

# **SMILE FARM**

## **Software Requirement Specifications (SRS)**

Version 1.0

### **Industrial Training & Presentation (ECS791)**

**BACHELOR OF TECHNOLOGY (CSE)**

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SMILE FARM DEVELOPERS	13/08/2017	initial draft	1.0 draft 1
SMILE FARM DEVELOPERS		baseline following changes after inspection	1.0 approved

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## 1 Introduction

The SMILE FARM is a system that takes the latest information and knowledge inputs to the farmers so that they can improve their productivity and economic wellbeing by registering and addressing their issues on the designed community for effective communication and solutions.

### 1.1 Purpose

The purpose of this document is to define scope and requirements of an agricultural initiative “Smile-Farm”. It is a vision of extending e-revolution to farmers and cooperatives through a three-pronged strategy:

- a) Development of knowledge inputs and e-services of relevance to rural India.
- b) Evolve effective dissemination strategies to encourage active use of the facilities by farmers & cooperatives.
- c) The broad aim is to empower farmers and cooperatives through latest in information and communication technology.

### 1.2 Scope of the Work

“Smile-Farm” will provide a secure user-id/password based login mechanism to access its services. Once logged in to the community, the user (Administrator/Content Manager/Subject Matter Expert, SME/Farmer) can use the services to fulfill their requirements. Login will be a prerequisite to use Smile-Farm. Internal users will be provided user id/password pair separately.

Once user logs in, s/he can view the dashboard of farmer queries with status, Latest Tips and Advisories added by SMEs are displayed.

### 1.3 Definitions, Acronyms, and Abbreviations

Abbreviation	Description
SME	Subject Matter Expert

## 1.4 References

S#	Reference Details	Owner	Version	Date
1.	<a href="https://www.youtube.com/watch?v=xbtbo5sp9n8">https://www.youtube.com/watch?v=xbtbo5sp9n8</a>	360SMS		
2.	<a href="https://help.salesforce.com/">https://help.salesforce.com/</a>	Salesforce		
3.	<a href="https://trailhead.salesforce.com/en">https://trailhead.salesforce.com/en</a>	Trailhead, Salesforce		

## 2 Overall Description

Smile-Farm is a community that provides secure login mechanism to all its users to use services as per their requirements. Once logged in to the community, the user (Administrator/Content Manager/Subject Matter Expert, SME/Farmer) can use the services to fulfill their requirements. Login will be a prerequisite to use Smile-Farm. Internal users will be provided user id/password pair separately.

Once user logs in, s/he can view the dashboard of farmer queries with status, Latest Tips and Advisories added by SMEs are displayed.

### 2.1 Product Perspective

The main purpose of Smile Farm is to take the latest information and knowledge inputs to farmers so that they can improve their productivity and improve their economic well-being.

The system contains features such as data tracking system for administrator, query module for farmers, response module for SME as well as real time notifications via e-mail and SMS to its users.

The context diagram for the smile farm is as follows:

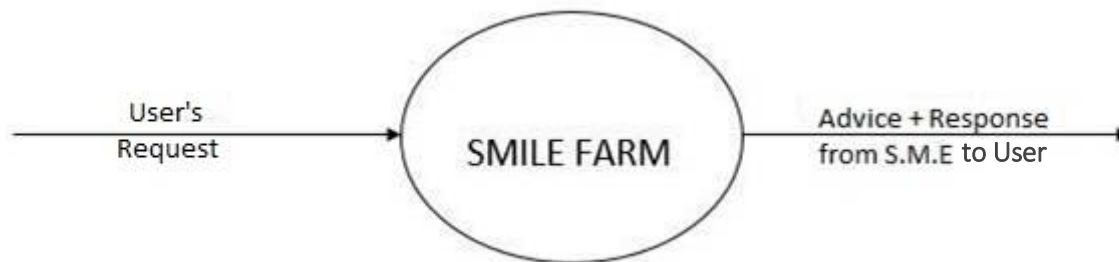


Fig. 1: 0-Level DFD

### 2.2 Product Functions

The main functions of the Smile-Farm are:

- Registering the farmers onto the smile farm to solve their queries.
- To provide the latest tips and advices for increasing farmer's productivity.
- To provide an interactive community to farmers for effective interaction.
- Provides SMS and E-Mail support to the users.
- Raising Awareness among the farmers.

## 2.3 User Characteristics

There are 4 types of users in the Smile-farm:

- **Administrator:** this is the user that has highest level of permission.  
He can:
  - Upload the data in bulk into the Smile Farm either by ApexDataLoader or by manual insertion.
  - View/Add/Delete/Edit all the data present in the Smile Farm System.
  - Can track how many records have been inserted/updated using the Smile Farm Tracking System designed in the dashboard.
  - Generate Reports whenever required.
  - Interact with all the other users using the Chatter Module in the Smile Farm.
- **Content Manager:** these are the managers of all the data present in the Smile Farm.  
They can:
  - View/Edit the data present in the Smile Farm.
  - Interact with all the other users using the Chatter Module in the Smile Farm.
- **SME (SUBJECT MATTER EXPERT):** this is the group of people who are responsible for resolving the issues addressed and generated by the farmers.  
They can:
  - Post Tips and advices in the Smile Farm to keep the farmers updated and “aware”.
  - Solve all the pending queries as well as the new queries raised by the farmers.
  - Interact with all the other users using the Chatter Module in the Smile Farm.
- **Farmer:** this is the group of people for whom Smile Farm has been designed.  
They can:
  - Register themselves onto the Smile Farm to use its Services.
  - Raise query to get relevant and appropriate answers.
  - Get tips and advices from the SME for better practices of farming.
  - Interact with all the other users using the Chatter Module in the Smile Farm.
  - Get email alerts and SMS whenever their account is created and their query is resolved, respectively.

## 2.4 General Constraints

All the modules of the Smile Farm must operate as part of the Smile Farm Community. It must adhere to all the Smile Farm standards and constraints.

## 2.5 Assumptions and Dependencies

1. The system is ideally meant for farmers having mobiles for receiving SMS of the information they have subscribed to. For project scope, email id is being used for communicating.
2. The Project owner is familiar with Farming aids and initiatives taken by various organization for empowerment. They are eye openers from the technology point of view.

## 3 Specific Requirements

Smile Farm is an independent cloud community and it will have a navigation menu on the top consisting of tabs (modules) as per the access privileges specified to each user by the administrator.

