

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

Countdown App – Countdown Time

Submitted by

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**Gyalpozhing College of Information Technology** 

Read carefully before filling the form.

- 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.
- 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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Tshering Lhamo tsheringlhamo.gcit@rub.edu.bt

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

### 1. Project Identification

| A. Reference Number:             |          |  |  |  |
|----------------------------------|----------|--|--|--|
| (for office use only)            |          |  |  |  |
| B. Project Title: Countdown Time |          |  |  |  |
| C. Project Internal G            | uide:    |  |  |  |
| Name:                            |          |  |  |  |
| Designation:                     |          |  |  |  |
| Organization:                    |          |  |  |  |
| Mobile #:                        | Tel. #:  |  |  |  |
| Email:                           |          |  |  |  |
| C1. Project External Guide:      |          |  |  |  |
| Name:                            | NA       |  |  |  |
| Designation:                     |          |  |  |  |
| Organization:                    |          |  |  |  |
| Mobile #:                        | Tel. #:  |  |  |  |
| Email:                           |          |  |  |  |
| C2. Student Grou                 | ıp 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:   | ,   |
| This   | application is:  |   |
|  | Timer, offline, free, countdown, android applicatio  | n.  |
| F.   | Research and Development Theme:  |   |
| outs<br>app<br>dea<br>the  | people are busy with their work and usually forget side of their schedule even sometime their own wilcation, a virtual clock will countdown the time for the dline and how urgent it is by their priority. Not only any work and event. It will aid the person in time to day. | ork of deadline. With the help of this he user and keep them on track of the that but it will also remind the user of |
|  |  |   |

### G. Project Status:

(Please mark ☑)

- q 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: Class level (College).

The android app is based on class-level (college) utilization in which it will help students to keep track of their assignment datelines and important events. It is advantageous for college students who wants to balance their study time with their free time. Not only that but also to learn managed time efficiently.

System Scope

To develop mobile application dealing with efficiency in time management.

- Offline based: It is accessible from anywhere and anytime.
- Notify: It will alert the user before the time or on the time of the event.
- Cost free: All the features of the application is free.
- Organize the time schedule: The time will organized and based on the priority of the events or task. The user can also categorize their timer.

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

The countdown was invented by an Austrian filmmaker Fritz Lang and was first used on making science fiction film called Women in the Moon that features a scene of rocket launch with the countdown of ten seconds. It was created to suspense. However through history time line, there is noticeable usage of countdown or similar features like it where they calculate the interval of times. For example hourglass is also a device that used to count down the time and calculate the intervals of time. The hourglass use sand as key measure time. It was invented around 1000-1100 AD where the era of maritime navigation. The sailors used it to record time and sailing speed. The hourglass was ideal for people who travels in ocean because the bobbing waves didn't affect its accuracy. Not only that but now in modern generation, people still use it to keep track of time while cooking and for playing game. The hourglass can be seen on multiple occasion with its usage. According to Doctor (2019), Australia's Senate uses an hourglass to time period in which Senators have to come to the chamber to vote before door are closed." Even now in period of technology the concept of hourglass is still being use in the clock.

Razek (2016) stated that countdowns are just a utility telling you that something will be complete or will happen at some point in time. Thus it can be created into a virtual clock which will indicate end or beginning of an offer or event from date or time. It can make a person sense of urgency or importance that would require a swift action. Setting the countdown ahead of the time will enable a user from keeping track of the flow of work and be prepared as the due date is approaching. The sense of desire and willingness to do something is also occurred. Hence it build a habit to manage time smoothly and avoid procrastinate the task in in future time. The important events will not missed and this application can assist the any events to accommodate in the time table. In addition, McMahon also point out that there are also practical uses for countdown timers: they can be used to keep track of a counseling session, period of work, or to keep track of long a user has been on a computer. Some people use countdown timers while organizing, so that they can put in a solid block of time organizing and then take a break, using a countdown timer as a guide.

In similar aspect, Adoric Team written an article where it stated that businesses also use countdown timers to count down to when a special discount or offer will become available. It can be used to generate curiosity and keep people interested and coming back. A survey conducted by Whichestwon, by adding a countdown timer, on the average increase a business revenue by as much as 9%. This gives the way for a countdown timer to be used in email marketing, on product page, at the checkout page website pages and on landing pages. According to McMahon, many fan websites use countdown timers to show the amount of time left before the release of a major movie or book.

