

1 WBS of KrishiKhamar

This section depicts the Work Breakdown Structure for our project, KrishiKhamar:

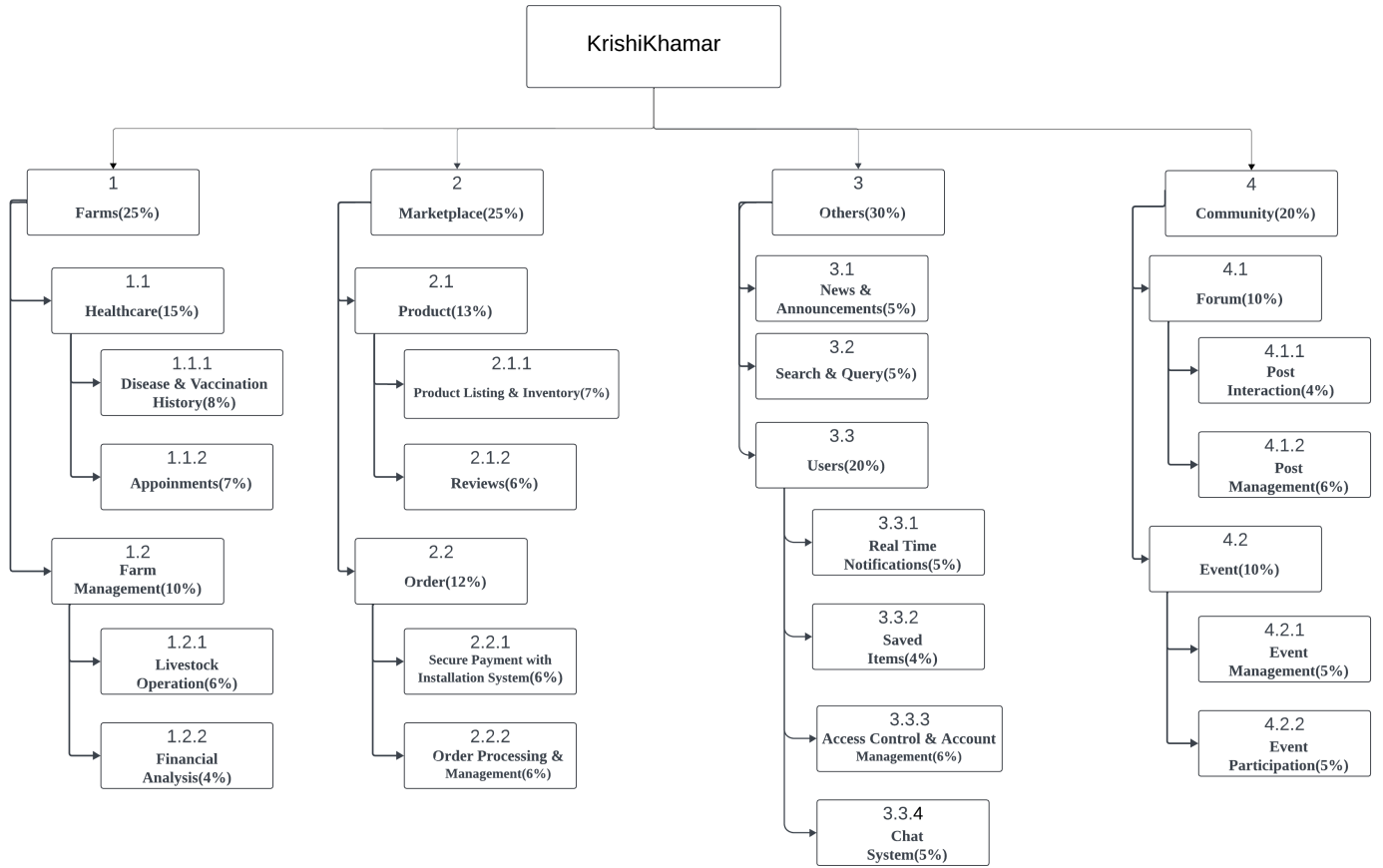


Figure 1: Work Breakdown Structure for KrishiKhamar

2 Delphi WideBand

2.1 Nusrat Hossain

Estimation Form for Delphi Wideband								
Name: Nusrat			Date: 03/03/24			Estimation Form: /1/		
Goal statement: To estimate the time to develop the product								
Units: days								
WBS#	Task Name	Estimation	Delta 1	Delta 2	Delta 3	Delta 4	Total	Assumptions
1	Prototype Development	2	1	1			4	
2	Database Management	7	2	3			12	
3	Farm Management System Development	15	4	-2	1		18	Includes healthcare
4	Marketplace Development	12	2	3	2		19	Integrate secure payment method and order tracking
5	Content Development	13	3	1	-1		16	Includes news and announcements
6	User Management System Development	10	1	3	-1		13	
7	Community Development	12	2	-3			11	
Delta			15	6	1			
Total		71	86	92	93			

