Proposal

For

Second Year Project

Bachelor of Science in Information Technology

Bhutanese Recipe App

Submitted by

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Gyalpozhing College of Information Technology

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.
2. Guidance notes in various fields should not be deleted.
3. Required information should be duly filled in the specified fields.
4. 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.

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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

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Application for Final Year Project

1. Project Identification

A. Reference Number: (for office use only)	
B. Project Title: Daily Expense Tracker	

C. Project Internal Guide:

Name:	
Designation:	
Organization:	
Mobile # :	Tel. # :
Email:	

C1. Project External Guide:

Name:	**NA**
Designation:	
Organization:	
Mobile # :	Tel. # :
Email:	

C2. Student Group Lead:

Name:	
Roll No:	
Department:	
Mobile # :	Tel. # :
Email:	

D. Organizations Involved in the Project:

(Please identify all affiliated organizations collaborating in the project, and describe their role/contribution to the project.)

D1. Industrial Organizations:

#	Organization Name	Role / Contribution
	NA	

D2. Academic Organizations:

#	Organization Name	Role / Contribution

D3. Funding Organizations:

#	Organization Name	Role / Contribution
	NA	

E. Key Words:

(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)

1. Bhutanese Recipe

2. Recipes

3. Food

4. Eat

5. Cooking Recipes

F. Research and Development Theme:

To develop an application where the users will be able to find all the Bhutanese cuisine in one platform. The proposed application would allow the users to see different Bhutanese recipe.

G. Project Status:

(Please mark ☑)

☑ New ☑ Modification to previous Project

☑ Extension of existing project

H. Project Duration:

Expected Starting Date:	9th February
Planned Duration in months:	4 months

2. Scope, Introduction and Background of the Project

A. Scope of the Project:

System Scope

For people to learn Bhutanese cuisine, they have to search from the websites where all the recipes are not available in single platform.

I am going to develop an android based application with the following features:

1. Categories: The user can select a category that they want (Veg or Non-Veg).

2. Favorite: The user can add and remove the recipes in favorite.

3. Share link: The user can share the recipe link with their friends and family.

Future Scope

4. Upload Recipe: The user can upload their recipes in the application.

User Scope

The target of my project are those people who want to learn Bhutanese cuisine.

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.)

Food is the basic human need to stay alive. In fact, it is the need of every living organism. Food ultimately shapes everything in our world, everything a person does, he or she does it for food. Without food there would obviously be no life, which is why, culture, societies and technologies are all developed in connection to food. Of course modern food today is extremely different from the way we found and cooked food from centuries ago. Moreover, the events, both positive and negative, that counties and civilizations go through can really have huge impact on their ability to sell food to the people living in it. This will lead to either the rise or the downfall of the entire society. Further, what people put inside their body has an important role on the diseases they may or may not get. It can also have an impact on the safety of their nation.

For example, giving military the strength they need to fight and defend their people and most importantly just giving everyone the opportunity to survive and carry on with their everyday lives. Food being the most vital element in one's lives comes in different styles and tastes. Every nation has their unique style of preparing and serving food. Likewise, Bhutan also have some of the most unique and traditional foods to serve. Hence the main objective for the development of this mobile application is to teach people the recipes to these foods and in a deeper sense to keep the cultural and traditional way of cooking Bhutanese food alive in this modern era of development. The app will have sections for non-veg and vegetarian. Not only will the recipes be written in detail but also there will be videos to enhance the learning for the users. Further if the users desire to share the recipes then it can easily be done by sharing the link of these recipes.

Literature Review

Perfect Recipes App is the name of the application that I will be using as a reference while developing this app. The Perfect Recipes App is a food app for those users who love cooking. It includes the recipe database which is constantly updated. The application also has a supplies manager so that it allows the users to find the recipes by the supplies they have at home or can create a shopping list to buy ingredients that were missing. "We've been designing usable interfaces, which is like a chef cooking edible food. Certainly, we all want to eat edible foods with nutritional value, but we also crave flavor. Why do we settle for usable when we can make interfaces both usable and pleasurable?" Aaron Walter said in his book "Designing for Emotion". With high competition and a constantly growing number of mobile apps devoted to the theme of food and cooking, the first impression cannot be just nice and clean. A successful app should instantly appeal to the emotional and aesthetic sides of user perception and be simple to use to engage the user from the first seconds and let them interact according to their personal preferences. That's the balance the Perfect Recipe Team strives for.