### Literature Review:

### 1. Dreamdays Countdown

Dreamdays Countdown is one of the best count down application in 2021. It will allows a user to countdown the events or occasion that are prefer by users along with it has features like reminders, style and voices. The countdown events are organized through categories and priority. Other features that includes are the customizing of the countdown events: the background can be customized, record voices, writing memos and sharing it to social media. The categories which are included are Anniversary, holiday, Birthday, Life, School, Trip and custom. In every events, the voice could be recorded. It also set favorite event as cover too. Addition to that it will send reminder regularly for upcoming events. This application is available in both android and IOS platform. However this application is known for it to be not loading. This application is reported several time for crashing after the update of the new version of the application again and again. There are also problem with troubleshooting. It is not available in Bhutan. It is not a free app and have use money to use it.

### 2. Countdown widget: Track events

Countdown widget: Track events is also one of the best app of 2021 for IOS platform. It aids to set countdown for all important moments in a person's life. It allows a user to select the units which user desire for each countdown. Additional to that it also has features that repeats the countdown. This application doesn't have features of organizing and does not have user friendly interface and it is only available for IOS. Most of the time it cannot be found easily in app store.

### 3.Final Countdown – widget

Final Countdown – widget is available for both android and IOS platform. It includes resizing of widget for home screen and also allows cloud backup with the help of face book login. It aslo allows to sync the countdowns and customize the countdowns. It will show from years to seconds. Also includes 300 free HD background images and allow to share live customize countdown across social media. It also import special events from Facebook birthday.

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### C. Challenges:

- Device compatibility: Since it is an android based application it will be available only to android mobile. It will not support other application platform.
- Traditional method like sticky notes also has the advantage of being less prone to technical failures than tablets and phones.
- Students may also be discouraged from using this app as there many similar app available with variety of functionality.

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

The idea of this application is inspire from based on the people who are forgetful and mixes the dates of the events due to their careless or absent-mind. It is not only because of these reason but also for the busy schedule of work that one goes through every now and then. The application is created so it can be a helping hand to manage time and space for every events and tasks occurring in one's life. Even though the idea of application of counting down of time is nothing new in play store but this application is developed to have a simple and user friendly features so that a user can interact and use it easily.

The necessity of this app is to remind of the time that is needed to spend out of their line of work for the workaholic and to keep alert about the works those procrastinate.

### 3. Aim and Objectives of the Project

AIM: "To keep reminder of important events and urgent work to be done on time by using virtual clock."

Time management is must for all and this application help an individual person not to get out of track from the work and to have some time to for themselves and their loved one. Its application can be versatile from reminding of important to measure the interval of time taken at any places and anytime. Thus it can make a person to be strict on their daily routine which could give a way for good method.

### **OBJECTIVES:**

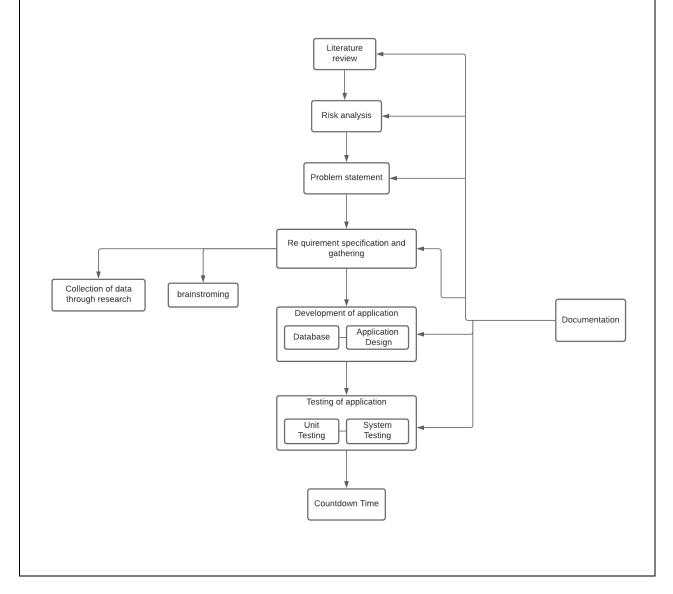
- Notify user: The students will be remind of their tasks or events by notify with them through phone.
- Effective time management: Through notifying, a student can manage their time effectively.

