

#### **Proposal**

# For Second Year Project Bachelor of Science in Information Technology

**Project Name** 

**Submitted by** 

12190085

...

**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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### **Application for Final Year Project**

#### 1. Project Identification

A. Reference Numb	er:
(for office us	e only)
B. Project Title:	
C. Project Internal (	Guide:
Name:	
Designation:	
Organization	1:
Mobile # :	Tel. # :
Email:	
C1. Project Exte	ernal Guide:
Name:	NA
Designation:	
Organization	ı:
Mobile # :	Tel. #:
Email:	
C2. Student Gro	oup Lead:
Name:	
Roll No:	
Department:	
Mobile # :	Tel. # :
Email:	

# Organization Name Role / Contribution  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 incorporated in our database.)  Todo, User, GCIT, Task, LIST  F. Research and Development Theme:  The theme of my project would be developing a platform where the users of GCIT canote down all their list of things that they should do on a particular day. The proposed application will allow the users to manage the work load, manage all yot tasks for the day. By logging and monitoring the list the user can be more productive with time.  The potential for human error can be reduced, therefore increasing the productivity of the workforce. It willmainly focus on digitalizing the way how the daily chores are being managed efficiently and effectively. It will also give the user a motivation to do something productive if the thin are managed properly according to the time.		D1. Industrial Organizations:	
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In GCIT, the chores and listing are being dealt manually where the students/staffs have to do the tedious way of handling with their tasks and managing their life. It is exhausting and time consuming for users for this type of tedious task to be handled with out any technology by their side . Therefore, my application "LIST" will mainly focus on helping the people in dealing with their daily chores and proper management of their time. With the help of this application, the students and staffs of GCIT can save their time and solve their problems through "LIST without having to lose their precious time scribbling on a piece of paper which might get lost easily.

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#### H. Project Duration:

Expected Starting Date: 20/3/2021

Planned Duration in 5 months

months:

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

#### A. Scope of the Project:

The scope of our project is limited to staffs and students of Gyalpozhing College of Information Technology. There are times when every individual in the college faces problems like managing of their daily tasks, shopping lists, prioritizing their list of things to do, These problems are dealt manually as of now. Therefore, this app will transform the existing manual way of doing things and will be focusing on doing it effectively with the help of technology.

#### Limitation

- 1) As of now the scope is set to only GCIT because the app will be in the beta stage, it will grow gradually with feed backs and will be reaching heights and then the scope will be made larger covering more areas.
- 2) The ToDo list doesn't capture uncertainties. There is no way for management to plan based on a todo list. Management can't plan alternatives, and can't assess the impact of your suddenly contracting appendicitis and being unavailable.

#### System scope

- 1) Add The user can add the list of things
- 2) Edit The user can edit the list of things.
- 3) Done The done button will be used to delete the list of things from the dashboard
- 4) Reminder It will remind the user of the time at which the things must be done, and the status about being early or late for your task.

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#### 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.)

A project to-do list assists with keeping track of the tasks and procedures that must be completed in order for a project to be completed on schedule. Project to-do lists detail all of the steps involved in completing the project, as well as the things that must be present to ensure that each project phase is completed. Did you ever forgot your shopping list? Do you struggle managing your Sunday chore efficiently? Well this application is a solution, which turns your phone into an effective tool for management of all your day to day task of your life. It will provide an effective way for managing all you tasks in an organized way of your type and you will never lose track of your time. It will help you manage your life and organize it in the most efficient way possible so that there is no shambles created due to clash of your inefficiently managed schedules. It will have features that will ease your life. This application will be easy to use with its best user interfaces and active note down facilities it provides. This is a power full tool which can fit into your small pocket and does herculean tasks with some gentle touch and swipes. It is an app which will be built for all those who aspires to become a productive person in life with proper plans for future, as new revolutionary progresses are being made along with infrastructures in this world, there is a need for an app which helps you walk along with this pace in the most efficient way as possible. So, that is how this app "LIST" was born.

