



Agricultural Information System (AIS)

Report on Use Case

Group – 4

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This is a report on use case scenario of the aforementioned AIS. The following subsystems will be reported.

- Agro-based Information
- Farmer account management
- Experts' Solutions
- Weather updates

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► Agro-based Information

Use-Case ID	Name	Description	Participant actors and Roles
1.1	Sign Up & Login	Signing Up & Logging in to an account	FRM into account, AG into account
1.2	Searching	Searching for any agro-info	FRM searches agro-info
1.3	Ask question	Ask solution to the problems from experts	FRM ask question
1.4	Notification	Solution, weather update and new info	(individual)FRM+AG
1.5	Updating product info	Uploading products produced	FRM

1.1 Sign up & Login:

Priority: high

Primary business actor: Farmer(FRM), Agent(AG)

Description: Farmers can create a new account here with the help of field worker or individually create account by providing email id. They can access their necessary information after logging into the system.

Use case narrative:

Actor action	System Response
Step 1:Farmer individually register in the system	
Step 2:Register with the help of field worker	

Documentation of Use-Case:

Sign up & login

Conclusion: concludes when the farmers can access his account.

Post-Condition: information access by the registered farmer

Implementation Issue: information will be provided to the webpage and maintained by the system to notify individually.

1.2 Searching:

Priority: high

Primary business actor: FRM

Description: Here the registered farmer individually or with the help of field worker can search for his desired information.

Use case narrative:

Actor action	System Response
Step 1:Farmer search for info	

Documentation of Use-Case

Searching

- Conclusion: concludes when the users get his expected data
- Post-Condition: information access
- Implementation issues: information will be provided to the webpage and maintained by system to notify individually

1.3 Ask Questions:

Priority: Medium

Primary business actor: FRM

Description: Here the registered farmer asks for solutions of their problems they face.

Use case narrative:

Actor action	System Response
Step1:Farmers ask questions	notifies the farmers with solutions.

Documentation of Use-Case

Ask questions

- **Conclusion:** concludes when the questions are submitted.
- **Post-Condition:** solution of the questions will be given by experts and notifies the farmer.

- Implementation issues: information will be provided to the webpage and maintained by system to notify individually.

1.4 Notifications:

Priority: high

Primary business actor: FRM+AG

Description: Notifying by the system on special weather, new info, solution to the problems.

Use case narrative:

Actor action	System Response
	notifies the FRM/ AG

Documentation of Use-Case

Notifications

- Conclusion: concludes when the system notify.
- Post-Condition: notifies the farmer
- Implementation issues: information will be provided to the webpage and maintained by system to notify individually

1.5: Updating Product Info:

Priority: high

Primary business actor: FRM+AG

Description: Farmers individually or with the help of field worker upload and update their product info.

Use case narrative:

