



**Proposal**  
**For**  
**Second Year Project**  
**Bachelor of Science in Information Technology**  
**Gyalpozhing College of Information Technology**  
**Buddy Farmer app**

**Submitted by:**  
**UGYEN TASHI(12190103)**

**Read carefully before filling the form.**

- 1 Please do not alter the layout of the application form. Information must be filled in the spaces provided, under set format.

Guidance notes in various fields should not be deleted.

Required information should be duly filled in the specified fields.

Required heads/fields which are not relevant to the project should be marked **N/A** (Not Applicable) or left blank and should not be deleted.

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

**Guidelines and Forms**

**Submission Procedure**

Duly filled proposal forms completed in all respects should be submitted in form of soft copy and a hard copy to project guide and project coordinator. On receipt of the applications the proposals will be evaluated by reviewer panel and proposal would then be defended by student groups. The project group may need to revise the proposal in light of the evaluator's recommendations.

**For further information, please contact:**

Project Coordinator

Jigme Wangmo  
[jigmewangmo.gcit@rub.edu.bt](mailto:jigmewangmo.gcit@rub.edu.bt)

Tshering Lhamo  
[tsheringlhamo.gcit@rub.edu.bt](mailto:tsheringlhamo.gcit@rub.edu.bt)

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

**Table of Contents**

Description	Page #
1. Project Identification.....	1
2. Scope, Introduction and Background of the Project.....	3
3. Aim and Objectives of the Project.....	5
4. Methodology.....	6
5. Benefits of the Project (Expected output/outcomes):.....	10
6. Risk Analysis/Feasibility.....	10
7. Project Approval Certificate.....	11
8. Reviewers Panel Comments.....	13
10. Project Schedule / Milestone Chart /Work plan.....	14
13. Report Writing Guidelines.....	15
Bibliography.....	16

**Note:** To update the table of contents, right click in the table and select '*update field*' and then select 'Update Entire Table'.

## Application for Final Year Project

### 1. Project Identification

<b>Reference Number:</b>  (for office use only)
<b>Project Title:</b>  Buddy Farmer
<b>Project Internal Guide:</b>  Name: _____ Designation: _____ Organization: _____ Mobile # : _____ Tel. # : _____ Email: _____
<b>C1. Project External Guide:</b>  Name: <b>NA</b> Designation: _____ Organization: _____ Mobile # : _____ Tel. # : _____ Email: _____
<b>C2. Student Group Lead:</b>  Name: _____ Roll No: _____ Department: _____ Mobile # : _____ Tel. # : _____ Email: _____

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

<b>Organizations Involved in the Project:</b> <i>(Please identify all affiliated organizations collaborating in the project, and describe their role/contribution to the project.)</i>		
<b>D1. Industrial Organizations:</b>		
#	<i>Organization Name</i>	<i>Role / Contribution</i>
	NA	
<b>D2. Academic Organizations:</b>		
#	<i>Organization Name</i>	<i>Role / Contribution</i>
<b>D3. Funding Organizations:</b>		
#	<i>Organization Name</i>	<i>Role / Contribution</i>
	NA	
<b>Key Words:</b> <i>(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)</i>  Registration, Credit account, Admin, Customer and App.		
<b>Research and Development Theme:</b>  To create an app that serves as a platform where the farmer and agriculture students can use the digitalized farming app to maintain the what are use of farming in field.		
<b>Project Status:</b> (Please mark <input checked="" type="checkbox"/> ) <div style="margin-top: 5px;"> <input checked="" type="checkbox"/> New      Modification to previous Project   Extension of existing project </div>		

**Project Duration:**

Expected Starting Date: \_\_\_\_\_

Planned Duration in  
months: \_\_\_\_\_

**2. Scope, Introduction and Background of the Project**

**Scope of the Project:**

**User Scope:**

Farmer and agricultural students of Bhutan.

The android app is based on farmer and agriculture students where to know about the seasoning crops and fertilizer used.

**System Scope:**

**1. View:**

The farmer and agriculture students can view on the latest news of agriculture.

**2. Update:**

Admin have a right to add new features of farming.

**3. Market**

Farmer and agricultural students can see the market values of farming tools and crops.

**4. Seasoning:**

It allows farmers to know about seasoning crops that grows.

**5. Group:**

Its allow farmers and agricultural students to communicate on farming.



**B Introduction (Project Background and Literature Review, Current State of the Art):**

*(Detailed summary of what all has been done internationally in the proposed area quoting references and bibliography. Please note that this section demonstrates the depth of knowledge of the project team and builds the confidence of the evaluators about capability of the team in achieving the stated objectives.)*  
*(Please describe the current state of the art specific to this research topic.)*

**Project Background**

Farmers Buddy is a web-based project which is useful for farmers and agricultural students. This is an open discussion portal providing solutions to small farmers and agricultural students. It also provides soil analysis for all regions and suggestions on which fertilizers to use where and how much? And which crop, herb or vegetable to be grown where and in which season? It also helps to make decisions on the market and the best prices. Information about major crop markets and their current price for the crop will be publish daily.

