

Bachelors of Science in Information Technology

Gyalpozhing College of Information Technology



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

E-Book For BSc IT

**Submitted by
YESHI DEMA(12190106)**

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

Sonam Wangmo
sonamwangmo.gcit@rub.edu.bt

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Application for Second Year Project**1. Project Identification**

A. Reference Number:	
(for office use only)	
B. Project Title: E-Book for BSc IT	
C. Project Internal Guide:	
Name:	Sonam Wangmo
Designation:	Lecturer/Programme Leader
Organization:	Gyalpozhing College of Information Technology
Mobile # :	17391134 Tel. # :
Email:	sonamwangmo.gcit@rub.edu.bt
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
	Gyalpozhing College of Information Technology	Development support

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.)

Notes
References
E-Book
Read
Semester

F. Research and Development Theme:

The research and the development theme of this project is to develop an application whereby individuals who are pursuing in Information technology can refer all the books and notes that are available in this application. One can also refer it if you are interested in IT world. Presently one has to save all the notes and the projects in a folder for references and in case the system is crashed or the folder is deleted accidentally, then all the files would be lost. So prevent that, there is in need of a application to which you can use as and when you like.

G. Project Status:(Please mark ☒)☒ New Modification to previous Project

Extension of existing project

H. Project Duration:

Expected Starting Date: 10th February, 2021

Planned Duration in months: 4 months

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

The scope of this project is broadly classified into two, namely:

1. User Scope

The user scope of this project is limited only to the students of Gyalpozhing College of Information Technology.

2. System Scope

- View: Any user will be allowed to view the materials that are available. Like they are four which user can view and they are, Paper, Notes, Projects and Practical's
- About: Information regarding the application will be available here.
- Help: In case you need some help regarding the application
- Feedback: if the user has any suggestion, they can send it.

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

After studying or using several applications, the conclusion was made that though there are similar applications that have been developed but none in our country and none of the students of GCIT use such applications. Instead they save the safe the files in their laptop or college PC and sometimes, others who are using the same PC delete the folder and we lost all the files. But coming to our application, we can flourish our application more than the traditional method because all the notes that you want would be there and there would also be extra references for you.

Problem Statement

Traditional way of saving your files in PC or laptop is no longer safe.

Literature Review:

Smith (2003) studied the role of e-journals and its impact and led to the conclusion that e-journals are playing integral part in the research activities, with vast majority of faculty reporting they read at least one article from an electronic source every week.

Next Generation Libraries: Application and Challenges by Ashim Kundu

This paper presents an evaluation of the role of innovative technology utilities in the transformation of next-generation libraries. This paper discusses there have been many advanced technologies that have already implemented many libraries in the world. It also analyzes different technology aspects of next-generation digital libraries: learning commons, internet of things, big data, user-focused interface, augmented reality, artificial intelligence, mobile app, drone, etc. to relevant and useful techniques to implement at the library.

One of them is Mobile apps – The new trend is "Information in our fingertips." Libraries can extend the mobile app services outside the physical border, facilitating interaction with the user. In libraries, mobile interfaces are making access for users of all abilities. Mobile apps are growing faster because of the large number of smart phone users. Now is an excellent time for librarians to meet with mobile app developers to become app experts for their library professional's community. Librarians should be aware of such things when creating mobile library apps. It would be cost-effective because libraries are a nonprofit organization, compatibility, 24/7 access, work offline, limitless access, Interactive, User less memory, security, reliability,

encourage 155 reading habit, etc. Libraries' leading motto mobile apps would disseminate the library information product and services online.

The other is Library Bookmark Apps – In libraries, users can be locating books without knowing the bay guide or call number. A Chinese design company Toout invented this little tiny device that works as a regular bookmaker. The device also has features that could make using the library much more comfortable, like keep track of all borrowed books, remind the user of the return dates, finding a book quickly. This device 157 would be a perfect assistant when navigating the library by offering turn-by-turn direction to the book the patron wants.

