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**Proposal**

**For**

**Second Year Project**

**Bachelor of Science in Information Technology**

**Timing Reminder**

**Submitted by**

**Karma Choda(12190055)**

**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

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)

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**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

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| --- | --- | --- | --- | --- |
| Reference Number: | | | | |
| (for office use only) | | | | |
| Project Title: | | | | |
| Time Reminder | | | | |
| 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: |  | | | |

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| 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* |
|  |  | |  |
| **D2. Academic Organizations:** | | | |
| *#* | *Organization Name* | *Role / Contribution* | |
|  | *Gyalpozhing College of Information Technology* | Provides feedback | |
| **D3. Funding Organizations:** | | | |
| *#* | *Organization Name* | | *Role / Contribution* |
|  | *NA* | |  |
| Key Words: *(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)*  Complaints, Android application, digitalize, workload, resources. | | | |
|  | | | |
| Research and Development Theme:The theme of my project would be developing a platform where user can set the reminder by setting the what he/she wants to do latter. By setting the reminder, the potential for human tends to forget can be reduced, so that user can update their individual work easily on time. It will mainly focus on digitalizing the way complaints are being handled in GCIT. | | | |
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| Project Status: (Please mark ☑)  ☑ New  ☑ Modification to previous Project  ☑ Extension of existing project | | | |

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| Project Duration: | | |
| Expected Starting Date: |  | |
| Planned Duration in months: |  | |
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# 2. Scope, Introduction and Background of the Project

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| Scope of the Project:User Scope:User scope of this project is to limited to the interested user. Therefore, this project will transform the existing manual complaint management system into an automated system.LimitationScope of project is limited to interested user, so therefore service provided to user might not fulfilled.System Scope:It is an android based application which includes the following features:Set Reminder: user can set their reminder with notes on it.Set Time: User can set time when do user want their reminder.Set Date: User set the date in which date they want reminder.View Reminder: The User can view the current status of the reminder.Delete – The users can delete the reminder before it has been alarmed.Notification – Once the user set reminder, they will be alarmedfo. They will also get notified when the complaints would be resolved.Feedback – The users can provide feedback about the system. |
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| 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.)*  Background  People often forget to perform everyday tasks, and they may find it difficult to recall details related to the tasks they have already completed (Hodges et al., 2006). For example, people may fail to remember, or ‘forget’, future intentions such as buying milk or visiting the dentist. Recent technological innovations, such as smartphone-based reminder apps, can help users to remember future tasks.  The growth of smartphones has continued unabated. Nearly half of all adults in the United States (US) own a smartphone, with nearly 1.8 billion units currently in use. Smartphones are used for much more than phone calls. The average user spends two hours per day using the device, of which only around 11 minutes are spent making phone calls (Miller & Monaghan, 2013). The popularity of smartphones has led to a significant increase in the popularity of smartphone applications (or apps). According to Apple, more than 50 billion apps have been downloaded from Apple’s online App Store since it opened in 2008 (Miller & Monaghan, 2013). Reminder apps are available in the App Store’s Productivity category; a recent study found that this category contains 1687 apps (Kim, Park, Kim & Lee, 2014). This study will focus on general reminder apps. To remember future tasks, users may have different roles or identities based on where, when and why they use the app (Kim et al., 2014). They can use reminder apps for shopping lists, remembering homework assignments or even waking up.  **Literature Review:**  Followings are the list of projects/papers that we referred to:   1. Reminder alarm clock   According to ([Shahreen Kasim](https://www.researchgate.net/profile/Shahreen-Kasim)), reminder alarm clock is used to awake someone at the specific time to do some specific works. Thus, many people need an alarm clock to wake them up on time. Today, the alarm clock is developed as an application for the smartphones or tablets. The existence of alarm clock application can be improved, which is how easy it is to disable the alarm clock when it is rang. Many people have problem in waking up early in the morning even after they set the alarm clock to a specific time. Some of the people are still unwilling to wake up even when they have set the alarm clock at the specific time the night before. Some of the people may also encounter the problem which is when the alarm is activated, they have switch it off without realizing it. This project aims to develop an android alarm clock application to make sure users can wake up on time. This project has enhanced the capability of the alarm clock by adding new feature such as the pedometer system, so that it has not easy for the user to turn it off. The goal of this project was to develop an android Smart Reminder Clock (SRC) application for the target user. The project is to design and develop an alarm clock that allows the user to do a specific task before switching it off. Also, this project aims to enhance the capability of alarm clock by integrating it with Short Message Service (SMS) and pedometer. |
| Current State of the Art.Currently there is no such reminder app in Bhutan alarm for the work to be done. Mostly the Bhutanese used alarm app for waking up but most probably set manually as reminder. Which have less chance of forgetting the work that user needs to be done.. |