I will be developing this mobile application to teach people the recipe of Bhutanese cuisine and to keep the cultural and traditional way of cooking Bhutanese food alive in this modern era of development.

Current State of Art

A lot of application have been developed but are mostly western cuisine. If they want to learn Bhutanese cuisine they will have to search from the websites which is not available in particular websites. It also has a feature where the users can set goals that they want to achieve such as losing or gaining weight, keeping a healthy diet etc. The users can also mark the ingredients they don't like so that the application doesn't show the recipes containing them.

C. **Challenges:**

(Please describe the challenges, specific to this research topic, currently being faced internationally.)

i.   Performance – it would be challenging to make the app responsive and smooth.

ii. Security – securing all the data of the application would be challenging.

iii. Compatibility – challenging for me to develop an application that would run on older version platforms.

D. Motivation and Need:

(Please describe the motivation and need for this work.)

As a person who is interested in cooking but don't know how to cook, I have to search the website to learn all the recipes which is fine but when I want to cook multiple dishes I have to search the recipes one by one as they are not available in a particular websites which is time consuming.

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.)

AIM: The aim of my project is to develop an application to help those people who want to learn Bhutanese cuisine.

OBJECTIVES:

1. To develop a platform where you can find all the recipes.

2. To preserve traditional way of cooking Bhutanese cuisine

3. To promote Bhutanese cuisine.

4.To reduce time.

4. Methodology

A. 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

There is no proper platform to learn Bhutanese cuisine. Most of the peoples even Bhutanese are not familiar with different types of traditional foods. Since they are not familiar with different types of food, they eventually end up making the foods they always make. This also leads to making same dishes all the time. Even when someone wants to try learning Bhutanese cuisine they will have to search from websites where they won't get all the recipes for different cuisine in particular website.

Planning

In this phase, the team will discuss about the general information of the project and make an overview of the project.