2.2 Sabbir Hossain

Estimation Form for Delphi Wideband								
Name: Nusrat				Date: 03/03/24		Estimation Form: /1/		
Goal statement: To estimate the time to develop the product								
Units: days								
WBS#	Task Name	Estimation	Delta 1	Delta 2	Delta 3	Delta 4	Total	Assumptions
1	Prototype Development	3	4				7	
2	Database Management	7	4	3			14	Creating backup database server
3	Farm Management System Development	8	6	4			18	
4	Marketplace Development	10	5	2	1		18	
5	Content Development	7	(+2				10	
6	User Management System Development	13	(+2	(+1	(-)1		15	75% exists now
7	Community Development	14	(+1	(+2	(+1		18	Front end design needs to be im- proved
Delta		12	6	1				
Total		74	86	92	93			

2.3 Ibrahim

Estimation Form for Delphi Wideband								
Name: Ibrahim			Date: 07/07/24			Estimation Form: /1/		
Goal statement: To estimate the time to develop the product								
Units: days								
WBS#	Task Name	Estimation	Delta 1	Delta 2	Delta 3	Delta 4	Total	Assumptions
1	Prototype Development	3	1				4	Design of some features missing
2	Database Management	6	3	2			11	Include news database
3	Farm Management System Development	12	4	2	1		19	Information about the farms and images missing
4	Marketplace Development	10	3	3	2		18	Two queries need to be fixed
5	Content Development	13	3	2	(-) 1		17	More detailed information is still needed
6	User Management System Development	12	2	2	(-)1		15	75% exists now
7	Community Development	11	3	(-)2	(-)1		11	Front end design needs to be improved
Delta			18	10	0			
Total		67	85	95	95			

2.4 Soumitro Sarkar

Estimation Form for Delphi Wideband								
Name: Soumitro Sarkar			Date: 03/03/24			Estimation Form: /1/		
Goal statement: To estimate the time to develop the product								
Units: days								
WBS#	Task Name	Estimation	Delta 1	Delta 2	Delta 3	Delta 4	Total	Assumptions
1	Prototype Development	9	3	(-)1	1		12	Design of some features missing
2	Database Management	9	1	1	1		12	Include news database
3	Farm Management System Development	12	2	2	1		15	Information about the farms and images missing
4	Marketplace Development	12	1	2	(-)2		13	Two queries need to be fixed
5	Content Development	5	2	1	2		10	More detailed information is still needed
6	User Management System Development	13	2	1	(-)1		15	75% exists now
7	Community Development	14	1	2	1		18	Front end design needs to be improved
Delta			12	6	1			
Total		74	86	92	93			

2.5 Afia Jahin Ela

Estimation Form for Delphi Wideband								
Name: Afia Jahin Ela			Date: 07/07/24			Estimation Form:		
Goal statement: To estimate the time to develop the product								
Units: days								
WBS#	Task Name	Estimation	Delta 1	Delta 2	Delta 3	Delta 4	Total	Assumptions
1	Prototype Development	8	1	2	1		12	Prototyping should take more than a week for a better prototyping
2	Database Management	6	2	-1	1		8	A huge collection of dataset,thus more than a week
3	Farm Management System Development	15	5	-3	1		18	Farm is one of the biggest part
4	Marketplace Development	8	2	1	-1		10	It includes a lot of products and purchase system,so 10 days
5	Content Development	5	3	-1	1		8	
6	User Management System Development	5	2	1	1		9	
7	Community Development	10	5	-2	-1		12	
Delta			20	-3	3			
Total		57	77	74	77			

2.6 Summarized Results of Estimation

Goal Statement: To estimate the time to develop prototype for KrishiKhamar										
Estimators: Nusrat, Sabbir, Ibrahim, Soumitro, Ela										
Units: Days										
WBS# or priority	Task Name	Nusrat	Sabbir	Ibrahim	Soumitro	Ela	Worst Case	Best Case	Average hi & lo	Notes
1	Prototype Development	12	12	7	4	4	12	4	7.7	Discrepancy between Nusrat, Sabbir and Soumitro, Ela
2	Database Management	8	12	14	11	12	14	8	11.7	
3	Farm Management System Development	18	15	18	19	19	19	15	18	
4	Marketplace	10	13	18	18	19	19	10	16.3	
5	Content Development	8	10	10	17	16	17	8	12	Discrepancy between Nusrat and Soumitro
6	User Management System Development	9	15	12	15	13	15	9	13.3	
7	Community Development	12	18	18	11	11	18	11	13.7	
Total		77	95	97	95	93	114	65	92.7	

3 Risk Plan

Risk plan for project				
Assessment team members: Nusrat Hossain, Sabbir Hossain, Ibrahim, Soumitro Sarkar, Afia Jahin Ela				
Risk	Probability	Impact	Priority	Actions
Not finding professional veterinarians	2	3	6	<ol style="list-style-type: none"> 1. Team meetings for frequent updates and gather thoughts from veterinarian applicants. 2. Sudden health issues in animals may indicate the need for urgent veterinary support. 3. Observe signs of stress or overwork in current staff due to a lack of a vet.
Disease history and vaccination history	2	2	4	<ol style="list-style-type: none"> 1. Farmowners must provide complete and well documented vaccination record certificates. 2. Conduct health checkups on the animals during public events. 3. Maintain detailed records for each animal on the system database. 4. Regularly monitor animal health and behavior with the help of professional veterinarians.
Farmers not providing necessary information about their farm on time	2	2	4	<ol style="list-style-type: none"> 1. Create an automated notification system to remind farmers regularly. 2. Integrate a user-friendly and effective data entry platform for farmers to update information. 3. Emphasize the importance of timely data submission during training and meetings.
Time limitations for future documentation	5	5	25	<ol style="list-style-type: none"> 1. Can reduce the complexity of certain features and also keep the design user-friendly. 2. Use automated data entry with RFID for easier use. 3. Manage resources and scheduling well to ensure timely data entry. 4. Emphasize the importance of submitting data on time during everything within estimated times.
Early departure of team member(s)	3	4	12	<ol style="list-style-type: none"> 1. Encourage the team to be aware of the project's broad aspects and keep multiple resource members informed on the project. 2. Develop backup plans and ensure a clear knowledge transfer whenever any member decides to leave. 3. Security measures that can be implemented such as allowing limited member access to only the data they need for their specific tasks. 4. Sign legal contracts and agreements to follow terms and conditions to minimize the security threats.

4 Risk Information Sheet

4.1 Nusrat Hossain

Risk Information Sheet			
Risk ID: AG2-429	Date: March 3, 2024	Probability: 5	Impact: 5
Description: Having limited time frame for the project implementation may affect the project completeness and may lead to very poor documentation.			
Refinement/Context: Sub Condition 1: Since all the team members are neither expert nor have worked as a software developer, we may underestimate any of the features complexity. Sub Condition 2: We are having a limited time to finish the project, thus we might not get enough time for the documentation or completely finishing the features.			
Mitigation/monitoring: 1. Clearly defining and prioritizing features and documentation tasks based on their impact on project goals. 2. Identifying and focusing on completing the most critical elements first. 3. Minimizing the delays in the implementation process. 4. Conducting frequent progress reviews to assess completion of tasks.			
Management/contingency plan/trigger: 1. Trying to release a minimal viable product (MVP) first with essential functionalities and core documentation. 2. Continuously prioritizing features and documentation based on their impact on project goals.			
Current status: 05/03/24: Mitigation steps initiated.			
Originator: Nusrat Hossain		Assigned: Nusrat Hossain	

4.2 Sabbir Hossain

Risk Information Sheet			
Risk ID: AG2-429	Date: March 3, 2024	Probability: 5	Impact: 5
Description: Farm owners not promptly providing up to date information about their farms.Hence, potentially leading to outdated data and a diminished user experience on the platform.			
Refinement/Context: Sub Condition 1: Farm owners may have busy schedules causing delay in updating information. complexity. Sub Condition 2: They may face challenges in utilizing the platform or encounter technical difficulties during data.			
Mitigation/monitoring: 1. Set up automated reminders for farm owners to regularly review and update their information 2. Implement a user friendly and efficient data entry system to encourage timely updates. 3. Conduct regular awareness programs emphasizing the importance of timely impacts and their positive impacts.			
Management/contingency plan/trigger: Provide clear communication to farm owners about the benefits of timely updates. Assign a dedicated team to follow up with farms that constantly delay updates.			
Current status: 05/03/24: Mitigation steps initiated.			
Originator: Sabbir Hossain		Assigned: Sabbir Hossain	