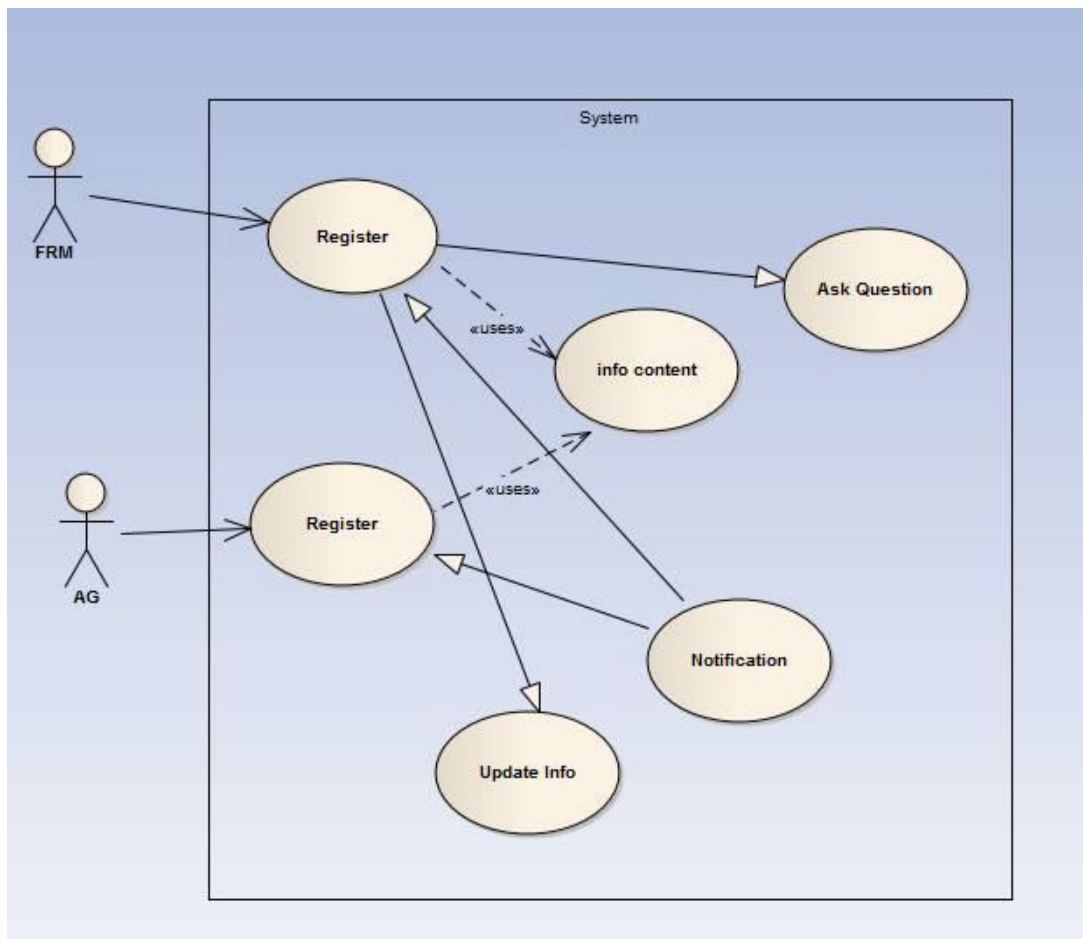
Actor action	System Response
Step 1: Farmers update info	

Documentation of Use-Case

Updating Product Info

- Conclusion: concludes when the users update info.
- Post-Condition: updated information
- Implementation issues: information will be provided to the webpage and maintained by system to notify individually

Use case diagram:



► Farmer account management

Use-Case ID	Name	Description	Participant actors And Roles
2.1	Agro-information Upload	Uploading agricultural information	AIP provides
2.2	Agro-info update	Updating info, market price and other info	AIP updates

2.1 Agro-information uploads:

Priority: high

Primary business actor: Agro-information Provider (AIP)

Description: AIP provides necessary agricultural information. Those are discussed below:

- a) Crop-based information: information on different types of crops and their harvesting procedure.
- b) Insecticides information: information how to use insecticides on appropriate condition.
- c) Fertilizer information: information how to use fertilizer
- d) Soil and Seed: information on how to keep soil fertile and healthy seeds and their market
- e) agro- raw materials: information on other raw materials needed and their market prices
- f) Latest technology: information on the latest technology on agricultural field and latest equipment and their market price

Use case narrative:

Actor Action	System Response
Step 1: AIP supplies the info	
Step2: FRM get access to the info	

Documentation of Use-Case

Information upload

- Conclusion: concludes when the AIP upload information
- Post-Condition: information is accessed by the registered farmers
- Implementation issues: information will be provided to the webpage and maintained by system

2.2 Agro-information updates:

Priority: medium

Primary business actor: Agro-information Provider (AIP)

Description: AIP updates provided information if necessary. The info can be updated such as

- Crop-based information: new species of high growing crops that eliminate the previous ones
- Insecticides information: info update due to new and less devastating insecticides
- Fertilizer information: update due to new and environment friendly fertilizer
- Soil and Seed: information update due to variable market price
- agro- raw materials: information update due to variable market price
- Latest technology: information update due to highly technological raise and updating equipment price

Use case narrative:

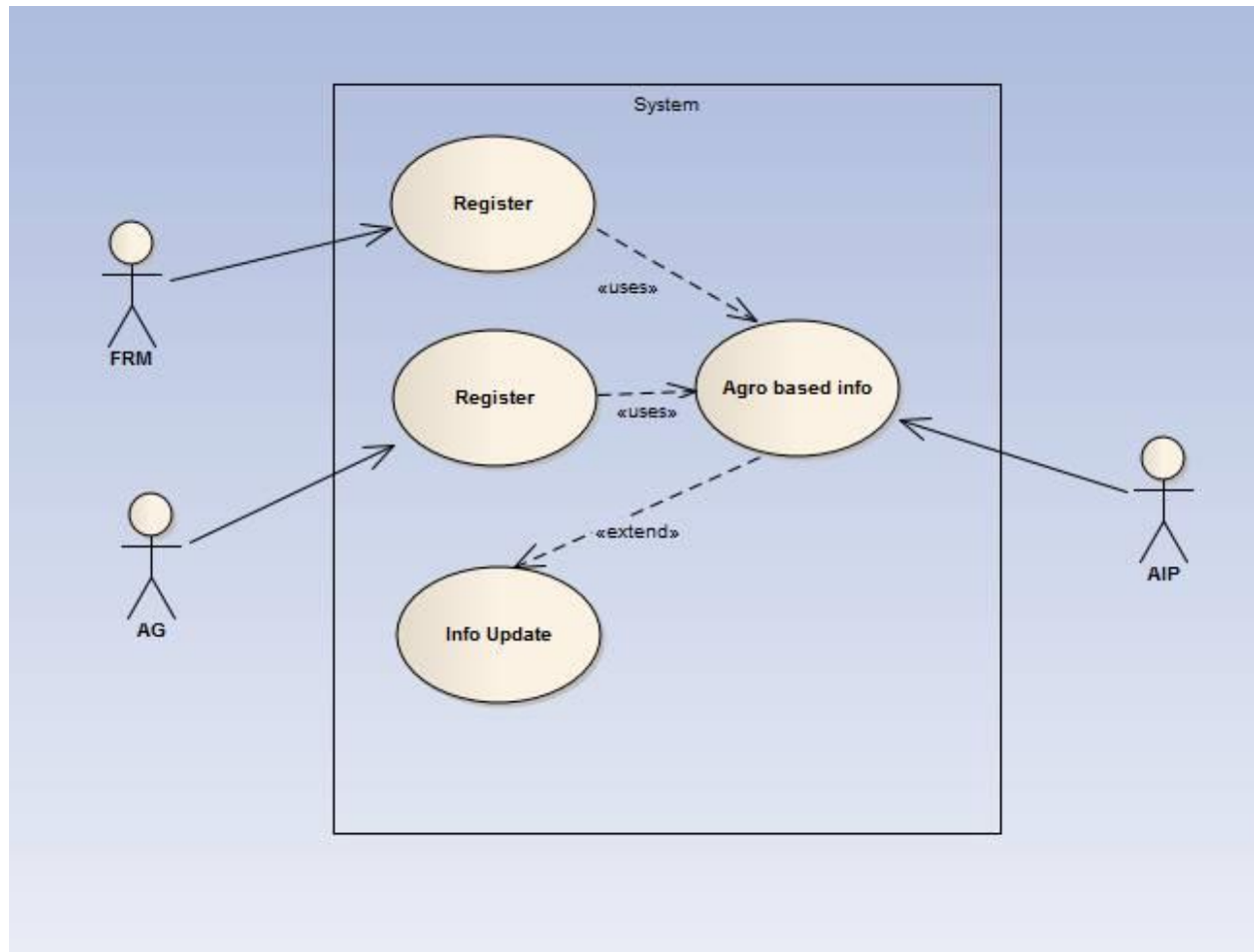
Actor Action	System Response
Step 1: AIP updates the info	Notifies the FRM/AG about new/updates
Step2: FRM get access to the info	

Documentation of Use-Case

Information upload

- Conclusion: concludes when the AIP updates information
- Post-Condition: Notified by the AG/FRM
- Implementation issues: information will be provided to the webpage and maintained by system to notify individually

Use case diagram:



► Experts' Solutions

Use-Case ID	Name	Description	Participant actors And Roles
3.1	Problems and Solutions	Farmers asks solutions to the problems	FRM asks and get solution from EXP
3.2	Experts Profile Management	Individual accounts for experts	ADM approves/removes ids in case of inconvenience

3.1: Problems and Solutions

Priority: high

Primary business actor: Farmer(FRM)

External Receiver actor: Expert(EXP)

Description: Farmers will ask here about their problems and the experts will answer them.

