

Bachelors of Science in Information Technology

**Gyalpozhing College of Information Technology**



**Proposal  
For  
Second Year Project  
Bachelor of Science in Information Technology**

Druk Seljuen

**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.

## **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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**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 .....	9
4. Methodology .....	10
5. Benefits of the Project (Expected output/outcomes): .....	16
6. Risk Analysis/Feasibility .....	16
7. Project Approval Certificate .....	18
8. Reviewers Panel Comments .....	19
10. Project Schedule / Milestone Chart /Work plan.....	20
13. Report Writing Guidelines.....	21
Bibliography .....	22

**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>A. Reference Number:</b>	
(for office use only)	
<b>B. Project Title:</b>	
<b>C. Project Internal Guide:</b>	
Name:	
Designation:	
Organization:	
Mobile # :	Tel. # :
Email:	
<b>C1. Project External Guide:</b>	
Name:	NA
Designation:	
Organization:	
Mobile # :	Tel. # :
Email:	
<b>C2. Student Group Lead:</b>	
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. Dzongkha
2. Offline
3. Categories
4. Search Button
5. Feedback

**F. Research and Development Theme:**

To move ritual-related books to digital format to make them last longer.

**G. Project Status:**(Please mark ☒)

- ☐ New      ☒ Modification to previous Project
- ☒ Extension of existing project

**H. Project Duration:**

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

Planned Duration in  
months: \_\_\_\_\_**2. Scope, Introduction and Background of the Project****A. Scope of the Project:****User Scope:**

Scope of the project is within Bhutan because it mainly focused on Bhutanese religion rituals and prayers.

**System Scope:**

To develop mobile application that deals with following features:

1. Everyone can access without internet connection.(Offline based app)
2. No need to register or login to this application.
3. It contains different type of rituals that is performed in Bhutan.
5. Users can click on any ritual icon according to their need.
6. Users can use the search button to find the rituals they need.
7. Users can provide feedback.

8. Users can also share the app.



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

When the countries around the world started their modernization developmental activities, Bhutan was still following its own unique method of maintaining its sovereignty by staying completely isolated from the world. It was only during the reign of Druk Gyalpo Jigme Dorji Wangchuck, the third king of Bhutan who dropped the traditional method of being isolated. Since then, Bhutan started opening its gateway to other nations and initiated its developmental activities towards modern Bhutan. In September 21st 1971, Bhutan joined United Nations and declared Dzongkha as national language of Bhutan. Dzongkha being the national language of Bhutan, preservation and promotion was of highly need in order to maintain its independence throughout the years. Keeping its importance in mind, Bhutan started Dzongkha Development Commission in 1986 as independent organization with the sole purpose of advancement of Dzongkha. (Dzongkha Development Commission, n.d.)

Today mobile communications technology has become the backbone of society as well as the world's most common way of transmitting voice, data, and services in the developing world, where it have brought improved the living of human beings. Given this dramatic change, mobile applications in general specifically the mobile applications for education development in holds significant potential for advancing development. Moreover, it has been the most affordable ways to access information, markets, finance, and governance systems that were previously unavailable to millions of people.

Almost everyone knows how to use all these latest phones and the applications within it. All are using smartphones and other electronic devices for playing games and other unproductive activities. While there are some app to contains the prayers and rituals of their own country. So in other countries the papers are almost all turning into technologies for their comforts and to last it more. I came up with the ideas to develop my project on the base concept to keeps all the rituals related together and the ritual performers can easily accessed from my app. It will mainly focus on displaying all the prayers that are needed for the ritual purposes. It will not only save resources and time, but it will also promote digital exposure and reduce work load of monks.

**Literature Review:****Paper Review:****a) Mobile Liturgy – Reflections on the Church of England's Daily Prayer App**

In Anglicanism, as in some other Christian traditions, a strong relationship is thought to exist between prayer and belief, public worship and church doctrine, sometimes expressed *lex orandi lex credendi*. “[F]or Anglicans, what we do when we worship expresses what we believe” (Stevenson,2006: 133).

**b) Prayer-Bots and Religious Worships on Twitter: A Call for a Wider Research Agenda**

The automation of online social life is an urgent issue for researchers and the public alike. However, one of the most significant uses of such technologies seems to have gone largely unnoticed by the research community: religion. Focusing on Islamic Prayer Apps, which automatically post prayers from its users' accounts, we show that even one such service is already responsible for millions of tweets daily, constituting a significant portion of Arabic-language Twitter traffic. We argue that the fact that a phenomenon of these proportions has gone unnoticed by researchers reveals an opportunity to broaden the scope of the current research agenda on online automation.

**c) findPanditj:**

“Aim of find Panditji app is to connect Brahmin society/Pandit into digital world.