To-Do List project is an application specially built to keep track of errands or tasks that need to be done. This application will be like a task keeper where the user would be able to enter the tasks that they need to do. Once they are done with their tasks they can also remove them from the list. Let us see what is there in the application:

- 1)You can add the tasks that are to be done in a descriptive way.
- 2)You will be able to add as many tasks as you have.
- 3)Once the task is completed, you will be able to remove it by clicking on "Task Completed" button.

Following are the user interface components that will be shown in our application-

- 1)There will be an add task button on the right top of the application
- 2)There will be a button "Task Completed" for each task added, so you will be able to delete it
- 3)The tasks that will be added by the users are stored in the dashboard of the user.

#### Literature Review:

1:

What a To-Do: Studies of Task Management Towards the Design of a Personal Task List Manager is a paper published by Victoria Bellotti, Brinda Dalal, Nathaniel Good†, Peter Flynn‡, Daniel G. Bobrow and Nicolas Ducheneaut on 29 April from Vienna, Austria and talks about reports on the results of studies of task management to support the design of a task list manager. We examined the media used to record and organize to-dos and tracked how tasks are completed over time. Our work shows that, contrary to popular wisdom, people are not poor at prioritizing. Rather, they have well-honed strategies for tackling particular task management challenges. By illustrating what factors influence task completion and how representations function to support task management, we hope to provide a strong foundation for the design of a personal to-do list manager. We also present some preliminary efforts in this direction.

2:

Remembering Future Tasks: A usability study of reminder apps is a paper published by Wesam Abusaber A thesis submitted to Auckland University of Technology In partial fulfillment of the requirement for the degree of Master of Computer and Information Sciences (MCIS) on 2015. This research is a usability study of reminder apps that are available on smartphones and tablets. Reminder apps are used by people to remember their future tasks and also manage their schedules. Interviews, co-inquiry, observation and diary methods were used with several students to understand user experiences. An initial set of guidelines were formulated covering interaction and graphic design. Awareness is raised about gender differences and religious preferences. The study also offers researchers and practitioners the comparative advantages of the different methods that can be used to get user experiences and preferences.

#### C. Challenges:

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

Followings are the challenges that we might face during the development of this application:

Time Management

Though we have a full semester to complete the android app development, we feel that we will still face difficulties in managing the time.

#### Security

We have little knowledge regarding the security issues and it can be nagging concern while developing the application.

#### System Failures

As we are going to develop an android based application, there is a high risk of our system getting crashed.

#### New Technologies

As being exposed to the new technologies for building an android application with very little knowledge on frame works and its works. This might hinder our *development process greatly.* 

#### D. Motivation and Need:

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

In today's world, everyone uses modern technologies to do any kinds of work as it makes the work easier. Everyone is busy with their own work and people tend to find the easier way to complete their task. There is very little services through which the common people can manage their tasks and keep a proper plan for the future also. There is a need for to-do list app in GCIT because as of now we have to do a manual way for listing our small chores and prior things but now we say no to it. It is time consuming and exhausting for everyone. In today's fast moving world nobody has the time to do all those tedious task which is very in-efficient aswell. So there should be an app through which the people can see their works for the day and keep track their time and make their day a productive one by scheduling their every tasks.

#### 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:

#### **OBJECTIVES:**

Aim: To develop an android application which can list all the things to do for a particular day for proper management of tasks.

#### Objectives of our project:

- 1)To make a app that can easily coordinate, monitor, track your daily tasks.
- 2)To provide a digitalized platform to manage the tasks effectively.
- 3)Enhancement in the completion of work within the constraints of time.
- 4)To reduce the workload of the users and digitalize everything.

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#### 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

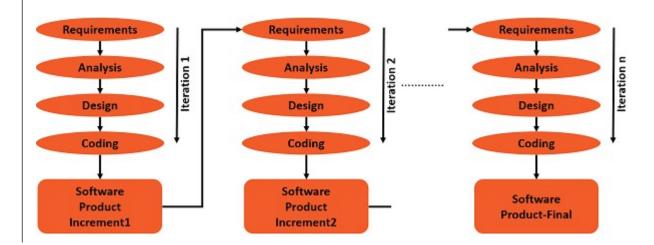
#### **Problem Statement**

Though GCIT is an IT (Information Technology) college, almost everything is done manually. The currently way of dealing with the tasks management in GICT is time consuming and exhausting where the students/staffs have to jot down all the things to be done for the day. The proposed application will provide the students and staffs of GCIT a proper platform to manage all their tasks. It will eliminate the manual way of handling of their chores. The general methodology that we will be using is Iterative Incremental Model.

In iterative incremental model, initially, a partial implementation of a total system is constructed so that it will be in a deliverable state. Increased functionality can be added. Defects, if any, from the prior delivery can be fixed and the working product is delivered. The process can be repeated until the entire product development is completed. The repetitions of these processes are called iterations. At the end of every iteration, a product increment is delivered.

The phases of iterative incremental model are:

- I. Requirement Gathering
- II. Requirement Analysis.
- III. Design.
- IV. Coding/development.
- V. Software product increment.



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The reasons for choosing iterative incremental for developing our application:

- 1. We will be able to develop the prioritized requirements first.
- 2. Requirement changes can be easily accommodated.
- 3. Initial product delivery is early.
- 4. Users can have working model in hand all the time.
- 5. Many of us are more familiar with this model.

The following processes will be involved in developing the application:

1) Feasibility study.

This process includes conducting survey, questionnaires and interviews on whether this project is feasible nor not.

2) Requirement gathering.

After studying the feasibility of the project, we will collect the requirements of the project. The requirement gathering includes all the relevant ideas and information of the project from the users, existing systems and other research papers.

3) Requirement analysis.

Once the requirement gathering is done, the team will work on understanding the project in details and analyzing the requirements that has been gathered. The SRS document will be prepared in this stage which will be an input for the design phase.

4) System design.

In this phase the overall architecture of the system will be implemented with the help of the SRS document. This process will also include identifying the hardware and software requirement for the development purpose.

5) Coding.

After successful system design the project will be divided into modules and actual coding will start. This is the longest phase software development life cycle.

6) Testing.

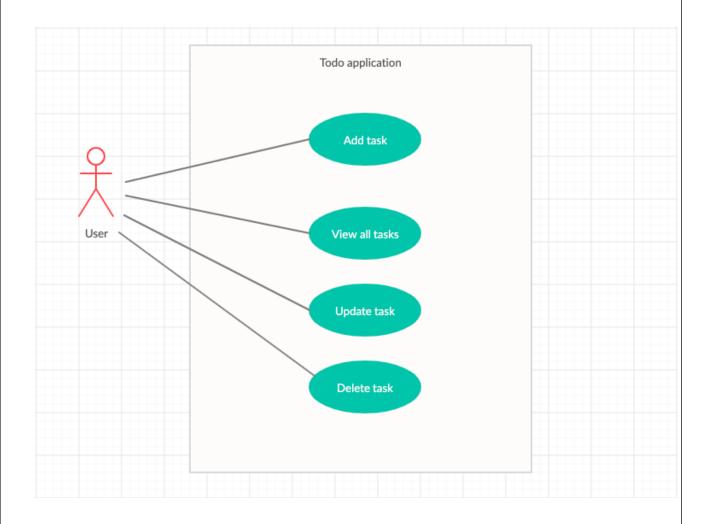
In this phase, the testing of the product will begin. Firstly, each unit of the system will be tested for its functionality. It will be followed be integration testing, system testing and acceptance testing.

7) Final documentation.

The final documentation will be prepared after completing all the coding and fulfilling all the

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#### **Work Flow**



The user can add the task that they wanted to do at some point of time, they can also edit the in between if they change their mind, They all can view it on their dashboard. If the task is done then they can finally delete it.

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

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#### 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) Installing the required software and tools.

Installation of Android Studio – it is an Integrated Development Environment (IDE) for the development of android applications.

