

Bachelors of Science in Information Technology

Gyalpozhing College of Information Technology



Proposal

For

Mobile application

Bachelor of Science in Information Technology

discussion application

Submitted by

TASHI NAMGAY (12190086)

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.

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1. Project Identification

A Reference Number: (for office use only)
B Project Title:discussion appication
C Project Internal Guide: Name: Mrs.Sonam Wangmo Designation: Lecturer Organization: Gyalpozhing College Of Information Technology Mobile # : Tel. # : Email:
C1. Project External Guide: Name: NA Designation: Organization: Mobile # : Tel. # : Email:
C2. Student Group Lead: Name: Tashi Namgay Roll No: 12190086 Department: B Sc IT Mobile # : 17532020 Tel. # :

Email: 12190086.gcit@rub.edu.bt

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	
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D2. Academic Organizations:

Organization Name Role / Contribution

	Gyalpozhing College Of Information Technology	
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D3. Funding Organizations:

Organization Name Role / Contribution

	NA	
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E Key Words:

(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)

gcit discussion forum for academic purpose.

F Research and Development Theme:

G Project Status:

(Please mark)

New Modification to previous Project

Extension of existing project

H Project Duration:

Expected Starting Date: 27/02/21

Planned Duration in
months: 3 months

2. Scope, Introduction and Background of the Project.

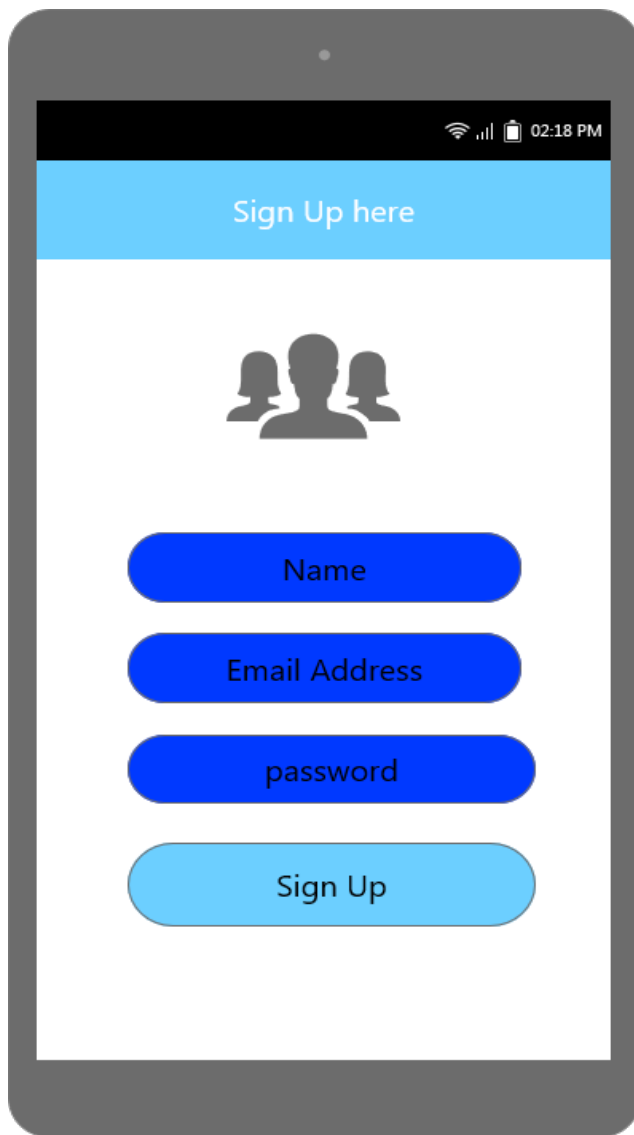
A Scope of the Project:

System Scope:


User should register if he/she is new to this, if not he can directly log in.



- register/signup(email address,name,password).