This also includes training scheduled by agricultural officers. Training is requeste by students, the general public. Training provides information about crops, fertilizers, and market details that are request. Online query handlings for all users. Queries can be post by students, the general public through mails. Queries can be direct to a particular officer. Information pages should be dynamic so that agricultural officers and administrators can change it.

**Literature Review:**

A **farmer** (also called an agriculturer) is a person engaged in agriculture, raising living organisms for food or raw materials. The term usually applies to people who do some combination of raising field crops, orchards, vineyards, poultry, or other livestock. Someone may have a **farm** and produce **farm** income, but not qualify as a **farmer** under some tax provisions. A **farmer** is an individual who is engaged in **farming** per the definition found above. Generally, the **farmer** has a profit motive when operating a **farming** business.

Now with modern world, farmer can understand about the farming with world full with internet. Farmer are getting smarter with the use of app.

As per Kheti Buddy FARM (KBF) app turns your mobile into your farming companion who is with you in all the steps of farm management. Our focus is on developing better farming habits with in-depth information and guidance throughout crop's lifecycle.

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

As per Agribuddy Develop a crop plan and monitor it using our farm activity calendaring service. Share your knowledge and skills with the rest of the farming community around the world. Save the progress of your crops and prepare for pests, weather and other events.

**Challenges:**

**Time schedule:** Completing the project within the given time period.

**Device compatibility:** Challenges of ensuring that app works on the android smartphone.

**Security issues:** Keeping in mind about developing the app which is trustworthy and secure.

**Motivation and Need:**

Farmer are lack of knowledge regarding the soil and crops that need to sow in season. The tools they need to use are not available in there hometown so that lead an idea to create an app which help farmer regarding the soil and many type of crop they need to purchase in seasoning.

### 3. Aim and Objectives of the Project

*(Please write the actual aim of your project. Also, describe the measurable objectives of the project and define the expected results. Use results-oriented wording with verbs such as 'to develop..', 'to implement..', 'to research..', 'to determine..', 'to identify..' The objectives should not be statements and should not include explanations and benefits. The objective should actually specify in simple words what the project team intends to achieve (something concrete and measurable/ deliverable). Fill only those objectives that are applicable to the proposed project.)*

**AIMS:** To develop an application for farmer and agriculture students to built a relationship.

**OBJECTIVES :**

The specific objective of this project are:

1. The main objective of the project is to provide information to the farmers and agricultural students.
2. It provides better solutions for farmers in providing the information regarding soils, fertilizers
3. It helps the users in getting training regarding various technologies that can be used in farming.

#### 4. Methodology

##### Development / Research / Test Methodology:

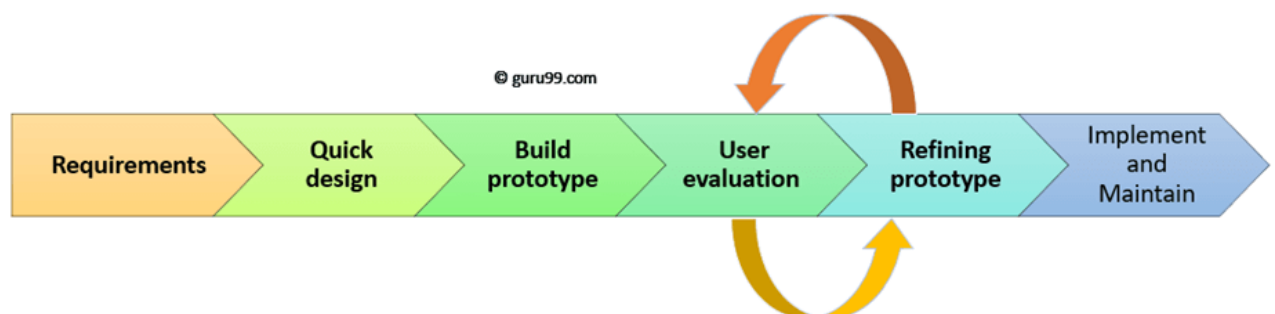
*(Please describe the technical details and justification of your development and research plan and test plan and testing strategies. Identify specialized equipment, facilities and infrastructure which are required for the project and their utilization plan. The block diagrams, system flow charts, high level algorithm details etc. have to be provided in this section. Also, describe the overall methodology to be used for the particular research topic)*

##### Problem Statement:

Think about how much food you eat each day. Now, think about how big the human population is and how much food is needed to feed all of those people. Since the development of agriculture, most of the food needed to feed the population has been produced through industrialized agriculture. Since the 1960s, the amount of food produced through this type of agriculture has increased drastically, and currently there is enough food produced to feed every human on Earth.