- **Chatter:** this is the default landing page of each user when logged into the Smile Farm community. This module enables the user for interacting with each other effectively.
- **Dashboards:** this module is made available to both the administrator as well as the content manager. Dashboard module consists of the “Smile Farm Tracking System” to keep track of all the records present in the Smile Farm.
- **Master Modules:** this module is made available to both the administrator as well as the content manager. Master modules include specific modules such as State Master, Location Master, Category Master and SME master.
- **Category Modules:** this module is made available to both the administrator as well as the content manager. Category Modules include specific module such as SME category for the data entry.
- **Reports:** this module is visible to both the content manager as well as the administrator for creating and analyzing the prepared reports.
- **Query Module:** this module is only visible to the farmer for addressing their issues and posting their queries. All their queries are resolved by the SME via Resolved Queries/Pending Queries module.
- **Farmer Details Module:** this module is solely made available to the farmers and the SME for registering and responding to farmer’s queries respectively. This module can also be reached from the signup link in the Smile Farm community login page.



### 3.1 Farmer Registration Function

#### 3.1.1 Description

This function has been designed to register new farmers into the Smile Farm Community.

This function will be triggered when the person clicks on the signup link in the smile farm community login page.

#### 3.1.2 Inputs

The function requires input data such as Name, DOB, Gender, Phone Number, Email, Address, City, Aadhaar Card and all other personal information to register the person as a new farmer.

#### 3.1.3 Processing

All the provided inputs gets stored into the Smile Farm cloud database to be accessed later.

#### 3.1.4 Outputs

All the input data gets reflected in the Farmer Details Module after registering.

#### 3.1.5 Error Handling

Error Handling is governed by the help of the below mentioned test cases.

#### 3.1.6 Test Cases for Farmer Registration Function

Test Case ID	Test Title	Test Case Description	Pre-condition, if any	Expected Results
TC001	Data insertion	Providing the input data to the registration page for inserting all the data into the Smile Farm System.	None	Data inserted Successfully
TC002	Data visibility	The registered data should be visible in the Farmer Details Module	None	Data visible in the Farmer Details Module
TC003	Data Format	Stored data is in the designed format of the registration page	None	Stored Data is in the appropriate format.

### 3.2 E-Mail Notification Function

#### 3.2.1 Introduction

This function will ensure that the Emails are sent to the farmer on his email-id when they register themselves into the Smile farm and also when the SME responds to their raised queries.

#### 3.2.2 Inputs

The email-id must be provided by the farmer during the time of registration.

#### 3.2.3 Processing

Email notification function gets triggered as soon as the farmer registers himself into the smile farm community. The e-mail id provided at the time of registration is used as input to supply the notifications to the farmers.

#### 3.2.4 Outputs

Emails are received by the farmer as per the designed template.

#### 3.2.5 Error Handling

Error Handling is governed by the help of the below mentioned test cases.

#### 3.2.6 Test Cases for Email Notification Function

Test Case ID	Test Title	Test Case Description	Pre-condition, if any	Expected Results
TC004	Email Received after registration	The email should be received by the farmer on his registered email-id after signing up on the smile farm.	Email address required as input while filling the sign-up form.	Email Received.
TC005	Email Received when SME replies to farmer's query.	An email should be received by the farmer on his registered email id as soon as the SME responds to his/her query.	Email address required as input while filling the sign-up form.	Email Received.

### 3.3 Design Constraints

None.