### 4. Methodology

### **Problem Statement:**

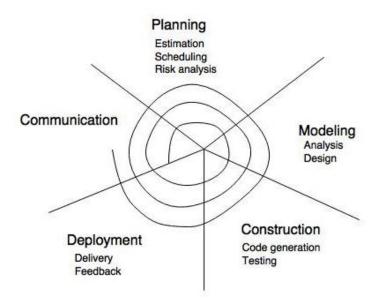
With always usage of sticky note and writing it down on paper to remind oneself has become a not effective method since the person has high chances of forget to go through those material. By setting up reminder on phone with date and time with the description of event and work can alert the student through one notification. The muddle of dates can work can be confusing as it would be much easier to have an application that could organize student's work as well as to reminding them and to check out the time remaining.

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



For this project, the first step would be literature review where project related matter is reviewed, researched and brainstorming to identify the problem. Along with that risk analysis would done. By identifying the problem, the solution is also proposed. Next the requirement of the project would gather in this phase. With every phase completion, the documentation is process. The requirement is specified according to the user need so research and interview is done to fulfil it. By analysing the requirements and data receive through interviews, the next phase is started. The designing phase, in which database, user interface and system is design and the developed. After the development of application, each components of the application is tested to find the error and to check its working progress. Not only that but also the components are tested together to find any flaws when it works with each other.

### **Development Model**



The phases of the model:

- Communication: Communicate with user by interviewing them to get user desire application.
- Planning: Gather the requirements of the application. Plan for schedule, estimate budget and analyse the risk.
- Modelling: Design the system, user interface and database of the application
- Construction: Develop the final software product and test the application.
- Deployment: Deliver the product to the users and evaluates the application. If the user is dissatisfied, then it is refined according to the user's requirement.

| To develop this application spiral model is use because of this model handle unknown risk that may occur after the development of the work has been started. Each phase, product is              |
|--|
| analysed and the risk could be found and it can be solve by developing the prototype which is done on every phase. So even if the risk is identified at later stage, it can handle it. The other |
| advantages are it can develops next version of the product, has review and plan for next phases. The requirements can be change at any phase and it ensure satisfaction to the customers.        |
| Documentation in this model is strong in control and approval as it process in each and every phase of the process.  |
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|  |
|  |
|  |

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

### C. Project Activities:

The installation of software and tools:

- 1. Installing Android studio (version 2 or more), Android SDK and Java Development Kit (version 8 or more) for developing the application.
- 2. Proto.in is a web software which is used to design prototyping.
- 3. Lucid Chart is used to create design of working systems.
- 4. My sqlit server to make design database.

### Procedure:

- I have referred various tutorials, books and websites related to the application that we are going to develop.
- I will be designing flow charts, UML diagram and user interface,
- The individual component of the system of application is tested and all the system is tested wholly so that each component of the application are working faultlessly.

### **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<br>from start (in<br>months) of the<br>project   |                                       | Deliverables   |
|-----|---|---------------------------------------|--|
| 1   | 13 <sup>th</sup> February<br>2021                             | Topic selection.                      | Topic selection of application.  |
| 2   | 14 <sup>th</sup> February<br>- 10 <sup>th</sup> March<br>2021 | Collection of data and research.      | Collecting data and designing prototype.                               |
| 3   | 14 <sup>th</sup> March<br>2021                                | Project proposal submission           | Submission of proposal   |
| 5   | 15 <sup>th</sup> March -8 <sup>th</sup><br>April 2021         | Design and development of application | Gathering requirements. Designing, developing and testing application. |
| 6   | 12 <sup>th</sup> April<br>2021                                | Project submission                    | Submission of the application.   |
| 7   | 24 <sup>th</sup> – 27 <sup>th</sup><br>May 2021               | Project presentation                  | Presentation of the application.                                       |
|     |   |                                       |  |
|     |   |                                       |  |
|     |   |                                       |  |

| (Please add | more rows if required.) |  |
|-------------|-------------------------|--|

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

The benefits of application are:

- Free: This application is free for android platform and all the features are free.
- Easily accessible: It is accessible from anywhere because it does not need internet connection.
- Simple and easy: It is not complicated to use.
- Saves time and resources: With one touch, the reminder is set so there is no need of sticky pad and write it down.
- Reusability: It can use again and again for many times.

