * This class is building a model for the given data file with a predetermined
    * classification algorithm eg. Bayes
    * and then writes the file as a javaObject file ( serialized model)
    */
    public static String buildObj (String s) throws IOException, Exception{

// copyright Code

    }
}

```

## Filter Class

```

package com.crop.userData;

import java.io.BufferedReader;
import java.io.FileOutputStream;
import java.io.FileReader;
import java.io.IOException;
import java.io.ObjectOutputStream;
import weka.core.Instances;
import weka.filters.Filter;
import weka.filters.unsupervised.attribute.Discretize;

/**
 *
 * @author Uditha
 */
public class CustomFilter {

    public static String filterData(String s) throws IOException, Exception{

// copyright Code

    }

}
}

```

## Page Structure of the Web Interface

### Home Page



## User Registration

The screenshot shows a web browser window with the URL `http://localhost/CPSTODAY/index.php/component/users/?view=registration`. The page title is "Forecasting Information System for Upcountry Vegetables". The navigation menu includes "Home", "Predictions", "About Project", "The System", and "Contact Us". A search bar is located on the right. The main content area is divided into three sections: "Useful Links" on the left, a registration form in the center, and "Farmer User Login" on the right. The registration form includes fields for Name, Username, Password, Confirm Password, Email Address, and Confirm email Address, all marked as required. A "Register" button is at the bottom of the form. The login section includes fields for Username and Password, a "Remember Me" checkbox, and a "Log in" button. Below the login section, there is a "People Online" section stating "We have one guest and no members online". The footer contains copyright information for 2015, mentions Joomla! and the GNU General Public License, and credits the Warp Theme Framework.

Forecasting Information System for Upcountry Vegetables

Home Predictions About Project The System Contact Us

Useful Links

Home  
Predictions  
About Project  
The System  
Contact Us

\* Required field

Name: \*

Username: \*

Password: \*

Confirm Password: \*

Email Address: \*

Confirm email Address: \*

Register

Farmer User Login

Username

Password

Remember Me ☒

Log in

Forgot your password?  
Forgot your username?  
Create an account

People Online

We have one guest and no members online

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Powered by Warp Theme Framework

## Default Prediction Page

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The screenshot shows a web browser window with the URL `http://localhost/CPSTODAY/index.php/predictions/default-predictor`. The page title is "Default Predictor". The navigation menu is the same as the registration page. The main content area is divided into three sections: "Useful Links" on the left, a prediction form in the center, and "Farmer User Login" on the right. The prediction form includes dropdown menus for District, Age Group, Received Training, Use of Fertilizer, Plot Type, Slope Type, Soil Erosion Intensity, Season, Cultivated Crop, and Land Extent. A "Submit" button is at the bottom of the form. The login section is identical to the registration page. The footer is the same as the registration page.

Default Predictor

Useful Links

Home  
Predictions  
Default Predictor  
About Project  
The System  
Contact Us

District \*

Male

Age Group \*

Below 35

Received Training \*

Yes

Use of Fertilizer \*

No

Plot Type \*