Installation of Java Development Kit (JDK) – It allows the developers to create, execute and run java programs.

Installation of Flutter Framework –It is a UI toolkit which helps in building native applications for the web, mobile and desktop.

2) Gathering the required resources.

The resources that we are going to use would be video tutorials, books and other online materials related to the android app development.

3) Design Phase.

Designing of UI (User Interface) and database of the application. It also includes understanding the functionalities and flow of information.

4) Development Phase.

It is a development phase of the application which includes coding by using android studio and flutter framework.

5) Testing Phase.

In this phase, the application or the product will undergo unit testing, integration testing, system testing and acceptance testing to ensure that all the functions of the applications are working properly.

6) Final Documentation.

After completion of all the phases, there will be a proper documentation of the project along with the project report.

#### **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	
	09/02/2021 – 20/02/2021	Topic Selection.	topic selected
	14/02/2021 – 13/02/2021	Literature review	Online research
	15/03/2021 – 25/03/2021	Requirement Gathering and Analysis.	SRS Document.
	26/03/2021 – 7/04/2021	System Design.	ER diagram, Relational diagram, architecture design, database design, User interface design.
	09/04/2021 – 2/05/2021	Development/coding.	Source code and functional features implementation.
	04/05/2021 – 15/05/2021	Testing.	Test case.
	16/05/2021 – 22/05/2021	Final Documentation.	Final report presentation.
	(Please add	more rows if required.)	

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

The Benefits of the project would be:

1)Digitalizing the way listing of things are being done.

- 2) Handling the daily chores effectively and efficiently.
- 3)Providing the user with user friendly and interactive application.

#### 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  $\square$  where applicable)

Medium High Low

Technical risk

Timing risk

Budget risk

Risks of the Project:

Technical Risk – There is high technical risk as i don't have required technology or hardware system for the development purpose.

Timing Risk – There is medium timing risk as we are not sure whether i will be able to complete the development of the project on time.

Budget Risk – There is no risk or low budget risk as we I will be using only the free software that are available on the internet.

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

. Project App	roval Certificate			
	iect Proposal by the C ry before the start of p			hority (Department Chairman) and Project Review on.)
Project Review	Team:			
	5	SI #	Name	Signature
(Please add more	e rows if required.)			
Project Coordina	ator			
Name:				
Designation:				
Email:				
Date:	Signature:			
-	ority – Head of Depa	ırtmei	nt	
Name:				
Designation:				
Email:				
Date:	Signature			
& stamp:				

8. Reviewers Panel Comments

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

Activities	Start D	ate	Da	ays To Com	olete	<b>End Start</b>		
Topic Selection			9-Feb		12		20-Feb	
Literature Review			21-Feb		21		13-Mar	
Requirement Gathering			15-Mar		11		25-Mar	
Design			26-Mar		13		7-Apr	
Coding			9-Apr		24		2-May	
Testing			4-May		12		15-May	
Final Documentation		:	17-May	8			24-May	
	9-Feb	1-Mar	21-Mar	10-Apr	30-Apr	20-May	9-Jun	
Topic Selection			_					
Literature Review			<u>'</u>					
Requirement Gathering								
Design								
Coding						_		

(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)

■ Days To Complete

Final Documentation

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

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

#### **Bibliography**

- 1)Boßelmann, S., Neubauer, J., Naujokat, S., & Steffen, B. (2016, July). Model-driven design of secure high assurance systems: an introduction to the open platform from the user perspective. In The 2016 International Conference on Security and Management (SAM 2016). Special Track "End-to-end Security and Cybersecurity: from the Hardware to Application (pp. 145-151).
- 2)Rogers, R., Lombardo, J., Mednieks, Z., & Meike, B. (2009). Android application development. O'Reilly.
- 3)Felker, D. (2010). Android application development for dummies. John Wiley & Sons.
- 4) Holla, S., & Katti, M. M. (2012). Android based mobile application development and its security. International Journal of Computer Trends and Technology, 3(3), 486-490.