Requirement gathering and Analysis

The team will start collecting relevant information from the research papers and existing system. After collecting, the team will work on understanding the problems in detail and do some brainstorming and conduct a survey related to the project.
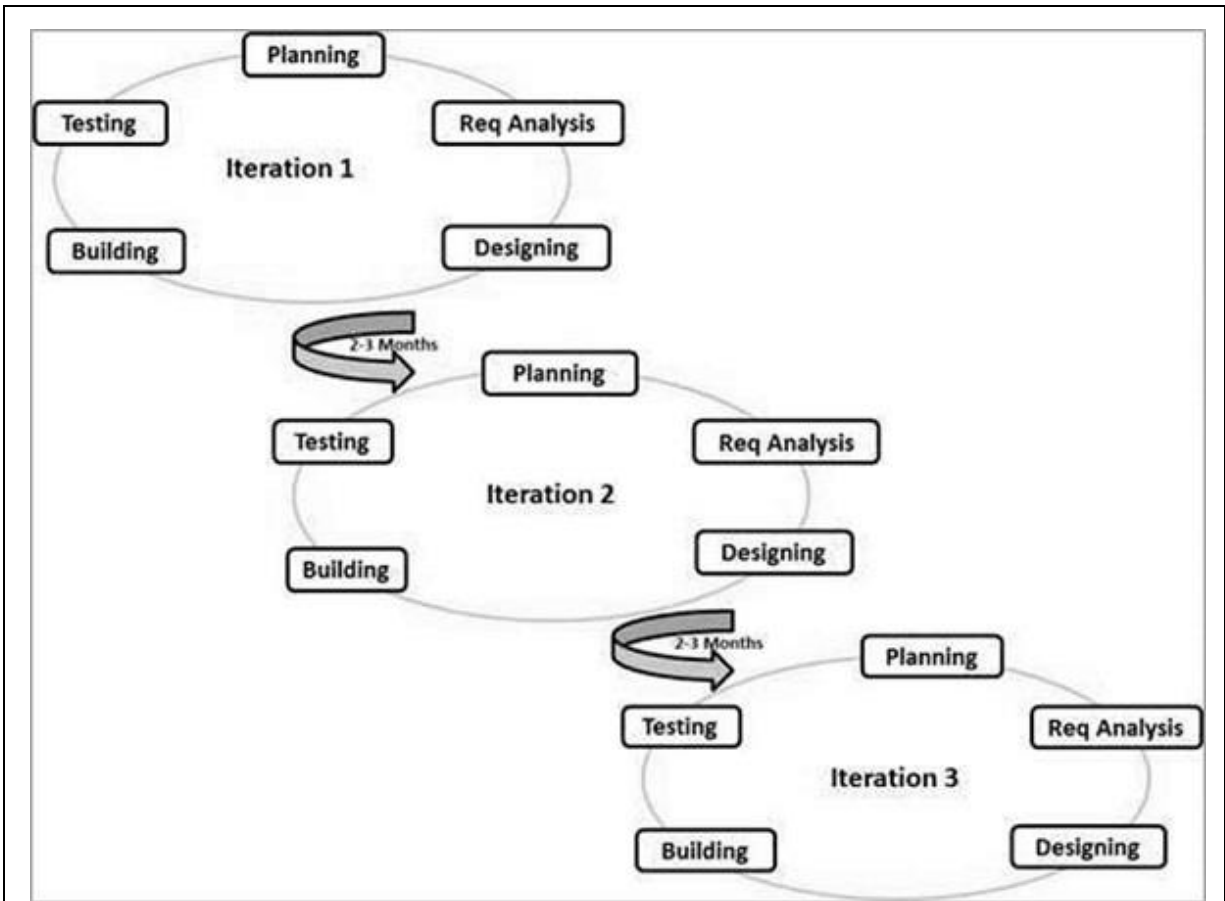
Design

In this phase, a design (or a prototype) will be prepared from the requirements that was collected in the previous phase. Accordingly, an ER diagram will be prepared.

Coding/Implementation

After design phase, according to the ER diagram and prototype implementation of the project will start.

Testing

After coding, each function will be tested separately with the process of unit testing.

Agile Model

An agile model is a combination of iterative and incremental process model. It breaks the product into small incremental builds. These builds are provided in iterations. Firstly, I will plan and prepare an overview of the project. Then, I will study in detail about the problems and design a prototype for the project. After designing, I will start with the implementation. At the end of each iteration, a working product is produced

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D. **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.

Elapsed time from start (in months) of the project	Milestone	Deliverables
09/02/2021 – 23/02/2021	Topic Selection.	Topic selected
25/02/2021 – 14/03/2021	Brain storming, Feasibility and Survey.	Project proposal.
15/03/2021 – 25/03/2021	Requirement Gathering and Analysis.	SRS Document.
26/03/2021 – 30/03/2021	Software Installation.	Setting environment for development.
31/03/2021 – 12/04/2021	System Design.	ER diagram, Relational diagram, architecture design, database design, User interface design.
13/04/2021 – 1/05/2021	Development/coding.	Source code and functional features implementation.
2/05/2021 – 15/05/2021	Testing.	Test case.
16/05/2021 – 22/05/2021	Final Documentation.	Final report presentation.

C. **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.)

1. Installation of software and tools: Installation of android studio, Java Development Kit, and database server.

2. Resource Gathering: Video tutorials, online references and books related to android app development and XML.

3. Design Phase: It includes designing user interface, database design and understanding the functionalities of the features.

4. Development Phase: In this phase, development of features in the app starts.

5. Testing: The product will be tested for its functionalities and will also be carried out for integration testing to ensure that it produces a desired function.

6. Final Documentation: After all the phases are done we will document about the project and will prepare a final report for our project.