## Appendix A

### Data Flow Diagram (DFD)

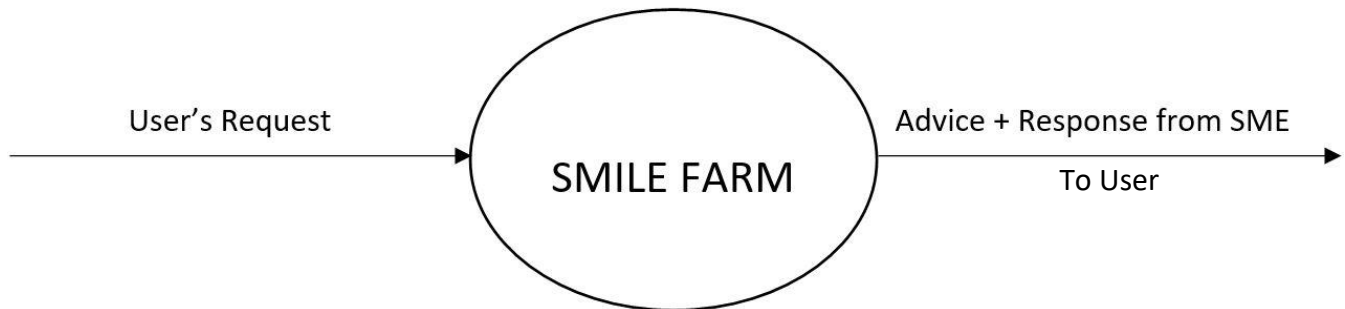


Fig. 2: 0-Level DFD

## Appendix B

### Entity-Relationship Diagram (ERD)

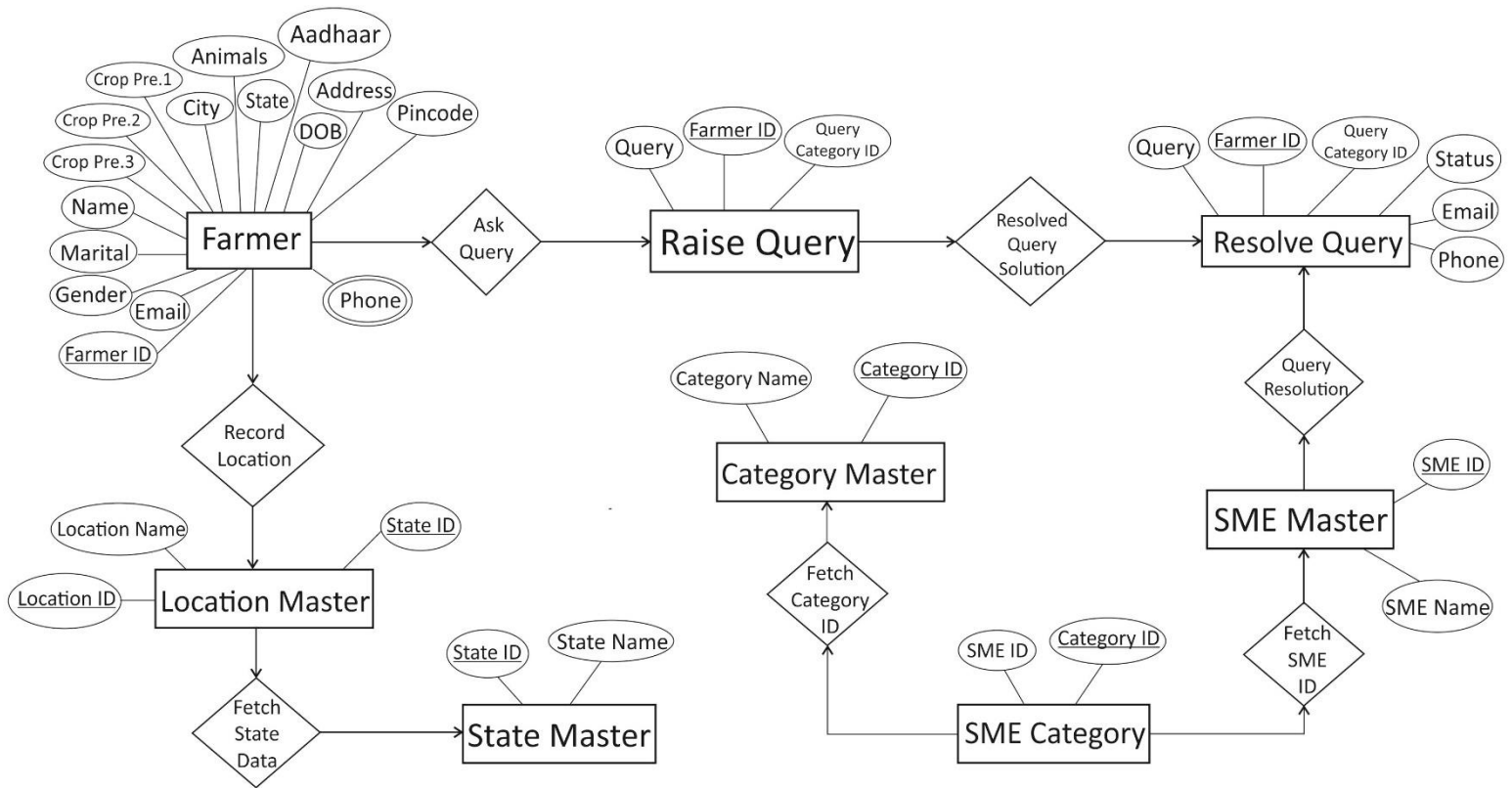


Fig. 3: ERD

## Appendix C

### Use-Case Diagram (UCD)

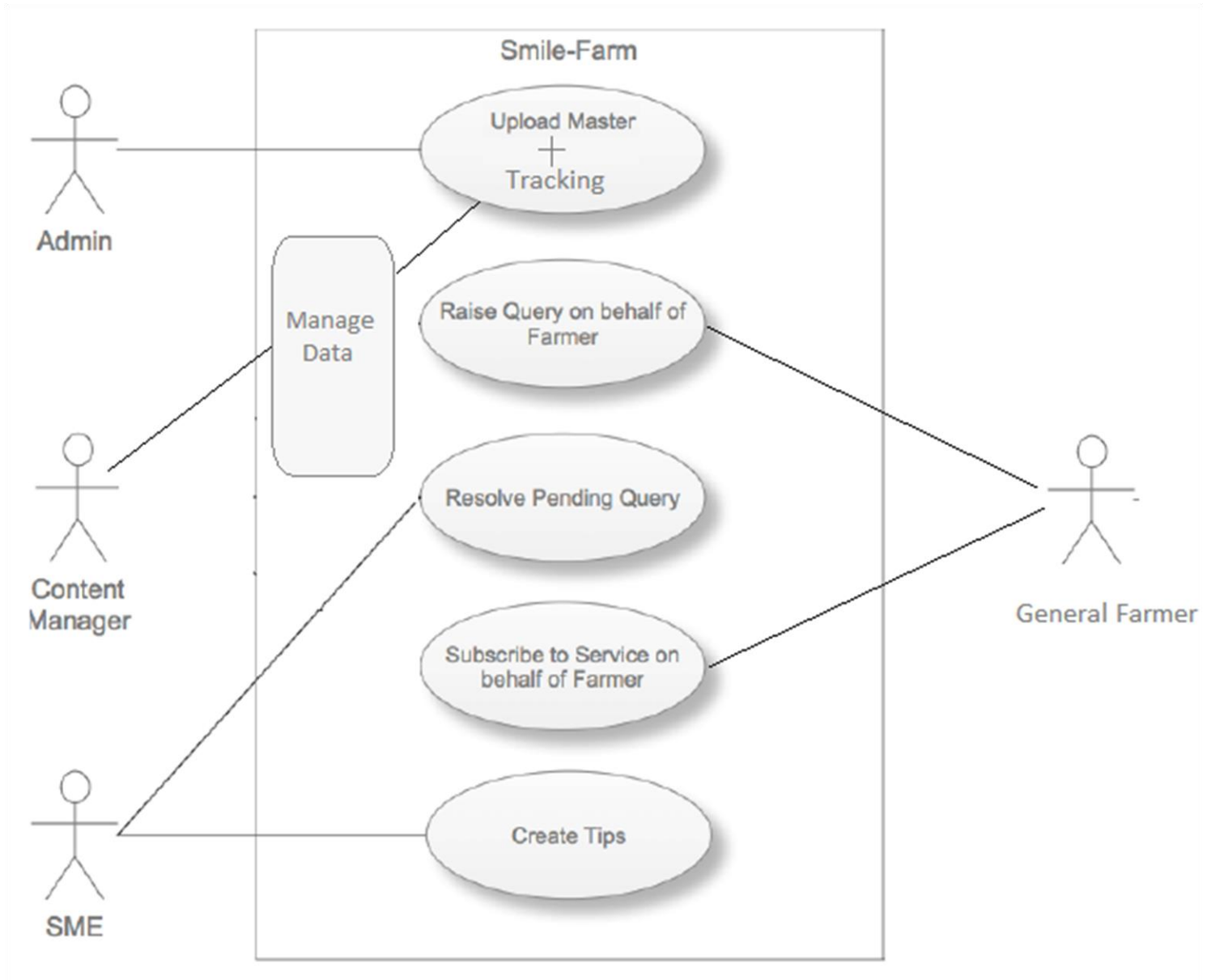


Fig. 4: UCD

## Appendix D

### Data Dictionary (DD)

#### State Master Table:

Fields	Data type	Description
State ID	NUMBER	It shows State ID
State Name	TEXT	It shows State Name