Acceptance of E-book reading Applications- Scale Development and Validation by Dunja Meštrovi, Lidija Bagari and Nataša Jakomini Marot

The paper develops and validates an instrument that explores users' attitudes and intentions to use mobile e-book reading applications (Apps) on smartphones and tablets and appraises users' perceptions of such Apps as a value-added service complementing travel experience. Dependence on mobile technology is growing and has a huge influence on digital media consuming. Mobile digital media time (51%) surpassed desktop and laptop digital media time (42%) for 2 years in a row (Bosomworth, 2015). The increase in mobile usage may explain the increase in mobile reading. In 2011, 41% of all e-book readers read e-books on e-readers, 23% on tablets, 42% on computers, and 28% on cell phones. In 2014, ebook reading on tablets and e-readers surged, respectively at 55 and 57%. Reading ebooks on computers decreased to 29% by 2014, while reading on cell phones rose to 32% (Zickuhr and Rainie, 2014). Computer reading thus continued to decline, while mobile reading seems to be the future. The use of e-books already has an impact on student's education and their productivity by improving reading comprehension and by increasing motivation and engagement.

The results of the study suggest a good model fit, confirming the proposed measurement scale's validity, reliability and dimensionality, thus contributing to the existing literature on IT and mobile Apps acceptance theories, while proposing an useful measurement instrument that accesses users' attitudes and intentions to use mobile e-book reading Apps on mobile devices and appraises users' perceptions of the mobile e-book reading Apps as a value-added service that complements their travelling experience.

C. Challenges:

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

- Completing task on schedule due to limited time allotted to us. We are new to application development and we have to develop two mobile applications within limited time period.
- Familiarization with new framework (Android studio). Problems may arise for not being fluent or familiar to the software that should be used for designing user interface and back-end of our application.

D. Motivation and Need:

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

Storing your files (notes and projects) in college PC or laptop is no longer safe because sometimes your friends might delete your file accidentally or sometimes the system might crash suddenly and what if the exam is tomorrow but you don't have any notes to study?

So, to overcome such issues, I have come up with an idea to develop an application where all the notes that you want are all in one place. And once you download this application you can refer your notes irrespective of places since mobile phones are portable.

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 an application with all the notes for BSc IT course.

OBJECTIVES :

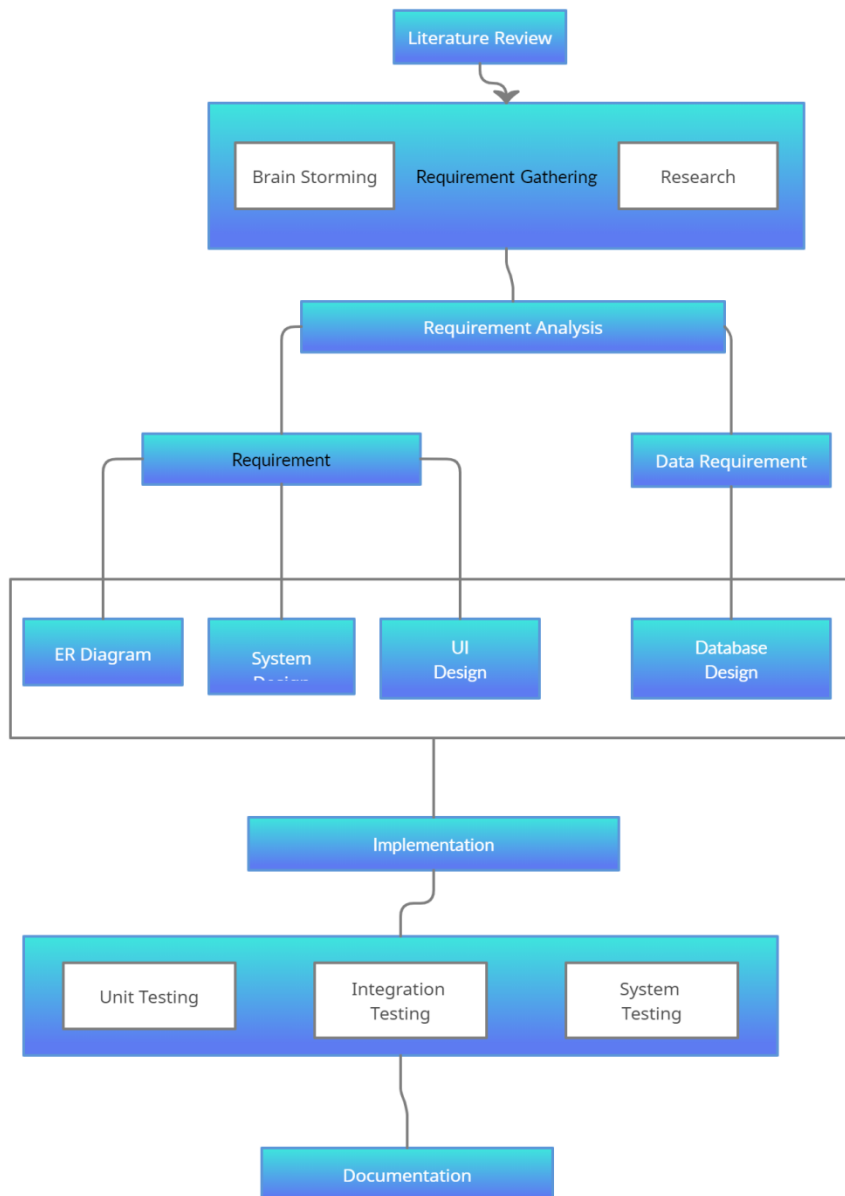
- To make it easier for the students to have all the materials in one place.
- They can refer it anytime and anywhere.
- It is safe and secure.