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

1. By using my app, the users can select the category that they want (Veg and Non-Veg).

2. Since the instructions will be written step-by-step with measurements and also videos will be uploaded, the users will be able to follow and cook accordingly.

3. From my app, the users will be able to learn and know more about different types of Bhutanese food and will be able to learn how to make those dishes which will help in promoting Bhutanese cuisine.

4. It will also help in preserving the traditional way of cooking Bhutanese cuisine.

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 ☑ where applicable)	Low	Medium	High
Technical risk		☑	
Timing risk			☑
Budget risk		-	

A1. Comments (Describe the risk):

1. Technical Risk:

As an amateur developer, I might face some technical risk such as

- Handling sophisticated software.

- I might not get all the resources that are required to develop an application.

- I might face some hardware problems (4GB RAM).

2. Timing Risk:

I might face some risk regarding time such as

- I might not be able to complete our project within the given time period.

- Pre-planned schedule may get delayed.

Feasibility Study

Since there is no other platform where we can learn Bhutanese cuisine, My application is feasible.

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:

SI #   Name   Signature

(Please add more rows if required.)

Project Coordinator

Name:

Designation:

Email:

Date: Signature:

Competent Authority – Head of Department

Name:

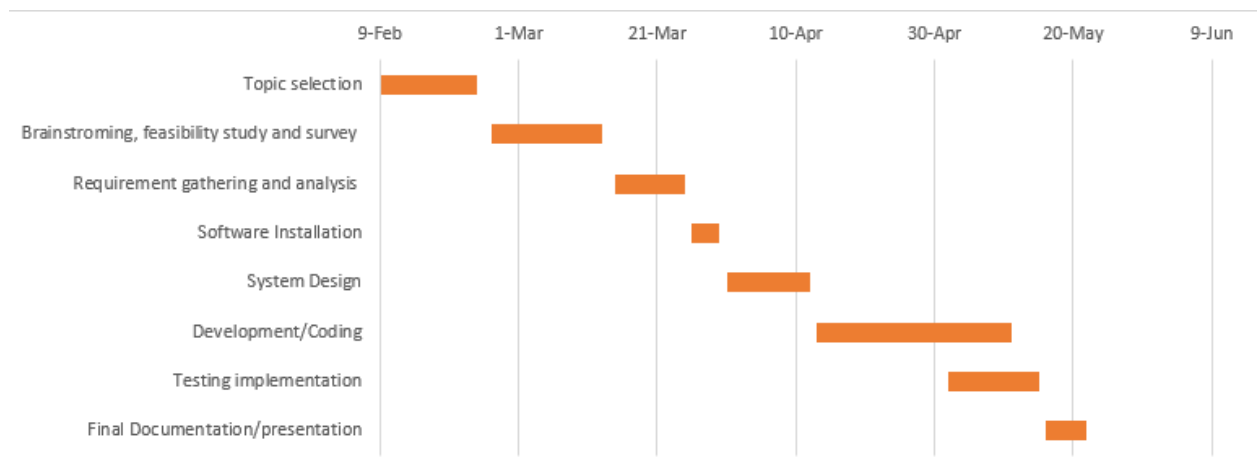Designation:

Email:

Date: Signature

& stamp:

8. Reviewers Panel Comments

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)

Task Name	Start	Days to complete
Topic selection	9-Feb	14
Brainstroming, feasibility study and su	25-Feb	16
Requirement gathering and analysis	15-Mar	10
Software Installation	26-Mar	4
System Design	31-Mar	12
Development/Coding	13-Apr	28
Testing implementation	2-May	13
Final Documentation/presentation	16-May	6

Timeline

Gantt Chart

13. Report Writing Guidelines

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

Bibliography

Taran, M. (2020, March 25). Case study: Perfect RECIPES App. UX design for cooking and shopping. Retrieved March 14, 2021, from https://blog.tubikstudio.com/case-study-recipes-app-ux-design/

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Deki. (2019, October 20). Dried beef with dried RED chillies and cheese. Retrieved March 14, 2021, from http://www.deki.bhutantourarchitect.com/2016/01/sha-kam-ema-datsi-dried-beef-with-dried.html