Use case narrative:

Actor action:	System response
Step 1: Farmers or interpreters ask the question Step 2: Experts give the answers	

Documentation of use case

Expert solution

Conclusion: Concludes with Experts give the answers

Post condition: IF same question is asked by another user the previous answer will be shown

Implementation issues: Question answer will be provided and the user will be notified when his qn is answered

3.2: Experts' profile management:

Priority: Low

Primary business actor: Admin (ADM)

External receiver actor: Experts (EXP)

Description: The admins will approve the account of experts and remove the unauthentic ids

Use case narrative:

Actor action:

system response

Step 1: Admin will verify account of Experts

Documentation of the use case

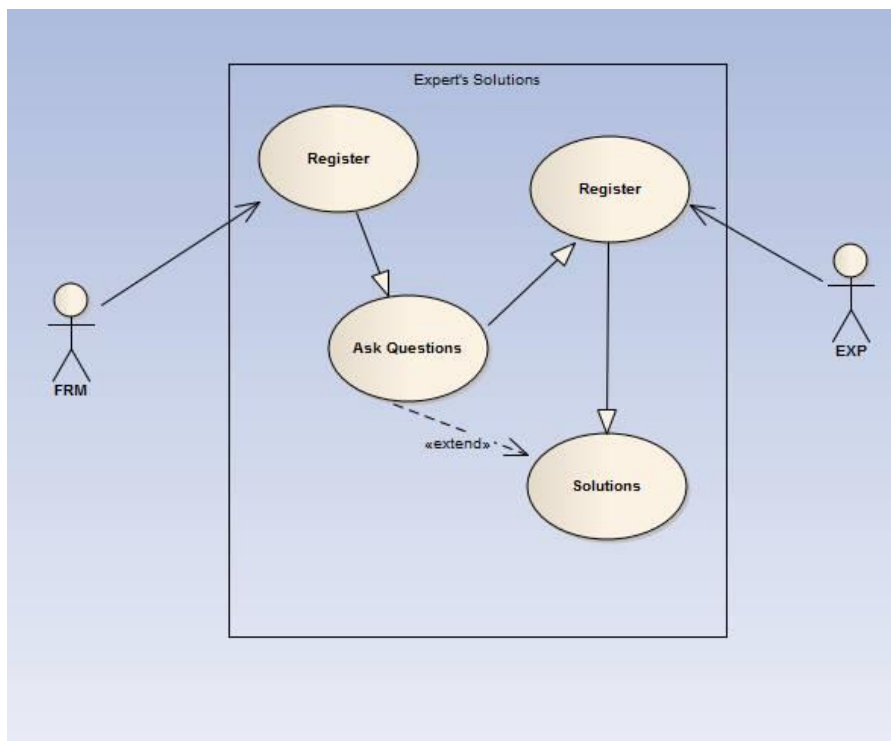
Experts' profile management

Conclusions: concludes with verifying new account and removing account

Post condition: Experts can access their account

Implementation issues: Information will be provided by the experts

Use case Diagram:



► Weather updates

Use-Case ID	Name	Description	Participant actors And Roles
4.1	Update Info	Updating weather info	WIP provides
4.2	Weather Compatible harvesting	Suggesting farmers about which kinds of crops will be suitable to grow depending on seasons and state of nature.	Based on WIP provided info, system manages to advise farmers about weather compatible harvesting

4.1 Update Info :

Priority: high

Primary business actor: Weather-information Provider (WIP)

External Receiver Actor: Farmers (FRM)/ Agents (AG)

Description: WIP provides necessary information of weather and climate which may be helpful for the farmers in many ways. Many unexpected natural calamities like flood, draught, over-rain can affect the harvest production. WIP will provide such information time to time so that farmers can take necessary steps for protecting crops from disasters and also to sow seeds at proper time.

Use case narrative:	
Actor Action	System Response:
Step 1: WIP supplies the info news	Notifies the FRM/AG about update
Step2: FRM & AG get access to the info	

Documentation of Use-Case

Information upload

- **Conclusion:** concludes when the WIP uploads information
- **Post-Condition:** information is accessed by the registered farmers and agents.
- **Implementation issues:** information will be provided to the webpage and maintained by system

4.2 Weather Compatible Harvesting:

Priority: medium

Primary business actor: Weather-information Provider (WIP)

External Receiver Actor: Farmers (FRM)/ Agents (AG)

Description: WIP provides necessary information about suitable crops depending on the weather and climate so that farmers can grow seasonal crops and get much profit.

Use case narrative:

Actor Action	System Response:
Step 1: WIP supplies the info updates	notifies the FRM/ AG about
Step2: FRM & AG get access to the info	

Documentation of Use-Case

Information upload

- **Conclusion:** concludes when the WIP uploads information
- **Post-Condition:** information is accessed by the registered farmers and agents
- **Implementation issues:** information will be provided to the webpage and maintained by system

Use case diagram:

