Farmers Buddy Java Project

Farmers Buddy is a open discussion portal developed using Java programming language with Oracle as the system database. This project is useful for farmers and agricultural students to obtain information regarding various crops, the fertilizers usage for these crops, the soil condition in which these crops yield more, and the suitable climatic and environmental condition for these crops.

The complete project materials including Java source code, project documentation (doc), reports, screenshots, and paper presentation (ppt) of Farmers Buddy can be downloaded from the link below. For executing this project, you need to install oracle 10g and Java software, Tomcat server.

Presented below is a brief introduction/abstract of this project. Refer the project report in the download file for detailed information regarding project analysis, requirements analysis, specific requirements, system requirements, and system design (data flow diagrams, behavioral diagrams, modules, system evolution & testing).

Farmers Buddy Project Abstract:

Farmers Buddy is implemented on a pure Java2EE architecture with Oracle database. It is a web-based open discussion portal providing information and solutions about crops, fertilizers, soil, and climate to small farmers and agricultural students.

The portal provides soil analysis for various regions and suggestions based on the soil condition and climate. It explores questions such as: "which fertilizers to use where and in what quantity", "which crop, vegetable, or herb should be grown where and in which season", etc.

Additionally, farmers buddy helps farmers and agricultural students in making decisions on the current market and best prices of crops and herbs. Information regarding major crop markets and the prevalent best price for the crops are published on a regular basis.

Farmers buddy also features training and online query handling for all users. Training can be request by students and general public; similarly, queries can posted on the portal via mails. Queries can be forwarded to a particular officer, and information pages of the system are dynamic so that agricultural officers can change it when needed.

Existing System:

The existing system is very traditional as the data management is very complex. It is difficult to provide sufficient information regarding agricultural products, soils, fertilizers, market details, and climate in a reliable way.

The drawbacks of existing system are:

- No category-wise classification of agricultural products
- Insecurity
- Insufficiency in querying details
- Periodic report generation is a very tedious task as it takes a lot of time.

Proposed System:

The proposed system is built in view of database integration approach; it tries to automate the entire process in an effective, simple, and reliable way. The **key features** are outlined below:

- Reduces complexity in data management.
- Category-wise classification of information regarding agricultural products, soils, fertilizers, and market details.
- Different access levels for different users from security point of view
- Rich user interface
- Reports are generated dynamically on a periodic basis.
- Querying details is very efficient.
- User queries and answers are maintained.
- Economical, user friendly, and effective.

Users of the System:
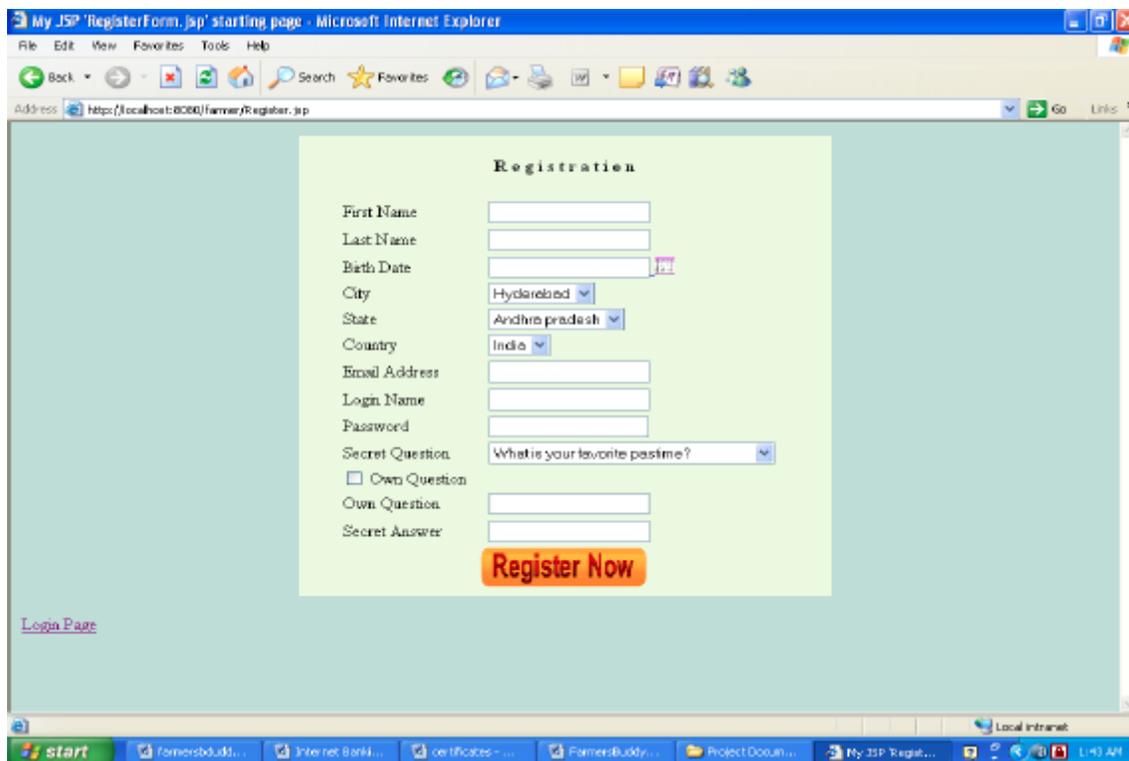
- Farmers and agricultural students
- General public
- Administrator
- Agricultural officers

Modules Overview:

Farmers Buddy is a six-modules project. (Detailed information about these modules are available in the project report.)

1. User Module
2. Soils and Fertilizers
3. Crop Details
4. Market Details
5. Reports
6. Mails

Project Screenshots:

Registration Page

Agriculture Industry - Agricultural Products ,Agricultural Product Manufacturers,Exporters,Suppl - Microsoft Internet Explorer
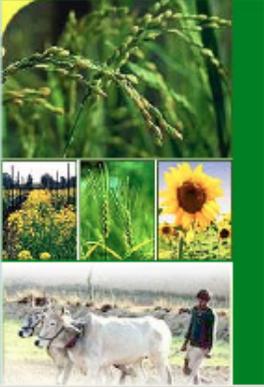
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Address   http://localhost:8080/farmer/UViewQueries.jsp   Go   Links

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HOME   TRAININGS▾   QUERIES▾

The Posted Queries are

Q.which fertilizer would be useful for black soil? 2010-03-14

Q.which fertiliser is used for abundant yield of tomato crops? 2010-03-14

Q.what are the climatic conditions for better growth of rubber? 2010-03-14

Q.In which area, the crop jowar is more available? 2010-03-14

Q.which crops grown more in black soil? 2010-03-14

Q.In which soil the crop potato gives better yield? 2010-03-14

Q.During summmer which crops gives more yield? 2010-03-14

Q.During winter which crops gives better yield? 2010-03-14

Q.What is the use of nitrogen? 2010-03-14

Q.which crops gives better yield in red soil? 2010-03-14

Q.Which crops grown more in alluvial soil? 2010-03-14

Q.what are the horticultural crop-flowers? 2010-03-14

Q.what are the medicinal and aromatic plants? 2010-03-14

Q.which commodity gives more profit? 2010-03-14

Q.what are the various crops and herbs grown in sandy soil? 2010-03-14

Q.what are the horticultural crop based fruits? 2010-03-14

Local intranet

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Queries

Agriculture Industry - Agricultural Products ,Agricultural Product Manufacturers,Exporters,Suppl - Microsoft Internet Explorer

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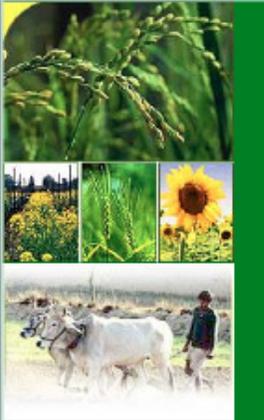
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Farmers Buddy

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HOME   SOIL▾   CROPS▾   FERTILIZERS▾   MARKET▾   REPORTS▾   MAILS▾   SECURITY▾   LOGOUT

ADD FERTILIZER INFORMATION

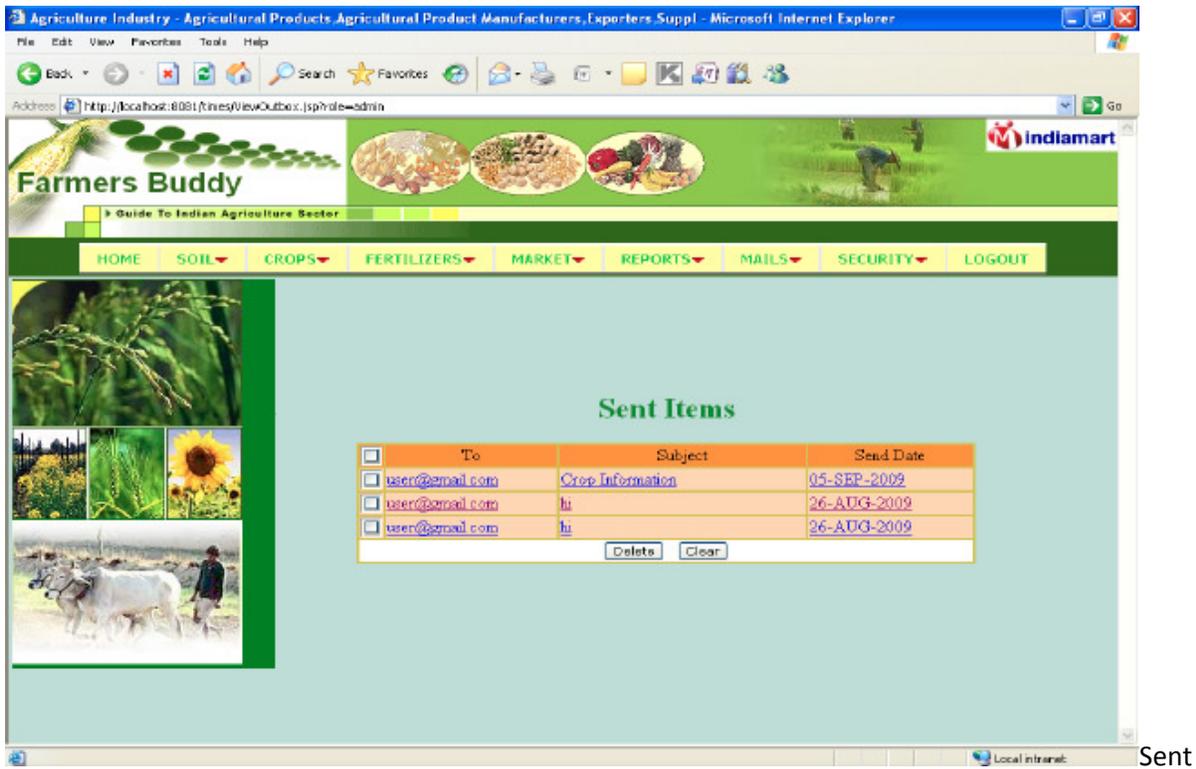|	
Soil Name	coastalsoil
Type	Crop
CropName	maize
Nitrogen(N)	3.4
Phosporous(P2O5)	5.7
CoffeeCreamer(K2O)	6.78
Use Fertilizer for Heactor	2
Cost of Fertilizer	456.67
Use Fertilizer for Year	667.89
Use Fertilizer for State	2
Use Fertilizer for Crops	4

send clear

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Fertilizer Information

Sent Mails

System Configuration/Specification:

Technologies Used:

- UML
- Java script
- J2EE
- Servlets
- JSP
- HTML

Tools Used:

- Oracle 10G
- Tomcat 5.0
- Rational Rose Enterprise Edition
- EDRAW

Hardware Requirements:

- Processor   : Pentium IV
- Hard Disk   : 40GB
- RAM   : 512MB or more

Software Requirements:

- Operating System   : Windows XP/2003 or Linux
- User Interface   : HTML, CSS
- Client-side Scripting   : JavaScript
- Programming Language : Java
- Web Applications   : JDBC, Servlets, JSP
- Database   : Oracle 10g
- Server Deployment   : Tomcat 5.0

Conclusion:

The proposed farmers buddy java project provides an effective online platform where farmers and agricultural students can get information regarding various agricultural matters and get answers to their queries. The system has limitations in a sense that being a open discussion portal anyone can post anything which may mislead students and farmers.

User requirements keep on changing as the system is being used, and in this regard, farmers buddy is very flexible. Being based on object-oriented design, new features and modules can be added in to the system in future.