4.3 Ibrahim

Risk Information Sheet			
Risk ID: AG1-418	Date: July 7, 2024	Probability: 3	Impact: 4
Description: As we are a team of 5 members, due to unforeseen circumstances, one or two members may leave. This could lead to a loss of knowledge, experience and skills which potentially causes delay and decreases the quality of the project.			
Refinement/Context: Sub Condition 1: The departure of a member in the middle of the ongoing project will hamper and delay the project as all the assigned tasks of that person will need to be reassigned and completed by someone else. Sub Condition 2: Major security threats may arise if the departing member(s) has access to sensitive information of the systems that were not properly secured as they can potentially compromise data and put it at risk.			
Mitigation/monitoring: <ol style="list-style-type: none"> 1. Encourage the team to be aware of each other's role and for that we can maintain a task board. This way everyone can see what others are doing in the project. 2. Develop a successor member of every team member, that way if any member decides to leave, the successor can quickly step in. 3. Strict access control can be implemented to control and limit team member access to only the data they need for their specific tasks. 4. Sign legal contracts and make sure everyone is following terms and conditions to minimize the security threats. 			
Management/contingency plan/trigger: If team member(s) leave, assess the impact on the project timeline, resource and security threats. Determine if the project can be delivered on time and within budget with the rest of the members. Redistribute tasks among remaining team members based on their skills and workload capacity.			
Current status: 07/07/24: Mitigation steps initiated.			
Originator: Ibrahim		Assigned: Ibrahim	

4.4 Soumitro Sarkar

Risk Information Sheet			
Risk ID: AG2-429	Date: March 3, 2024	Probability: 2	Impact: 3
Description: One of the major challenges is struggling to find skilled veterinarians for our animals. This might lead to delays, health issues for our livestock, and unexpected costs. It might be tough to find really good ones who know their stuff.			
Refinement/Context: Sub Condition 1: Limited Availability: Finding good veterinarians might be hard because there aren't many around our farm area. This could make it tough to keep our animals healthy. Sub Condition 2: : High Demand: Good veterinarians are in high demand, and many farms want them. This might make it challenging for us to find and hire the best ones for our project.			
Mitigation/monitoring: <ol style="list-style-type: none"> 1. Team meetings for frequent updates on the veterinarian search progress. 2. Gather thoughts from veterinarian applicants to understand our project's appeal. 3. Sudden health issues in animals may indicate the need for urgent veterinary support. 4. Observe signs of stress or overwork in current staff due to a lack of a vet. 			
Management/contingency plan/trigger: <ol style="list-style-type: none"> 1. Inform users promptly about the shortage. 2. Offer temporary online veterinary services. 3. Ensure close collaboration between teams. 4. Keep users informed through notifications. 5. Share reports on new team additions or alternative services. 6. Establish accessible channels for feedback. 7. Use feedback for ongoing improvement. 			
Current status: 05/03/24: Mitigation steps initiated.			
Originator: Soumitro Sarkar		Assigned: Soumitro Sarkar	

4.5 Afia Jahin Ela

Risk Information Sheet			
Risk ID: AG1-419	Date: July 7, 2024	Probability: 2	Impact: 2
Description: The majority of animals might not have a proper disease or vaccination history.			
Refinement/Context: Sub Condition 1: Without the complete or well documented vaccination history, it might be difficult to assess the immunity status and the potential risks associated with selling the animals or animal products to another farm or a consumer. Sub Condition 2: Acknowledges the possibility that the animals might not have had access to regular veterinary care, which could mean they have undiagnosed or untreated health conditions that could increase the risk of disease transmission during public events.			
Mitigation/monitoring: <ol style="list-style-type: none"> 1. Farmowners must provide complete and well documented vaccination record certificates. 2. Conduct health checkups on the animals during public events. 3. Maintain detailed records for each animal on the system database. 4. Regularly monitor animal health and behavior with the help of professional veterinarians. 			
Management/contingency plan/trigger: Establish partnerships with veterinary professionals, notify farm-owners about vaccination schedules, backup and update animal health information data regularly.			
Current status: 7/7/2024 - Mitigation steps initiated			
Originator: Afia Jahin Ela		Assigned: Afia Jahin Ela	