High Land

Slope Type \*

Flat Land

Soil Erosion Intensity \*

Excess

Season \*

Wata

Cultivated Crop \*

Potatoes

Land Extent \*

Less than 0.25 Acre

Submit

Farmer User Login

Username

Password

Remember Me ☒

Log in

Forgot your password?  
Forgot your username?  
Create an account

People Online

We have one guest and no members online

## Custom File Uploads Page



# FiS

## Forecasting Information System for Upcountry Vegetables

[Home](#) [Predictions](#) [About Project](#) [The System](#) [Contact Us](#)

### Useful Links

- [Home](#)
- [Predictions](#)
- [Upload Data](#)
- [Select Model](#)
- [Custom Predictor](#)
- [About Project](#)
- [The System](#)
- [Contact Us](#)

### Upload File \*

No file selected.

Please select an ".arff" file

### Data Filtering \*

☐ This is a Filtered Data Set , Use This

☐ This is a raw Data Set , Use This

☐ This is a raw Data Set , Filter This

### Farmer User Login

Hi uditha,

### People Online

We have no guests and one member online

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## Classifier Selection Page

### Useful Links

- [Home](#)
- [Predictions](#)
- [Upload Data](#)
- [Select Model](#)
- [Custom Predictor](#)
- [About Project](#)
- [The System](#)
- [Contact Us](#)

### The Evaluation results for your Data File :

NaiveBayes: 53.71%

J48: 97.68%

SMO: 45.71%

IBk: 92.11%

### Select Classifier \*

Please Select Classification Model

### Farmer User Login

Hi uditha,

### People Online

We have no guests and one member online

## Prediction Data Input Page

Useful Links

[Home](#)  
[Predictions](#)  
[Upload Data](#)  
[Select Model](#)  
[Custom Predictor](#)  
[Result](#)  
[About Project](#)  
[The System](#)  
[Contact Us](#)

Age Group \*

Below 35

District \*

Matale

Received Training \*

Yes

Use of Fertilizer \*

No

Plot Type \*

High Land

Slope Type

Flat Land

Soil Erosion Intensity \*

Excess

Season \*

Maha

Cultivated Crop \*

Potatoes

Land Extent \*

Less than 0.25 Acre

Select Model to Classify

result

Submit

Farmer User Login

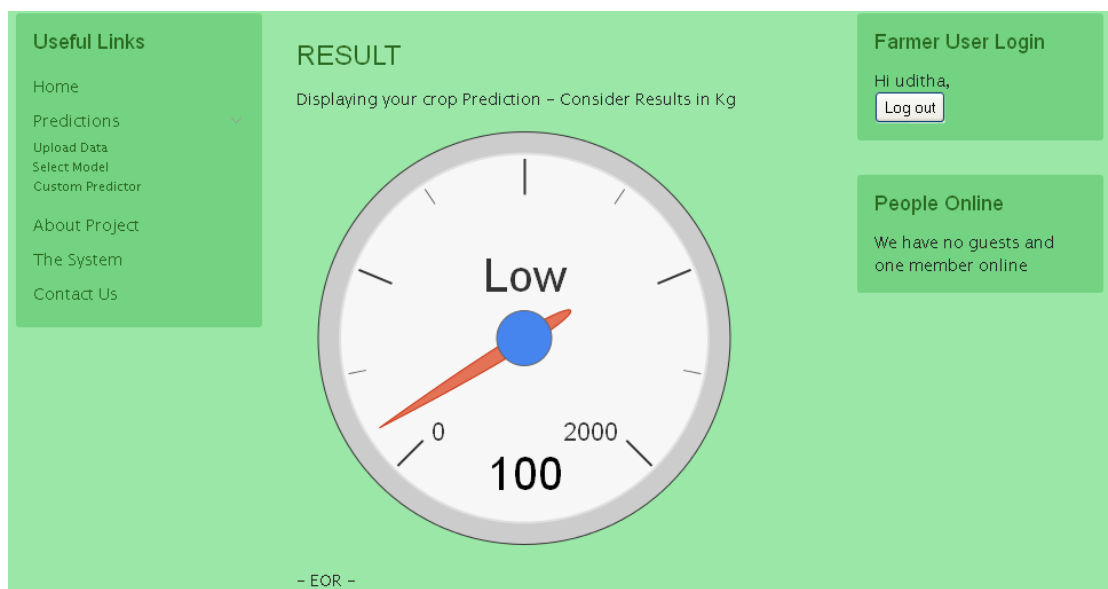
Hi uditha,

Log out

People Online

We have no guests and one member online

## Results Page



## Joomla Admin Panels

Menu

Content

Components

Extensions

Help

✔ Publish

✖ Unpublish

✔ Check In

🗑 Trash

★ Home

↺ Rebuild

📦 Batch

🔍 Help

	Status	Title	Home	Access	Language	ID
☰	✔	<a href="#">Home</a> (Alias: homepage) Articles > Category Blog	★	Public	All	101
☰	✔	<a href="#">Predictions</a> (Alias: predictions) Text Separator		Public	All	129
☰	✔	— <a href="#">Upload Data</a> (Alias: upload-data) — ChronoForms5 > ChronoForms5 form	☆	Registered	All	130
☰	✔	— <a href="#">Select Model</a> (Alias: select-model) — ChronoForms5 > ChronoForms5 form	☆	Registered	All	131
☰	✔	— <a href="#">Custom Predictor</a> (Alias: custom-predictor) — ChronoForms5 > ChronoForms5 form	☆	Registered	All	133
☰	✔	— <a href="#">Default Predictor</a> (Alias: default-predictor) — ChronoForms5 > ChronoForms5 form	☆	Guest	All	132
☰	✔	— <a href="#">Result</a> (Alias: result) — Plotlot > Simple List of Charts	☆	Public	All	125
☰	✔	<a href="#">About Project</a> (Alias: project-scope) Articles > Category Blog	☆	Public	All	115


[Home](#)
[Content](#)
[Components](#)
[Extensions](#)
[Settings](#)
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Setup

Locales

DB Viewer

Styles

Validation

On load

HTML (Render Form) 0

Edit Drag Delete

Page: 1

Submit event: submit

Default action URL ? ✓

AJAX: 1

On submit

Custom Code 2 run

Edit Drag Delete

Add new event