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| 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 because we also have other modules to study.   * 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. |
|  |
| 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 forget the next events. There are no such things which set reminder to do them to be done. Mostly people remember or write piece of note on the personal dairy which is more consuming the time.  Through this idea it motivates me to develop a reminder app which is more efficient and less time to set reminder. Moreover, less chance of forgetting the work to be done after one to another since it gives me alarmed at exact timing after setting. |
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# 3. Aim and Objectives of the Project

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| *(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 android application which user can set reminder for upcoming activity.  **Objectives**  Objectives of our project:   * To set the reminder easily through app. * Enhancement in the completion of work within the constraints of time. * To reduce the burden of forgetting the reminder. |
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# 4. Methodology

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| 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**  The general methodology that we will be using is Iterative Incremental Model.  Iterations  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:   1. Requirement Gathering 2. Requirement Analysis. 3. Design. 4. Coding/development. 5. Software product increment.   The reasons for choosing iterative incremental for developing our application:   * We will be able to develop the prioritized requirements first. * Requirement changes can be easily accommodated. * Initial product delivery is early. * Users can have working model in hand all the time. * 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.   1. 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.   1. 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.   1. 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.   1. 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.   1. Testing.   In this phase, the testing of the product will begin. Firstly, each unit of the system will be tested for its functionality. After the unit testing, the system will be tested as a whole which is known as integration testing.   1. Final documentation.   The final documentation will be prepared after completing all the coding and fulfilling all the features of the application.  **System Workflow**  **­­­­­­­­­­­­­­­­­­­­­­­** |

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| Project Team: | |
| ***Title / Position*** | ***Number*** |
| Project Internal ide | Mr. Yonten Jamtsho |
| Project External Guide |  |
| Student Team Members | Cheki Lhamo (12190043)  Dawa Tshering (12190046)  Karma Choda (12190055)  Sourav Rai (12190085) |
| Others (please specify) |  |
| Add more rows if required |  |

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| 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.   1. 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.   1. Design Phase.   Designing of UI (User Interface) and database of the application. It also includes understanding the functionalities and flow of information.   1. Development Phase.   It is a development phase of the application which includes coding by using android studio and flutter framework.   1. Testing Phase.   In this phase, the application or the product will undergo unit testing and integration testing to ensure that all the functions are working properly.   1. Final Documentation.   After completion of all the phases, there will be a proper documentation of the project along with the project report. |
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| 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* |
|  | 09/02/2021 – 13/02/2021 | Group Formation, Guide and Topic Selection. | Project group formed, topic selected and provided with project guide. |
|  | 14/02/2021 – 25/02/2021 | Brain storming, Feasibility and Survey. | Project proposal and presentation. |
|  | 01/03/2021 – 06/03/2021 | Re-proposal Submission. | Project Proposal. |
|  | 07/03/2021 – 10/03/2021 | Requirement Gathering and Analysis. | SRS Document. |
|  | 11/03/2021 – 12/03/2021 | Software Installation. | Setting environment for development. |
|  | 13/03/2021 – 18/03/2021 | System Design. | ER diagram, Relational diagram, architecture design, database design, User interface design. |
|  | 21/03/2021 – 10/05/2021 | Development/coding. | Source code and functional features implementation. |
|  | 11/05/2021 – 15/05/2021 | Testing. | Test case. |
|  | 16/05/2021 – 22/05/2021 | Final Documentation. | Final report presentation. |
|  | 23/05/2021 – 30/05/2021 | External Review. | Interactive review with external examiner. |

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

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| The Benefits of the project would be:   * User can manage a time in a efficient way. * The user will be timely reminded. |
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# 6. Risk Analysis/Feasibility