Although industrialized agriculture has been successful in producing large quantities of food, the future of food production is in jeopardy due to problems in agriculture. Two of the most major problems in agriculture are the loss of agricultural land and the decrease in the varieties of crops and livestock produced.

**Prototyping Model** is a software development model in which prototype is built, tested, and reworked until an acceptable prototype is achieved. It also creates base to produce the final system or software. It works best in scenarios where the project's requirements are not known in detail. It is an iterative, trial and error method which takes place between developer and client.





Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

<b>Project Team:</b>	
<b><i>Title / Position</i></b>	<b><i>Number</i></b>
Project Internal Guide	Sonam Wangmo
Project External Guide	
Student Team Members	Ugyen Tashi
Others (please specify)	
Add more rows if required	

**Project Activities:**

*(Please list and describe the main project activities, including those associated with the transfer of the research results to customers/beneficiaries. The timing and duration of research activities are to be shown in the Gantt chart in Section 8.)*

**Installation of software and tools:** Installing android studio latest version or bootstrap framework and database server.

**Resource gathering:** Gathering resources like research paper, book, video tutorials, and online research on app development.

**Design phase:** The system design shows the blueprint of any system that is to be developed. It gives the very detail about every components of the system that is to be built like designing user interface, functionalities, and flow of information.

**Development of app:** From this stage we will develop app using Bootstrap and android studio framework.

**Testing:** It will go under testing stage where each unit is check properly regarding functionality and it endure to produce desire function.

**Documentation:** After completing all phases we will document the project report and we will present it through presentation.

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

**A Key Milestones and Deliverables:**

*(Please list and describe the principal milestones and associated deliverables of the project. A key milestone is reached when a significant phase in the project is concluded, e.g. selection and simulation of algorithms, completion of architectural design and design documents, commissioning of equipment, completion of test, etc.) The timing of milestones is also to be shown in the Gantt chart in Section 8.*

No.	Elapsed time from start (in months) of the project	Milestone	Deliverables
1	14/2/21-11/3/21	Topic Selection	Selection of topic for android app.
2	3/3/21 - 14/3/21	Proposal Report	Documentation of proposal report.
3	15/3/21 - 31/3/21	Requirement gathering	Requirement
4	22/3/21 - 18/3/21	Requirement Analysis	SRS Document, Usecase Diagram, Activity and class diagram
5	28/3/21 - 31/3/21	Design UI	UI design
6	1/4/21 - 12/5/21	Features Development	Prototype
7	13/5/21 - 22/5/21	Documentation	Final Application
8	23/5/21 - 27/5/21	Project report writing/ presentation	Test case and presentation

(Please add more rows if required.)



**5. Benefits of the Project (Expected output/outcomes):**

**Some of the Benefits are:**

**Inclusion:** Through our app all farmer and agricultural students get proper instruction about farming.

**Accessibility:** Provide a fast and efficient interface for easy access to the concern authority.

**Flexibility:** App will provide services at any point of time, and anywhere.

**Satisfaction:-**Farmers and agricultural students get satisfaction form this app.

**6. Risk Analysis/Feasibility**

**A Risks of the Project:**

(Please describe the factors that may cause delays in, or prevent implementation of, the project as proposed above; estimate the degree of risk.)

(Please mark <input checked="" type="checkbox"/> where applicable)	Low	Medium	High
Technical risk		<input checked="" type="checkbox"/>	
Timing risk			<input checked="" type="checkbox"/>
Budget risk	<input type="checkbox"/>		

**A1. Comments(Describe the risk):**

**Timing risk:** Developing the application within the given time frame would be a difficult task for us as

- ✓ Our project time period is less.
- ✓ Being this our first attempt in developing an android application completing as per schedule will be difficult.
- ✓ We will not be able to achieve our goal due to external college activities.

**Technical risk:** Risk associated with the software development. Some of the technical risk are as follows.

- ✓ Learning how to use software and other sophisticated hardware tools will be hard job as it is our first approach.
- ✓ It will be difficult for us to handle any crashes or malfunction in software

as we are not use to it.

**Budget Risk:** We don't have budget risk because we don't have to buy any software or technology. Our project can be done using free software available on internet.

**Feasibility Study:** It is feasible because it will allow farmer to understand more about farming.

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

**7. Project Approval Certificate**

*(Approval of Project Proposal by the Competent Authority (Department Chairman) and Project Review Team is mandatory before the start of project execution.)*

**Project Review Team:**

Sl #	Name	Signature
------	------	-----------

(Please add more rows if required.)