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)

General methodology to develop E-Book For BSc IT



Prototype Model to be used

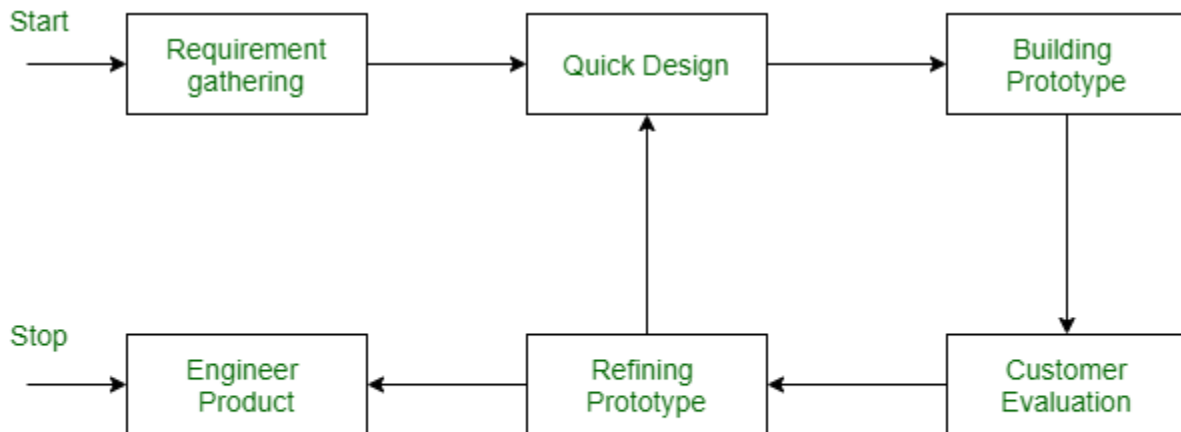


Figure - Prototype Model

Why Prototype Model?

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. In this model, working programs are quickly produced

Our motive to use prototype model is:

- It is easy to detect errors.
- Users are actively involved in the development.
- Missing functionality can be identified easily.
- Reduced time and cost.

B. Project Team:	
<i>Title / Position</i>	<i>Number</i>
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.)

Literature Review

In here I conducted surveys in major websites, articles and in addition, the similar existing application is tested to get a clear idea on our development. Through this, I am able to improve the working features and understand the certain working fields that will be beneficial for our application development.

Requirement Gathering and SRS document

In this stage of activity, I will gather the entire requisite requirement for our application development. In here I will gather all the list of requirements such as technical, system and functional from different users. In here I have initiated brainstorming to get a detail information on needed requirements or features that user are interested in. All the requirements will be analyzed before mentioning it in the SRS document.

In SRS document, all the chosen and analyzed requirement of the application will be listed in detail. Through this document we can assure the quality, workflow and reference for completion of work as per the mentioned schedule.

Software installation

In this phase, the software needed for our application development will be installed. The software that are needed for our application are:

- a) Android studio - for back-end coding or for generating source code.

Design

I will carry out design phase to assure that all the requirements specified in the SRS documents are correctly planned.

Coding and unit testing

The back-end activities will start in this stage where the working or source code will be generated for the mentioned requirements and prototypes. All stated features of app such as UI design and database design will be created. The unit testing will be performed simultaneously with coding to check if the individual components or modules are able to function as we expect.

Integration and system testing

These activities will be conducted after completion of unit testing. Integration testing will be done to know if an application component can communicate in group. System testing will be done to know if the entire requirements that are specified are practically implemented or not. Upon success in this phase, the application will be ready to use.