In today's world, Internet is the bare necessity for all the ages of people. As the name indicates, find Panditji app mainly focuses on helping the Yajaman/user to find Brahmins/Pandits in their nearby location. Yajaman/user can connect to their online Pandit through the application and contact them easily.

By using find Panditji, Yajaman/user can find the Puja-Samagri from the shop near to their current location. Panditji app also provides help to Yajamans/user so they can make delicious recipes for offering prasad to God. Yajaman/user can also get the dates for Muhurat by viewing Choghadiya.

Yajaman can connect with Hindu Culture by reading about historical Hindu temples, Mythological stories, Bhajans/Shloks or view the Hindu Festival Calender, etc. via find panditji app.

Yajaman can also connect to pujaris of Hindu temples for purposes like booking for Puja-Vidhi, Home-Yagna, etc.

Taking our culture in regard, the Yajaman can use the application in different languages such as Hindi, Gujarati and English.

Ultimately, find Panditji helps in connecting people digitally with their own culture.”

**Mobile App Review:****a) YouVersion The Bible App for Christians**

This is one of the most popular apps for Christians worldwide. The Bible App offers a huge range of features in visual, audio and written format. There over 1400 Bible versions and the app is available in 40+ languages, in addition, the bible can be downloaded and read offline and the app offers multiple audio bibles. There is a strong emphasis on connection and community with this app and you can view and share comments with friends about scripture and verses you have bookmarked.

**b) Hinduism Today**

Hinduism Today is an informative journal providing a wealth of information on all topics and traditions related to Hinduism. There is a large educational section providing much information on ancient wisdoms, Hindu trends on food, yoga and ecology and users can get regular updates on the network of Hindu temples and communities worldwide. Hinduism Today, also offers access to vast resources on Himalayan Academy's websites which includes videos, artwork, teaching resources and more.

**c) Pray.com**

Pray.com, the number one ranked app for prayer and faith, recently became the only religious app to be ranked in Apple's Top 10 in the lifestyle category. Shortly after launching the app on the campus of Southeastern University, Pray.com's daily prayers and Bible bedtime stories have gone viral. The app has climbed the charts and now sits at number five in Apple's Lifestyle category.

**C. Challenges:**

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

Challenges that I am going to face while developing the App is:

**Performance:** To make my app Responsive and smooth as per users expectation and requirements will be one of the biggest challenges for me.

**Security:** Since android is open source which invites more security flaws. As user increases

and due to openness this platform is more vulnerable to security flaws. Due to these flaws we might face challenges to keep source code safe from hackers.

**Software Fragmentation:** Google release a new version of android every year with new features and enhancement but the adoption of latest version of android remains slow. For example, Android 6.0 Marshmallow currently has a higher market share than Android 7.0 Nougat. Therefore we the developers have to target multiple version of android while developing mobile apps. So we often find it challenging to make our app function its features properly without any problems for both latest as well as earlier version of android OS.

**Marketing:** It is one of the major challenges of our project because there are more than 8 million of apps in market place today and getting my app among them will be challenging.

#### **D. Motivation and Need:**

Now the world turns into advanced technologies and all the papers are turn into digital form. There are many mobile applications to store the ritual related books in other countries however there is no application in our country. People are performing their ritual annually and ritual performers are performing all the time. All the ritual related books are still in the paper form and it is very difficult to carry wherever the performers go. Some ritual performers are forgetting to bring their books. So with such scenarios I came across, I came up with the idea to develop the mobile application based on to store the ritual related books.

### 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 :**

To develop Druk Seljuen application n based on android.

**OBJECTIVES :**

The following are the specific objectives in developing Druk Seljuen apps to work in Android phones:

- a) To develop Free and Offline Android application.
- b) To provide an interface through which it will help monks to reduce their work load.
- c) To perform functional test and user acceptance test before the application is formally launched.

## 4. Methodology

### A. Development / Research / Test Methodology:

#### **General Methodology:**

Following are process involved to develop my system “Druk Seljue”.

#### **Problem statement :**

This process recognizes the community's dilemma and designs the application that would be the solution to the identified question.

#### **Literature review :**

This process entails a discussion of previous research articles on the subject at hand. It's written with a good backbone to deal with the dilemma at hand. Seeking related publications (such as books and journal articles), objectively reviewing them, and describing the findings are all part of the process of writing a literature review.

#### **Requirement gathering :**

In this process, the team will understand the issue in depth and hold numerous meetings and conferences, brainstorming, and conducting related surveys after reading enough papers and collecting enough knowledge on how and what to do for requirement gathering. In addition to collecting specifications, the project team will begin the documentation process.