### 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                      | <b>7</b> |        |      |

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

Technical risk is medium since it can be difficult if the user's phone does not support the latest version of the application and the application only support the android platform.

Time risk is low as there is plenty of time to accommodate this project.

Budget risk is low since the tools and software use to develop this application is free.

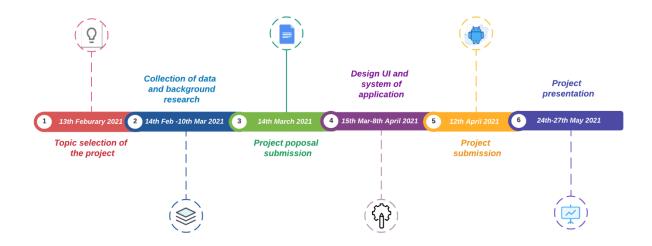
### 7.

| . Project Approva     | al Certificate  |        |
|-----------------------|---|--------|
|                       | Proposal by the Competent Authority (Department Chairman) and Project Refore the start of project execution.) | Review |
| Project Review Tea    | am:   |        |
|                       | SI # Name Signature   |        |
|                       |   |        |
|                       |   |        |
|                       |   |        |
|                       |   |        |
| (Please add more rows | rs 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)



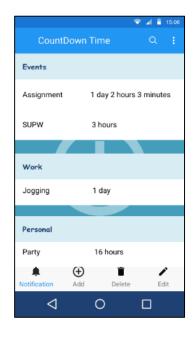
| Sl.No | Date  | Activity                              |
|-------|---|---------------------------------------|
| 1     | 13 <sup>th</sup> February 2021                          | Topic selection.                      |
| 2     | 14 <sup>th</sup> February – 10 <sup>th</sup> March 2021 | Collection of data and research.      |
| 3     | 14 <sup>th</sup> March 2021                             | Project proposal submission           |
| 5     | 15 <sup>th</sup> March -8 <sup>th</sup> April 2021      | Design and development of application |
| 6     | 12 <sup>th</sup> April 2021                             | Project submission                    |
| 7     | 24 <sup>th</sup> – 27 <sup>th</sup> May 2021            | Project presentation                  |

### 13. Report Writing Guidelines

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

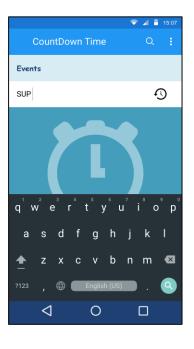
### Prototype of Mobile Application



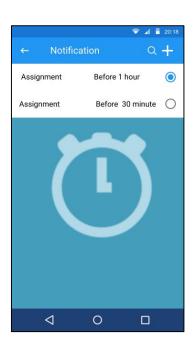




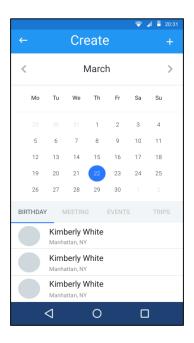
Cover page



Home page



Toolbar



Edit button

Notification

Add button

### **Gyalpozhing College of Information Technology**

### **Bibliography**

- Doctor, V. (2019, May 3). Why the hourglass will never lose relevance. *The Economic Times*. Retrieved from https://economictimes.indiatimes.com/news/international/world-news/why-the-hourglass-will-never-lose-relevance/articleshow/69167819.cms
- How to Use Countdown Timers to boost Conversions with Examples. (2020, July 23). Retrieved from Adoric Blog website: https://adoric.com/blog/how-to-use-countdown-timers/
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- Razek, S. (2016, December 11). Why Everyone Can Benefit from Using Countdowns. Retrieved March 14, 2021, from Medium website: https://medium.com/@ShawnRaz/why-everyone-can-benefit-from-using-countdowns-

ab970597e77a#:~:text=With% 20countdowns% 2C% 20you% 20see% 20exactly