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| 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 – There is high technical risk as many of us don’t have required technology or hardware system for the development purpose. |
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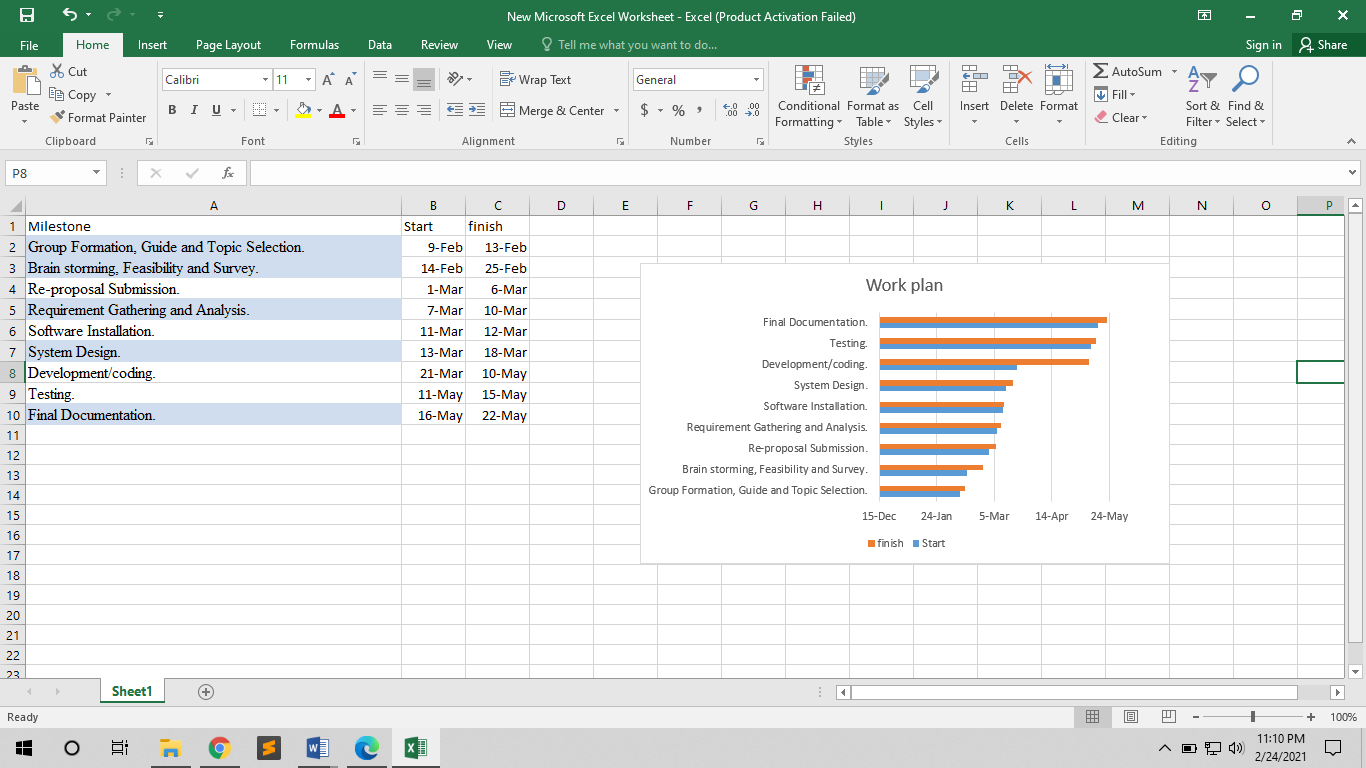
# 7. Project Approval Certificate

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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****.****)*  ***Project Review Team:***  Sl # 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)*



# 13. Report Writing Guidelines

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

# Bibliography

*Customer Complaint Management System Based On Android Platform*. Retrieved February 26, 2021, from <http://www.xajzkjdx.cn/gallery/444-april2020.pdf>

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SDLC - Iterative incremental Model. (n.d.). Retrieved February 26, 2021, from <https://www.tutorialspoint.com/adaptive_software_development/sdlc_iterative_incremental_model.htm#:~:text=In%20an%20Iterative%20Incremental%20model,the%20working%20product%20is%20delivered>.

The statistics portal. (n.d.). Retrieved February 26, 2021, from https://www.statista.com/