#### Location Master Table:

Fields	Data type	Description
Location ID	NUMBER	It shows Location ID
Location Name	TEXT	It shows Location Name
State ID	NUMBER	It shows State ID

#### Category Master Table:

Fields	Data type	Description
Category ID	NUMBER	It shows Category ID
Category Name	TEXT	It shows Category Name

#### SME Master Table:

Fields	Data type	Description
SME ID	NUMBER	It shows SME ID
SME Name	TEXT	It shows SME Name

**SME Category Table:**

Fields	Data type	Description
SME ID	NUMBER	It shows SME ID
Category ID	NUMBER	It shows Category ID

**Raise Query Table:**

Fields	Data type	Description
Farmer ID	NUMBER	It shows Farmer ID
Query Category ID	NUMBER	It shows Query Category ID
Query	TEXT	It shows Query

**Resolve Queries /Pending Queries Table:**

Fields	Data type	Description
Farmer ID	NUMBER	It shows Farmer
Phone Number	NUMBER	It shows Phone Number
Status	TEXT	It shows Status
Email	TEXT	It shows Email
Query ID	NUMBER	It shows Query ID
Query	TEXT	It shows Query
Solution	TEXT	It shows Solution

**Farmer Detail Table:**

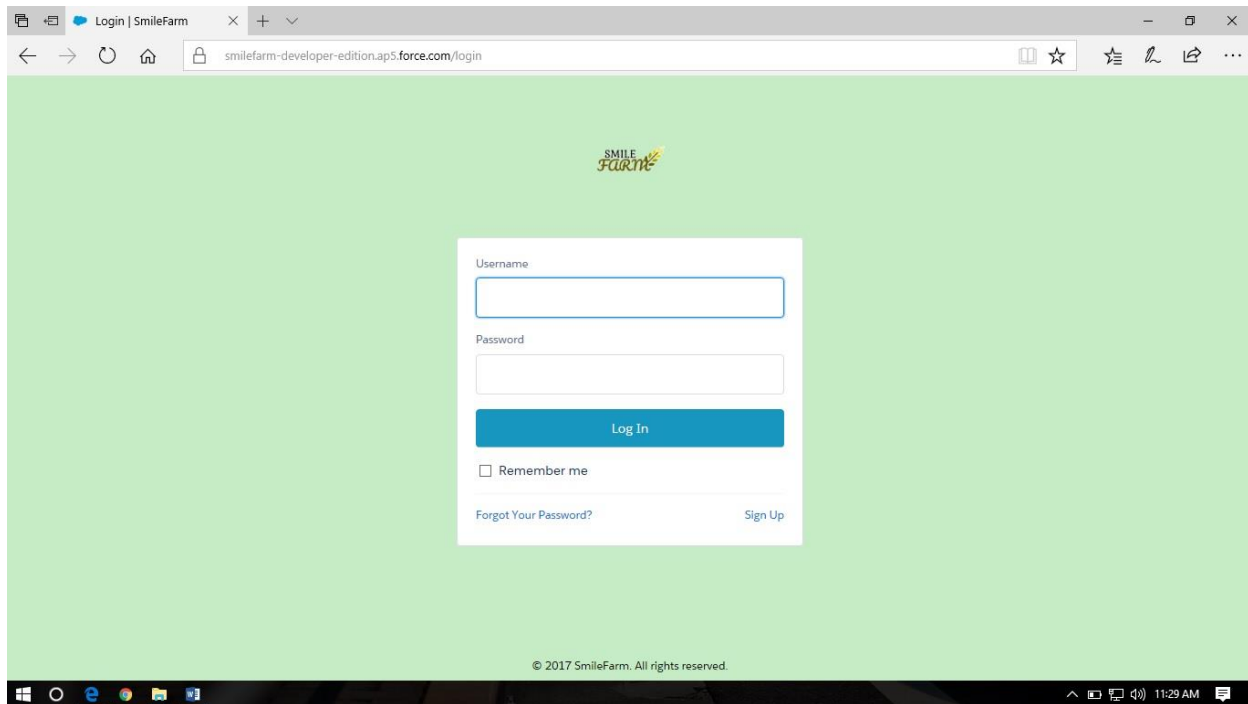
<b>Fields</b>	<b>Data type</b>	<b>Description</b>
Name	TEXT	It shows Name
Date of Birth	NUMBER	It shows Date of Birth
Gender	TEXT	It shows Gender
Marital Status	TEXT	It shows Marital Status
Phone	NUMBER	It shows Phone
Email	TEXT	It shows Email
Aadhaar Card	NUMBER	It shows Aadhaar Card
Address	TEXT	It shows Address
City	TEXT	It shows City
Pin code	NUMBER	It shows Pin code
States	TEXT	It shows States
Animals	TEXT	It shows Animals
Crop Preference 1	TEXT	It shows Crop Preference 1
Crop Preference 2	TEXT	It shows Crop Preference 2
Crop Preference 3	TEXT	It shows Crop Preference 3