**Project Coordinator**

Name: Mrs. Sonam Wangmo

Designation: Lecturer

Email: sonamwangmo.gcit@rub.edu.bt

Date: 13 March                      Signature:

**Competent Authority – Head of Department**

Name:

Designation:

Email:

Date:                      Signature

& stamp:

**8. Reviewers Panel Comments**

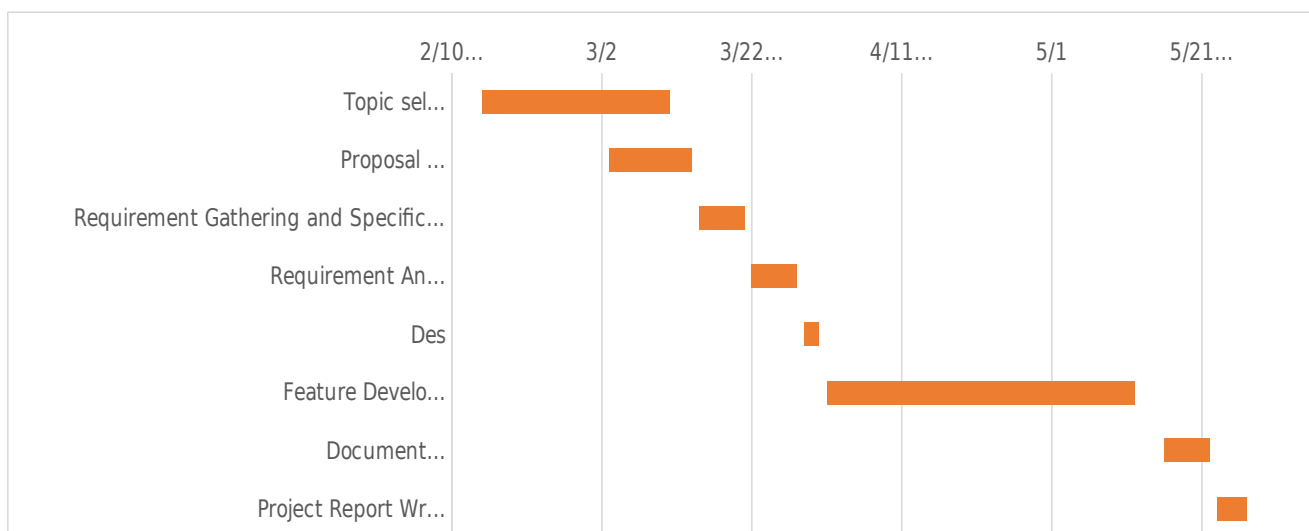
Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**

## 10. Project Schedule / Milestone Chart /Work plan

*(Project schedule using MS-Project (or similar tools) with all tasks, deliverables, milestones, clearly indicated are preferred. Task should be measured in terms of hours)*

A	D	C	D	E
ID	Task Name	Start Date	Finished Date	Days To Complete
1	Topic selection	2/14/2021	3/11/2021	25
2	Proposal Report	3/3/2021	3/14/2021	11
3	Requirement Gathering and Specification	3/15/2021	3/21/2021	6
4	Requirement Analysis	3/22/2021	3/28/2021	6
5	Design UI	3/29/2021	3/31/2021	2
6	Feature Development	4/1/2021	5/12/2021	41
7	Documentation	5/16/2021	5/22/2021	6
8	Project Report Writing	5/23/2021	5/27/2021	4

### Gantt Chart





### **13. Report Writing Guidelines**

*(Project report will be written under the specified guidelines.)*

## **Bibliography**

1. CodeWithC. (2015, July 16). Farmers buddy Java project. Retrieved March 14, 2021, from <https://www.codewithc.com/farmers-buddy-java-project/>
2. ShubhamPatkar7 Follow. (2019, August 03). FARMERS buddy. Retrieved March 14, 2021, from <https://www.slideshare.net/ShubhamPatkar7/farmers-buddy>
3. Farmers' framework – farmers' buddy. (n.d.). Retrieved March 14, 2021, from <https://digitalknowledgecentre.in/listings/farmers-framework-farmers-buddy/>
4. Kheti buddy Farm– Free AGRICULTURE app for farmers - apps on Google Play. (n.d.). Retrieved March 14, 2021, from <https://play.google.com/store/apps/details?id=com.aaria.farmer&hl=en&gl=US>
5. Anishaa, & \*, N. (2020, May 12). Farmers buddy project report in Java, NetBeans ide, And Mysql: Free download. Retrieved March 14, 2021, from <https://code-projects.org/farmers-buddy-project-report-in-java-netbeans-ide-and-mysql-free-download/>