Deployment and maintenance

This application will be installed and referring notes and other materials related to BSc IT course.

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.

No.	Elapsed time from start (in months) of the project	Milestone	Deliverables
	-	Commencement of the project	
1	10/02/2021-27/02/2021	Problem statement, title selection and literature review	-
2	1/03/2021-13/03/2021	Requirement gathering	Functional and non-functional requirements list
3	14/03/2021	-	Proposal submission
4	15/03/2021-30/03/2021	Requirement Analysis and design	SRS Document
5	31/03/2021	Software Installation	Setting up environment for application development
6	1/04/2021-8/05/2021	Coding	Source code generation
7	9/05/2021-15/05/2021	Testing	Test cases
8	16/05/2021-24/05/2021	Final Documentation and Final review	Complete application and project presentation

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

The outcome of this project would be fully functional E-book for Bsc IT with following features:

- Easy to access
- Convenient
- Won't require many resources

The output of this project is:

- To learn android studio
- Leave advance java programming

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):**

Technical Risk: Our project has a technical risk as to develop a application we require laptop of a desktop which has more than 8gb ram and we are in short of that. So there is a high chance of losing our data in case the software or the hardware fails.

Timing Risk: Completing the project as scheduled may be bit difficult as in a short duration we have to develop a new project. Difficult to manage time between study hours and project development.

Budget Risk: In order to complete this project we won't face much budget risk because we don't have to buy any software or technology.

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

Sl #	Name	Signature
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Project Coordinator

Signature:

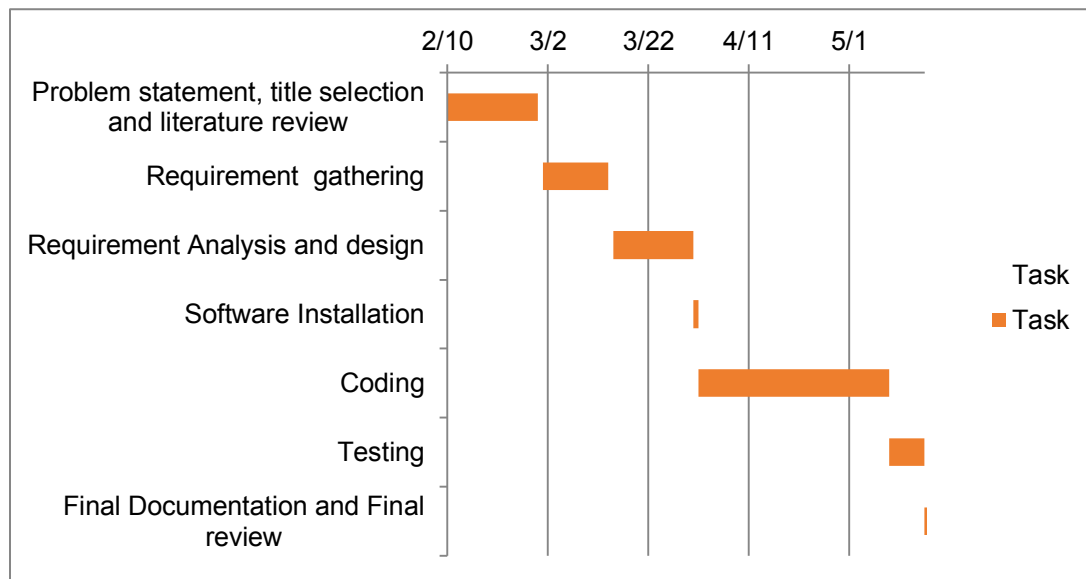
& stamp:

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)

Problem statement, title selection and literature review	2/10/2021	2/27/2021	18
Requirement gathering	3/1/2021	3/13/2021	13
Requirement Analysis and design	3/15/2021	3/30/2021	16
Software Installation	3/31/2021		1
Coding	4/1/2021	5/8/2021	38
Testing	5/9/2021	5/15/2021	7
Final Documentation and Final review	5/16/2021	5/24/2021	9



13. Report Writing Guidelines

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

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Zickuhr, K. and Rainie, L. (2014), E-Reading rises as device ownership jumps. Pew Research Center's Internet and American Life Project, Washington, viewed 25 January 2017, http://www.pewinternet.org/files/2014/01/PIP_E-reading_011614.pdf