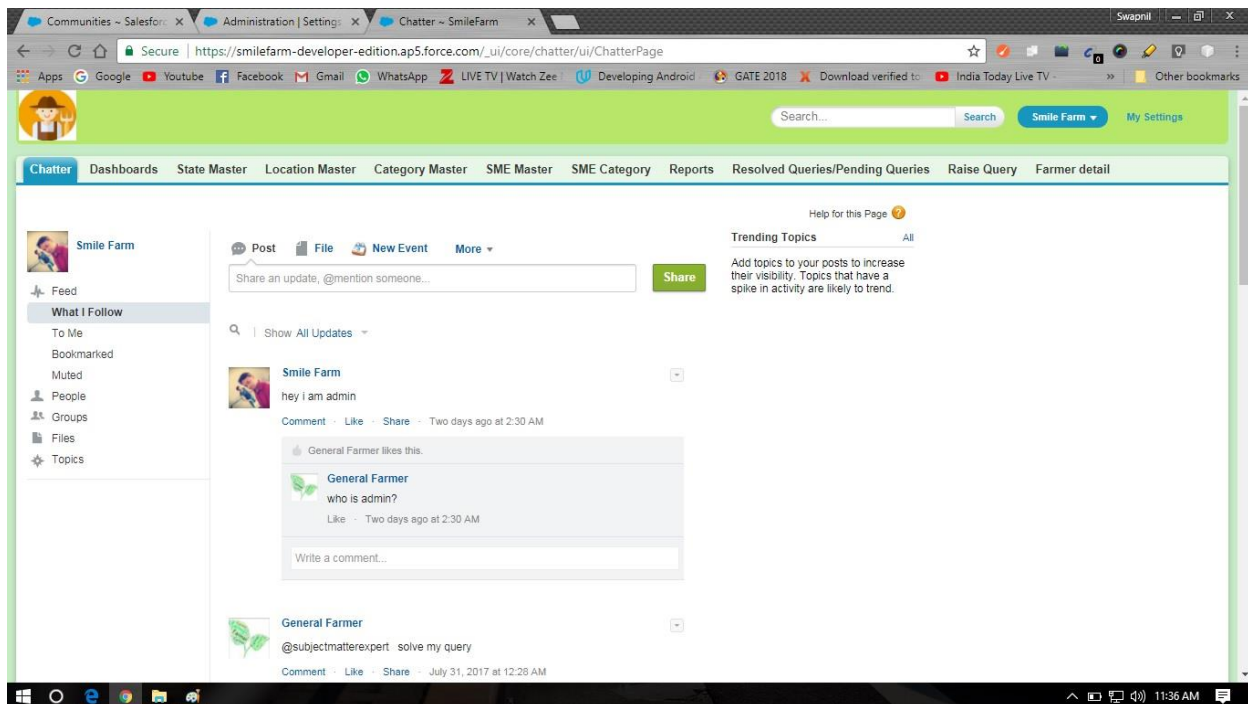
# Appendix E

## Screen Shots

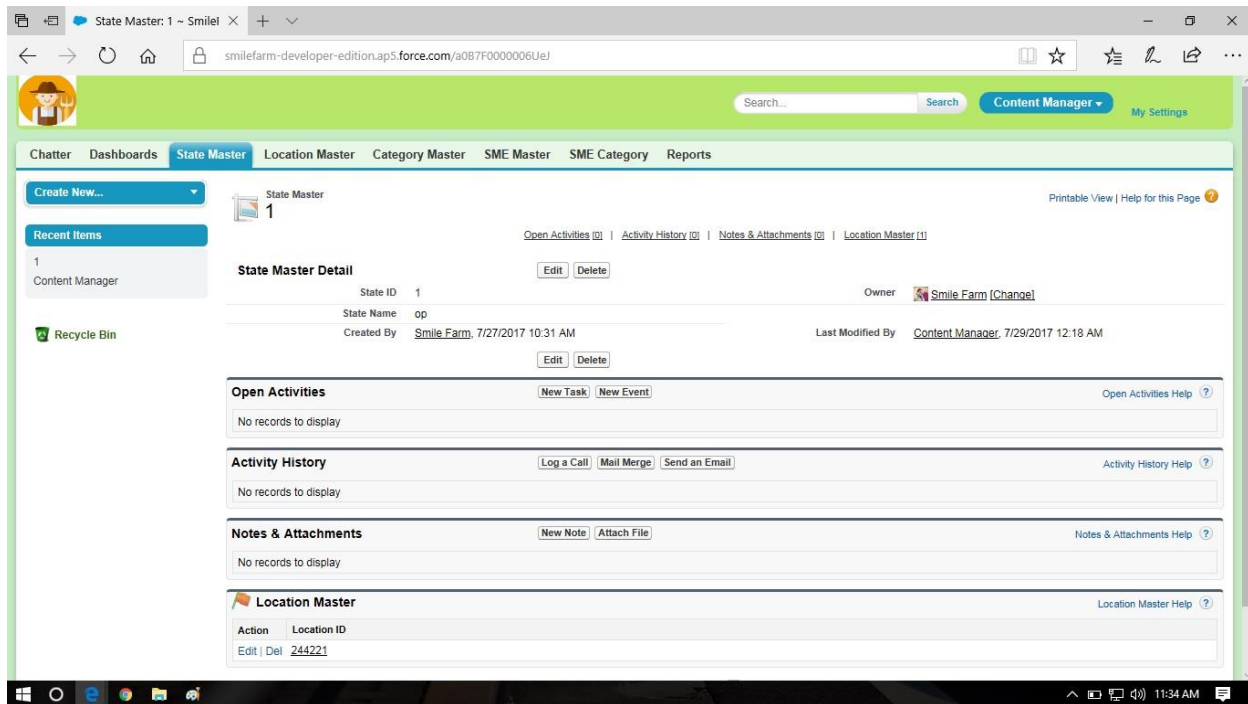
### Login Page:



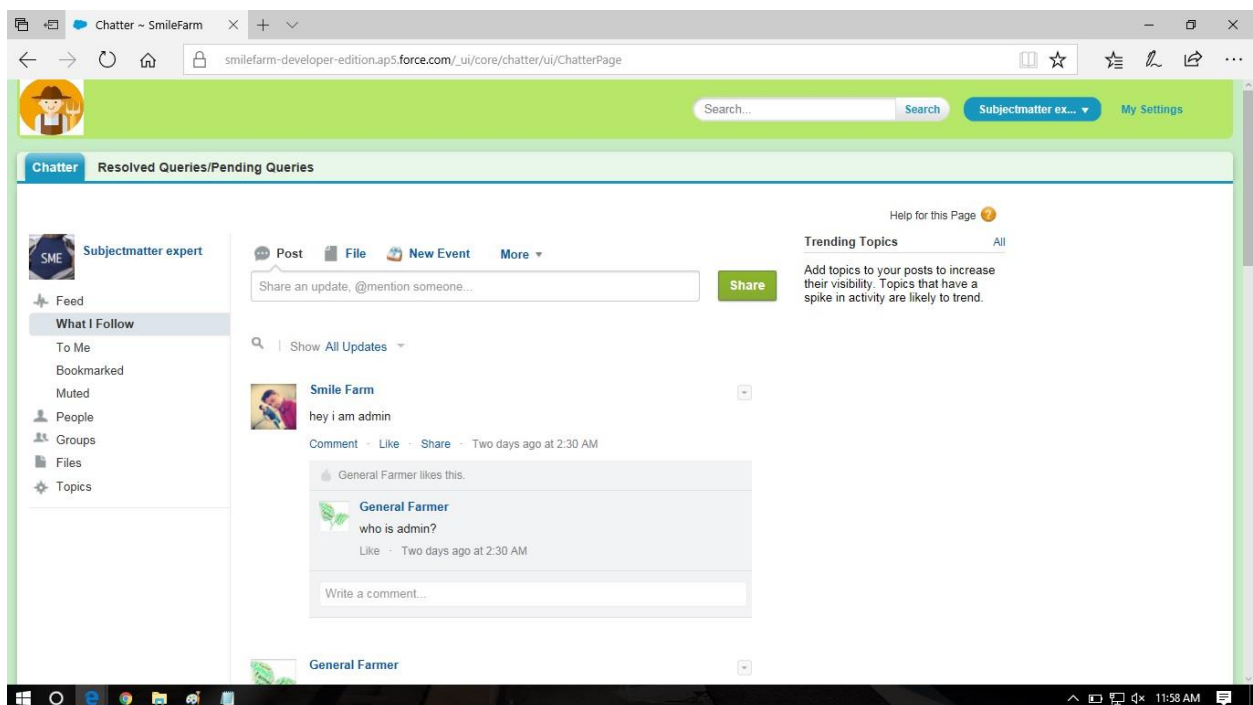
### Admin Chatter Page:



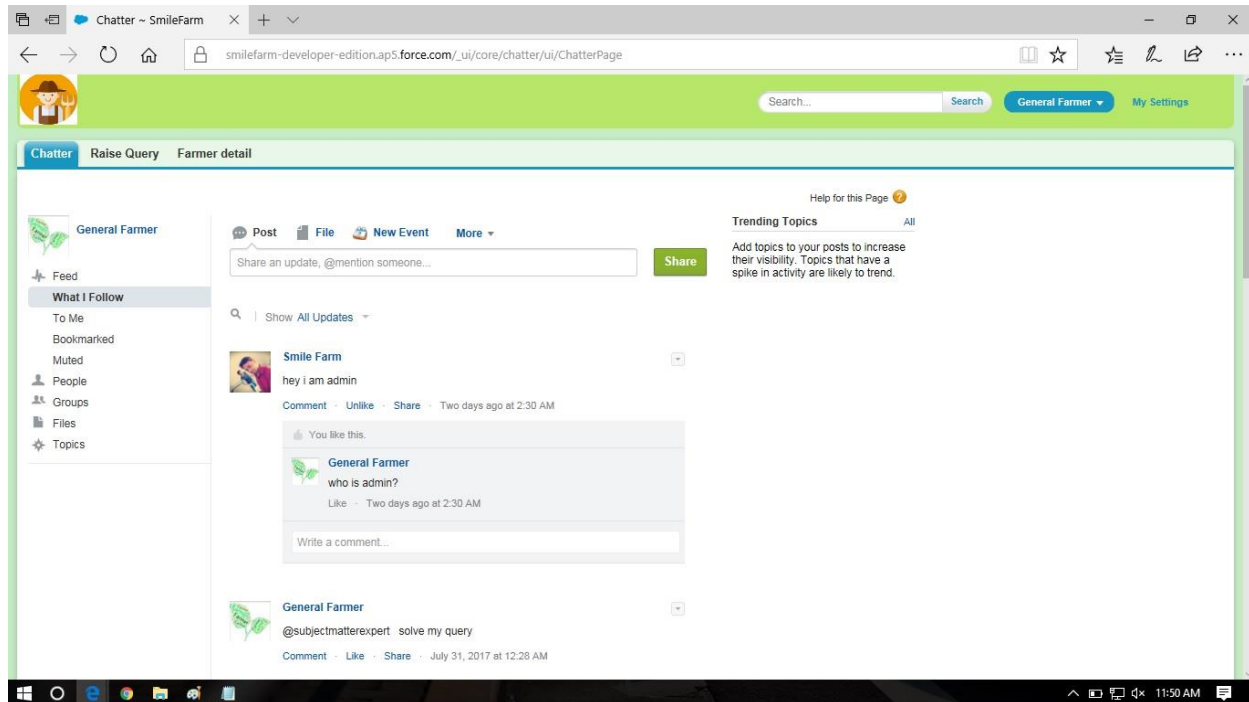
## Content Manager Chatter Page:



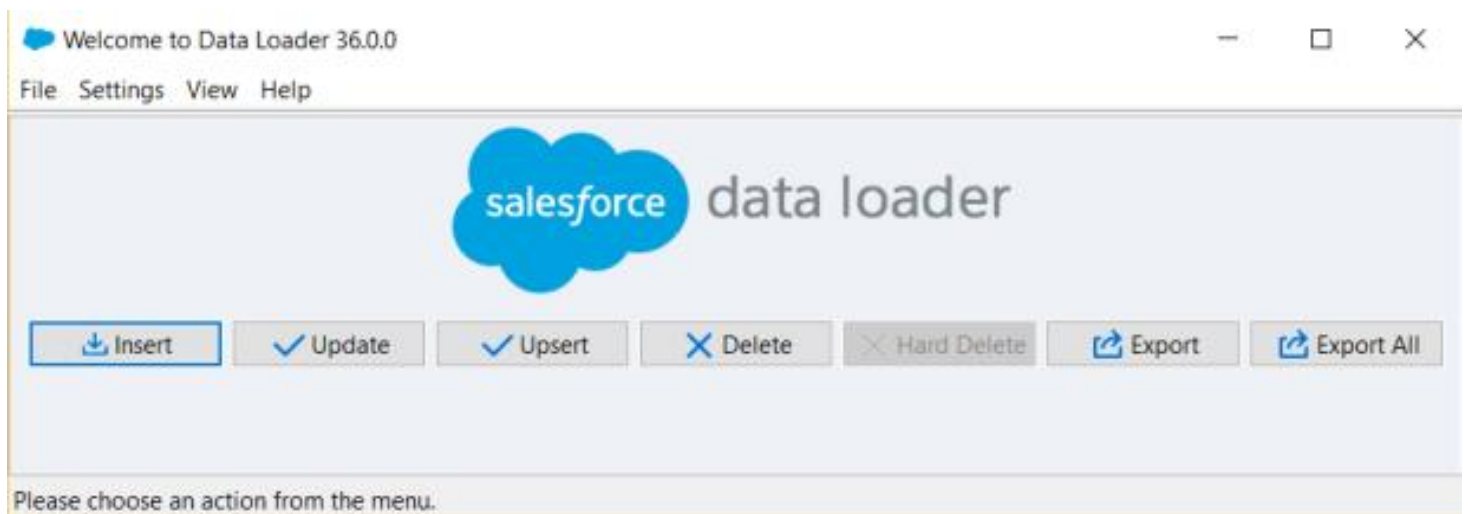
## Subject Matter Expert(SME) Chatter Page:



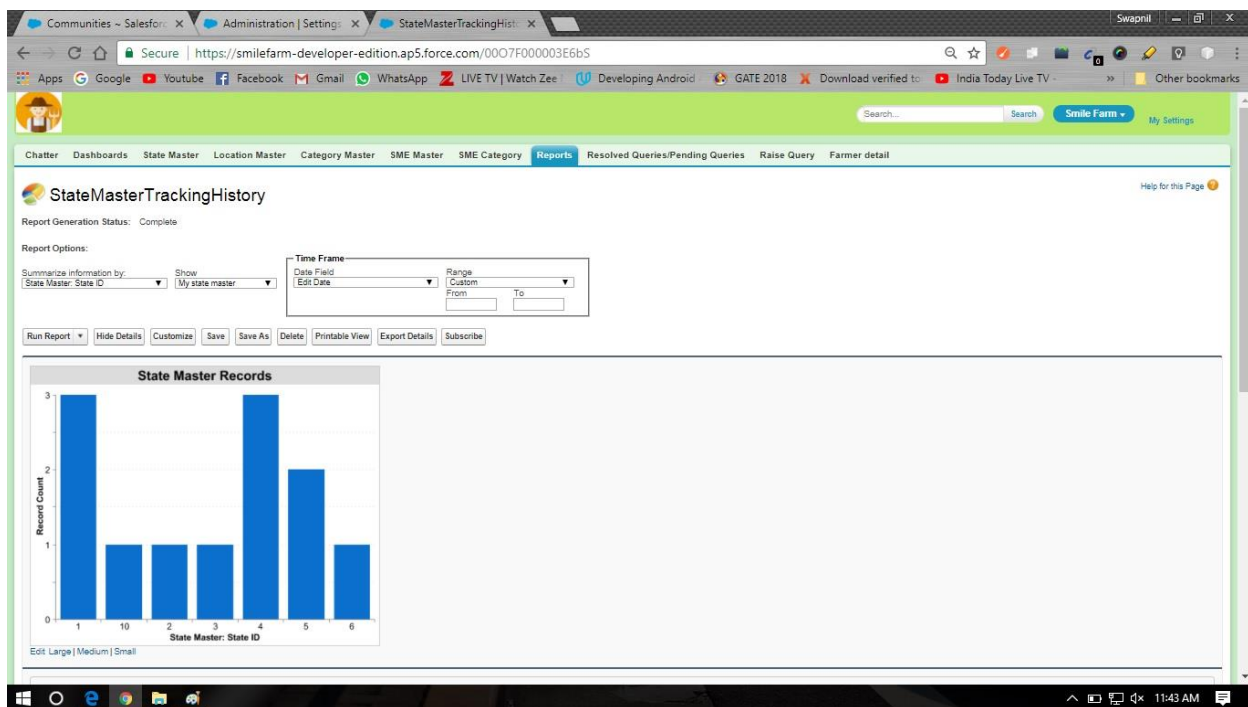
## General Farmer Chatter Page:



## Apex Data Loader :



## Admin Report Dashboard Page: 1



## Admin Report Dashboard Page: 2

Grouped By: State Master: State ID  
Sorted By: State Master: State ID

Edited By	State Master: ID	State Name	Edit Date	Field / Event	Old Value	New Value	State Master: Owner Name
Content Manager	a087F0000000UeJ	op	7/29/2017 12:18 AM	State Name	UP	op	Smile Farm
Smile Farm	a087F0000000UeJ	op	7/28/2017 3:28 AM	State Name	UttarPradesh	UP	Smile Farm
Smile Farm	a087F0000000UeJ	op	7/27/2017 10:31 AM	Created	-	-	Smile Farm
State Master: State ID: 10 (1 record)							
Smile Farm	a087F0000000V3y	agld	7/28/2017 10:11 PM	Created	-	-	Smile Farm
State Master: State ID: 2 (1 record)							
Smile Farm	a087F0000000UeQ	Andhra Pradesh	7/27/2017 10:51 AM	Created	-	-	Smile Farm
State Master: State ID: 3 (1 record)							
Smile Farm	a087F0000000VBx	MP	7/28/2017 3:27 AM	Created	-	-	Smile Farm
State Master: State ID: 4 (3 records)							
Smile Farm	a087F0000000VE3	gi	7/28/2017 6:03 AM	Created	-	-	Smile Farm
Smile Farm	a087F0000000VCH	swanil	7/28/2017 3:42 AM	State Name	Bengal	swanil	Smile Farm
Smile Farm	a087F0000000VCH	swanil	7/28/2017 3:39 AM	Created	-	-	Smile Farm
State Master: State ID: 5 (2 records)							
Smile Farm	a087F0000000VCI	paras	7/28/2017 3:42 AM	State Name	Uttarakhand	paras	Smile Farm
Smile Farm	a087F0000000VCI	paras	7/28/2017 3:39 AM	Created	-	-	Smile Farm
State Master: State ID: 6 (1 record)							
Smile Farm	a087F0000000VED	ula	7/28/2017 6:08 AM	Created	-	-	Smile Farm
<b>Grand Totals (12 records)</b>							

Check rows to filter, then drill down by: --None-- [Drill Down](#)

Confidential Information - Do Not Distribute

## Farmer Form Page:

**Farmer detail Edit** [Save] [Save & New] [Cancel]

**Basic Information** ⓘ = Required Information

Name

Date of Birth

Gender

Marital Status

Phone

Email

Aadhaar Card

**Geographical Details**

Address

City

States

Pincode

**Other Information**

Animals

## Farmer Detail Page:

**Farmer detail** A-017 [Printable View] [Help for this Page]

Farmer detail History ⓘ | Open Activities ⓘ | Activity History ⓘ | Notes & Attachments ⓘ | Raise Query ⓘ

**Farmer detail Detail** [Send SMS]

**Basic Information**

Farmer ID A-017

Name Swapnil

Date of Birth 4/3/1996

Gender Male

Marital Status Unmarried

Phone +918871179151

Email swapnil.1ein95@gmail.com

Aadhaar Card 599,078,464,798

**Geographical Details**

Address Pinky Printers, Main Road

City Kareli

States Madhya Pradesh - Bhopal

Pincode 487,221

**Other Information**

Animals None

Crop Preference 1 Food Crops (Wheat, Maize, Rice, Millets and Pulses etc.)