#### **Design:**

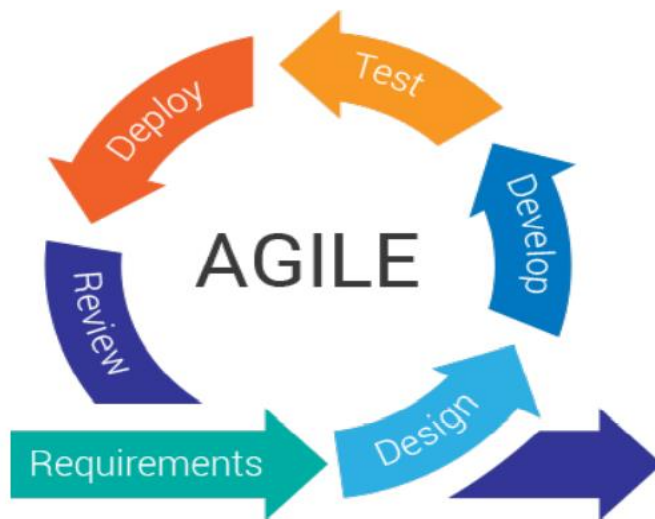
The database, app icon, user interface, and device architecture will all be designed during this process. It also aids in the specification of device and hardware requirements.

**Implementation:**

The framework will be developed during the implementation process, and different features of the software will be developed. Throughout the production process, the team will monitor each feature to ensure that it functions properly. The framework would be built using the prototyping approach to boost the app's efficacy and performance while also accommodating new specifications.

**Testing:**

Each part would be subjected to unit testing in order to ensure that it functions properly. The part that has been checked will then be integrated into the app to ensure that it works properly. If any problems arise during the testing process, the team will work to fix them before retesting.

**Development mode**

Since the following advantages are applicable for creating a web application, I choose the agile development model to build my system.

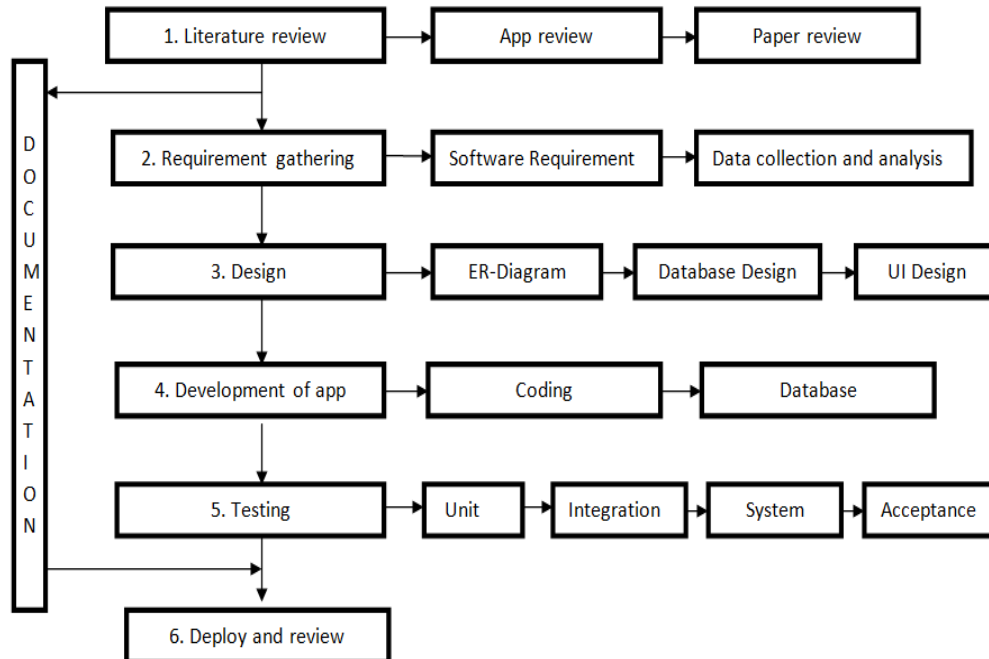
- 1 Errors are readily observable.
- 2 It is simple to identify missing features.
- 3 View a sample of the finished product.

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



**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.)*



The project will begin with the installation of the necessary tools (Android Studio and Java Development Kit v8 or higher) as well as the gathering of references (books, instructional documents, images, the internet, and the library) related to Android application development and XML.

The project would include creating a database for the program as well as familiarizing yourself with the system's features, such as how the power flows. Under each iteration, the product will be developed and tested.

The “Druk Seljue” app will be put to the test, with the developed app being incorporated to verify its features. If a flaw is discovered, the implementation team will address the problem and do further testing to ensure the application's correct functionality. The team's final step will be to write the project summary, user manual, and final presentation.

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**D. Key Milestones and Deliverables:**

<i>No.</i>	<i>Elapsed time from start (in months) of the project</i>	<i>Milestone</i>	<i>Deliverables</i>
1	9/2/2021 – 14/3/2021	<i>Title selection, problem statement, brainstorming, literature review and App review.</i>	Writing project proposal
2	15/3/2021 - 26/3/2021	Requirement gathering, analysis and design.	SRS document, ER diagram, database design, User interface design and UML design.
3	28/4/2021 - 30/4/2021	Development/ Coding	Source code and functional features implementation.
4	1/5/2021 - 9/5/2021	Testing	Test Case
5	10/5/2021 - 9/5/2021	Complete development and testing.	Complete android app.
6	17/5/2021 - 22/5/2021	Final Documentation	All document combined together and ready.

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

My initiative will assist monks with keeping track of their prayer books, which they use when conducting rituals and can take with them everywhere they go. I've seen a lot of monks looking for their prayer books before performing rituals, and I've also seen them losing their prayer books, which is a tragedy for them. In order to address this issue, my project would assist them in reducing their workload.

**For User:**

- 1) It will promote digital exposure.
- 2) It will reduce work load.
- 3) It will last forever.
- 4) Easy to access

**For developer:**

- 1) Gain real time project skills
- 2) Economically benefited if it is successful

**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		<input checked="" type="checkbox"/>	
Timing risk		<input checked="" type="checkbox"/>	
Budget risk	<input checked="" type="checkbox"/>		

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

**Technical risk:**

- Since I don't have any devices that support Android Studio, my project is at a medium technological risk.

**Timing risk:**

- Researching, designing, studying Android, and creating the program all take time.
- Failure to meet goals due to college activities conflicting with project deadlines.
- Managing time between research hours and project creation can be challenging.

**Budget risk:**

- I don't have to worry about running out of money and I don't have to buy any software or technology. My project can be completed with free software found on the internet.

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

SI #	Name	Signature
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### *Project Coordinator*

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

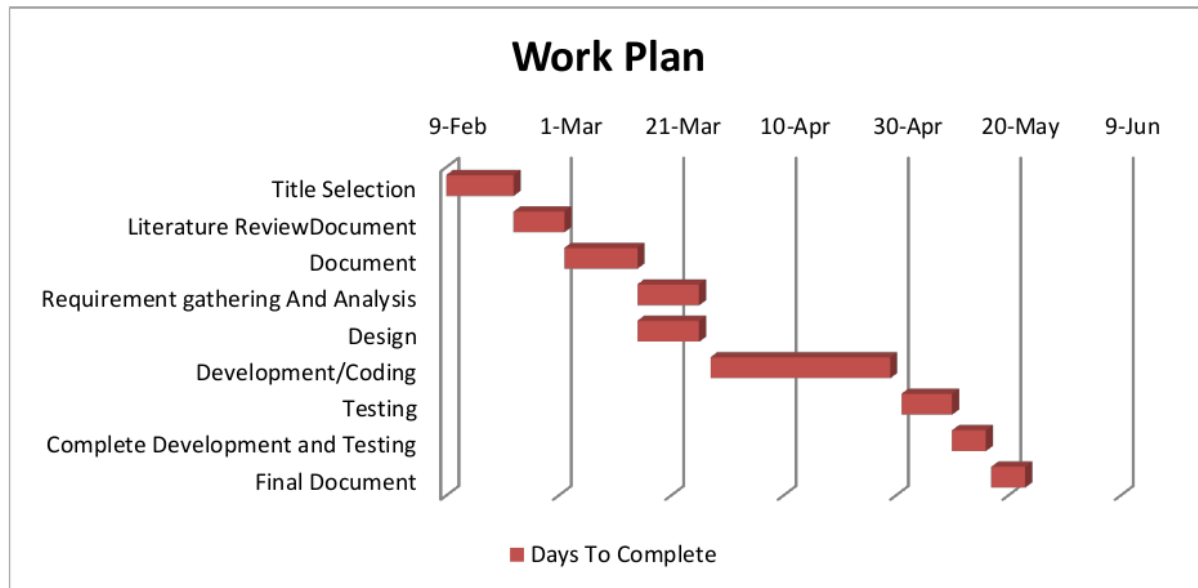
& stamp:

**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)*

Activities	Start Date	Days To Complete	End Date
Title Selection	9-Feb	12	20-Feb
Literature ReviewDocument	21-Feb	9	1-Mar
Document	2-Mar	13	14-Mar
Requirement gathering And Analysis	15-Mar	11	26-Mar
Design	15-Mar	11	26-Mar
Development/Coding	28-Mar	32	30-Apr
Testing	1-May	9	9-May
Complete Development and Testing	10-May	6	16-May
Final Document	17-May	6	22-May





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

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

## **Bibliography**

Mann, J. L. (2017). Mobile Liturgy-Reflections on the Church of England's Daily Prayer App. *Online-Heidelberg Journal of Religions on the Internet*, 12.

Öhman, C., Gorwa, R., & Floridi, L. (2019). Prayer-bots and religious worship on twitter: A call for a wider research agenda. *Minds and machines*, 29(2), 331-338.