Crop Preference 2 Cash Crops (Sugarcane, Tobacco, Cotton, Jute and Oilseeds etc.)

Crop Preference 3 Plantation Crops (Coffee, Coconut, Tea, and Rubber etc.)

Created By Smile Farm, 9/20/2017 11:11 PM

Last Modified By Smile Farm, 9/20/2017 11:11 PM

[Send SMS]

## Raise Query Page:

The screenshot shows the 'New Raise Query' page in the Smile Farm application. The page is titled 'New Raise Query' and includes a 'Raise Query Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. The 'Information' section contains fields for 'Farmer ID', 'Query Category Id', and 'Query'. A 'Recycle Bin' icon is visible at the bottom left. The page footer includes copyright information for 2000-2017 Salesforce.com, inc.

Communities - Salesforce | Administration | Settings | Raise Query Edit: New R... | Swapnil

Secure | https://smilefarm-developer-edition.ap5.force.com/a0G/e?retURL=%2Fa0G%2Fo

Apps | Google | Youtube | Facebook | Gmail | WhatsApp | LIVE TV | Watch Zee | Developing Android | GATE 2018 | Download verified to | India Today Live TV | Other bookmarks

Search... | Search | Smile Farm | My Settings

Chatter | Dashboards | State Master | Location Master | Category Master | SME Master | SME Category | Reports | Resolved Queries/Pending Queries | **Raise Query** | Farmer detail

Create New... | Recent Items | A-017 | A-004 | A-009 | Query-9 | Outgoing | imageedit\_1\_930... | SmileFarm Site Guest User | yhl.png | 1ed37fac-338f-4... | Smile Farm | Recycle Bin

Raise Query Edit | Save | Save & New | Cancel

Information | = Required Information

Farmer ID | Query Category Id | Query

Save | Save & New | Cancel

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11:46 AM

## Resolve Query/Pending Query Page:

The screenshot shows the 'New Resolved Queries/Pending Queries' page in the Smile Farm application. The page is titled 'New Resolved Queries/Pending Queries' and includes a 'Resolved Queries/Pending Queries Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. The 'Farmer Selection' section contains fields for 'Farmer ID', 'Phone Number', 'Status' (dropdown), and 'Email'. The 'Information' section contains fields for 'Query Id', 'Query', and 'Solution'. A 'Recycle Bin' icon is visible at the bottom left. The page footer includes copyright information for 2000-2017 Salesforce.com, inc.

Communities - Salesforce | Administration | Settings | Resolved Queries/Pending... | Swapnil

Secure | https://smilefarm-developer-edition.ap5.force.com/a0H/e?retURL=%2Fa0H%2Fo

Apps | Google | Youtube | Facebook | Gmail | WhatsApp | LIVE TV | Watch Zee | Developing Android | GATE 2018 | Download verified to | India Today Live TV | Other bookmarks

Search... | Search | Smile Farm | My Settings

Chatter | Dashboards | State Master | Location Master | Category Master | SME Master | SME Category | Reports | **Resolved Queries/Pending Queries** | Raise Query | Farmer detail

Create New... | Recent Items | A-017 | A-004 | A-009 | Query-9 | Outgoing | imageedit\_1\_930... | SmileFarm Site Guest User | yhl.png | 1ed37fac-338f-4... | Smile Farm | Recycle Bin

Resolved Queries/Pending Queries Edit | Save | Save & New | Cancel

Farmer Selection | = Required Information

Farmer ID | Phone Number | Status | Email

Information | Query Id | Query | Solution

Save | Save & New | Cancel

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11:45 AM



## Query Solution Page:

The screenshot shows the 'QuerySolution-19' page in the Smile Farm application. The page is titled 'Resolved Queries/Pending Queries' and includes a 'Create New...' button. A sidebar on the left lists 'Recent Items' including 'QuerySolution-19', 'QuerySolution-17', 'QuerySolution-18', 'QuerySolution-12', 'QuerySolution-11', 'QuerySolution-9', and 'QuerySolution-8'. The main content area displays the details for 'QuerySolution-19', including 'Farmer Selection' (Farmer ID: A-017, Phone Number: +919871179151, Status: Resolved, Email: swagnil.jain96@gmail.com), 'Resolved Queries/Pending Queries Name' (QuerySolution-19), 'Query Id' (Query-8), 'Query' (Why weeds are increase in my farm.), and 'Created By' (Subjectmatter expert, 9/20/2017 11:31 PM). The 'Solution' is 'We have to use the good pesticides.' and 'Last Modified By' is 'Subjectmatter expert, 9/20/2017 11:31 PM'. Below the details are sections for 'Open Activities' (No records to display) and 'Activity History' (No records to display). The page also includes a 'Notes & Attachments' section at the bottom.

## Admin Report Tab Page:

The screenshot shows the 'Reports & Dashboards' page in the Smile Farm application. The page is titled 'Reports & Dashboards' and includes a 'New Report...' button. A sidebar on the left lists 'All Folders' including 'Unfiled Public Reports', 'My Personal Custom Reports', '360 SMS APP Dashboards (Installed Package)', '360 SMS App Reports (Installed Package)', 'SmileFarm Dashboard', 'SmileFarm Reports', 'Account and Contact Reports', 'Opportunity Reports', 'Sales Reports', 'Lead Reports', 'Support Reports', 'Campaign Reports', 'Administrative Reports', 'Activity Reports', 'Product and Asset Reports', 'Call Center Reports', and 'File and Content Reports'. The main content area displays a table of 'All Folders' with columns for 'Action', 'Name', 'Folder', and 'Created By'. The table lists several folders, including 'Smile Farm Tracking System', 'StateMasterTrackingHistory', 'Location Master Track', 'Category Master Track', and '360 SMS Dashboard'. The page also includes a 'Recently Viewed' dropdown and 'All Types' dropdown. The footer of the page displays the copyright information: 'Copyright © 2000-2017 salesforce.com, inc. All rights reserved. Privacy Statement Security Statement Terms of Use 508 Compliance Go to Salesforce1'.