Sign Up here



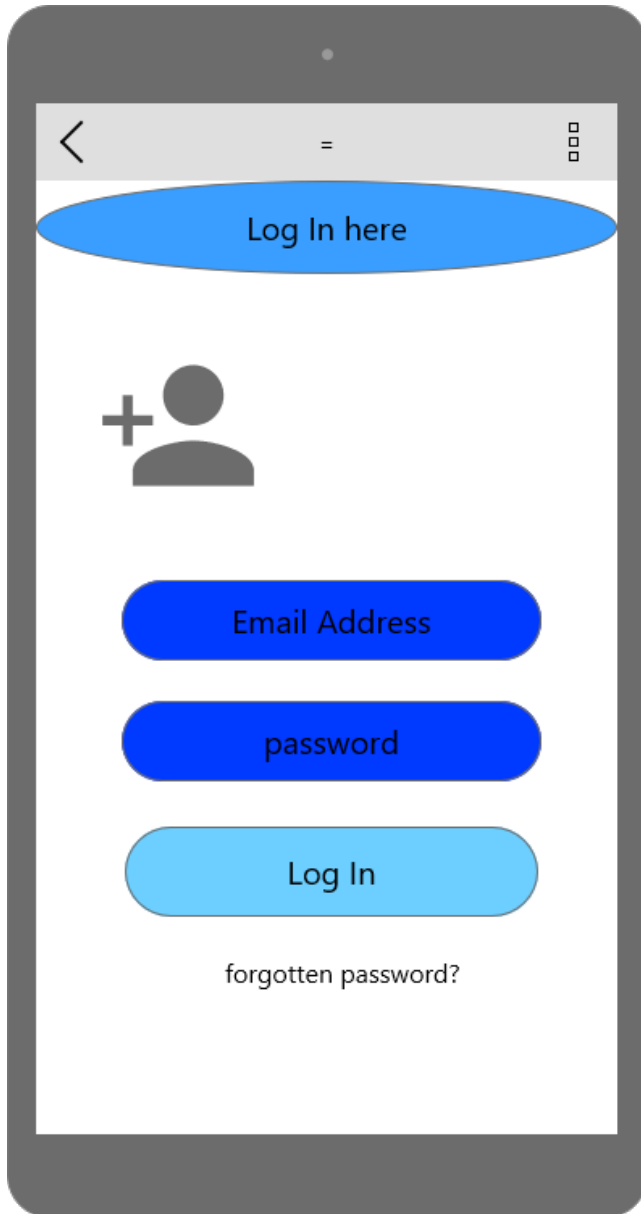
Name

Email Address

password

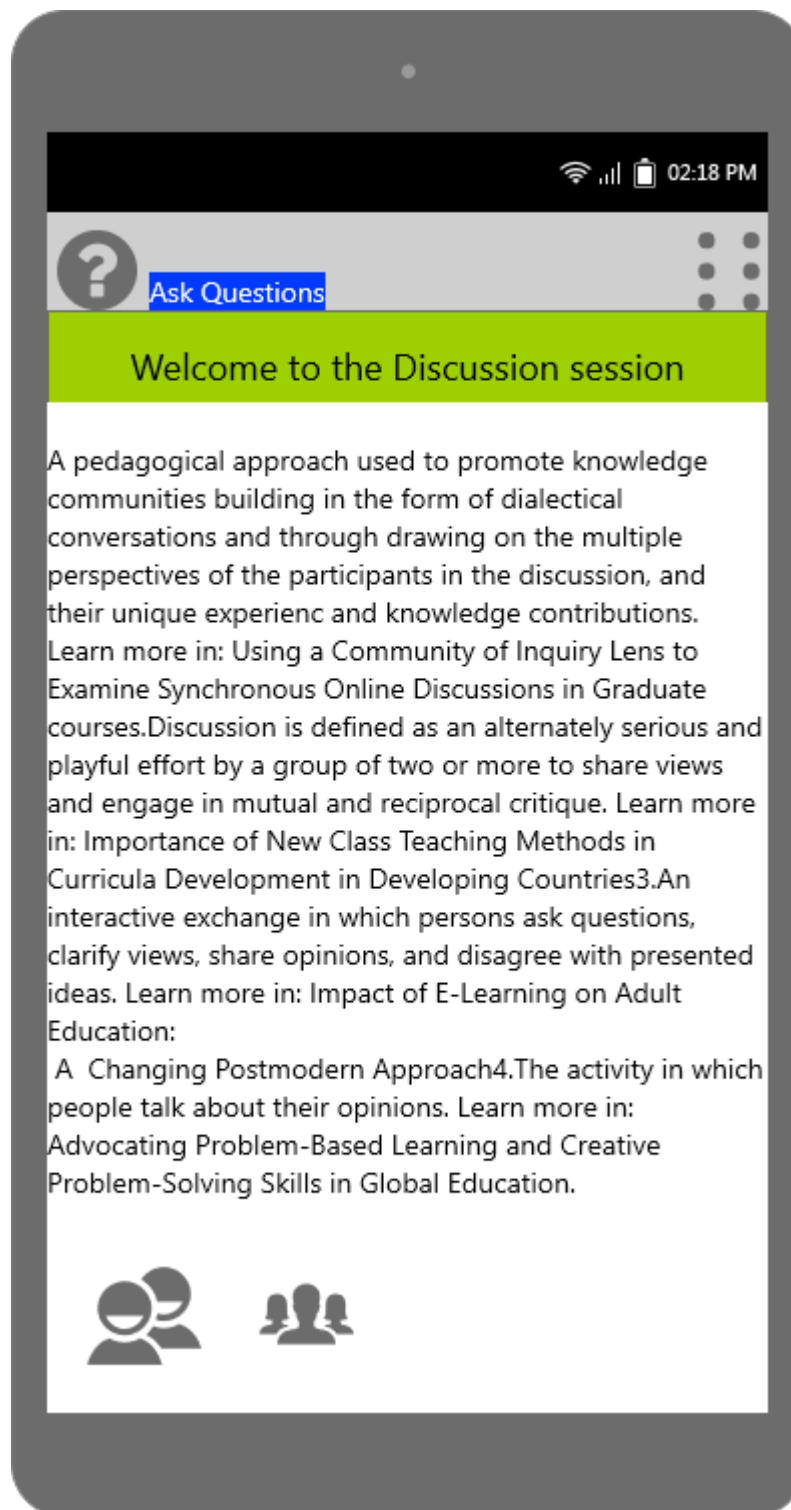
Sign Up

• login(email address,password).

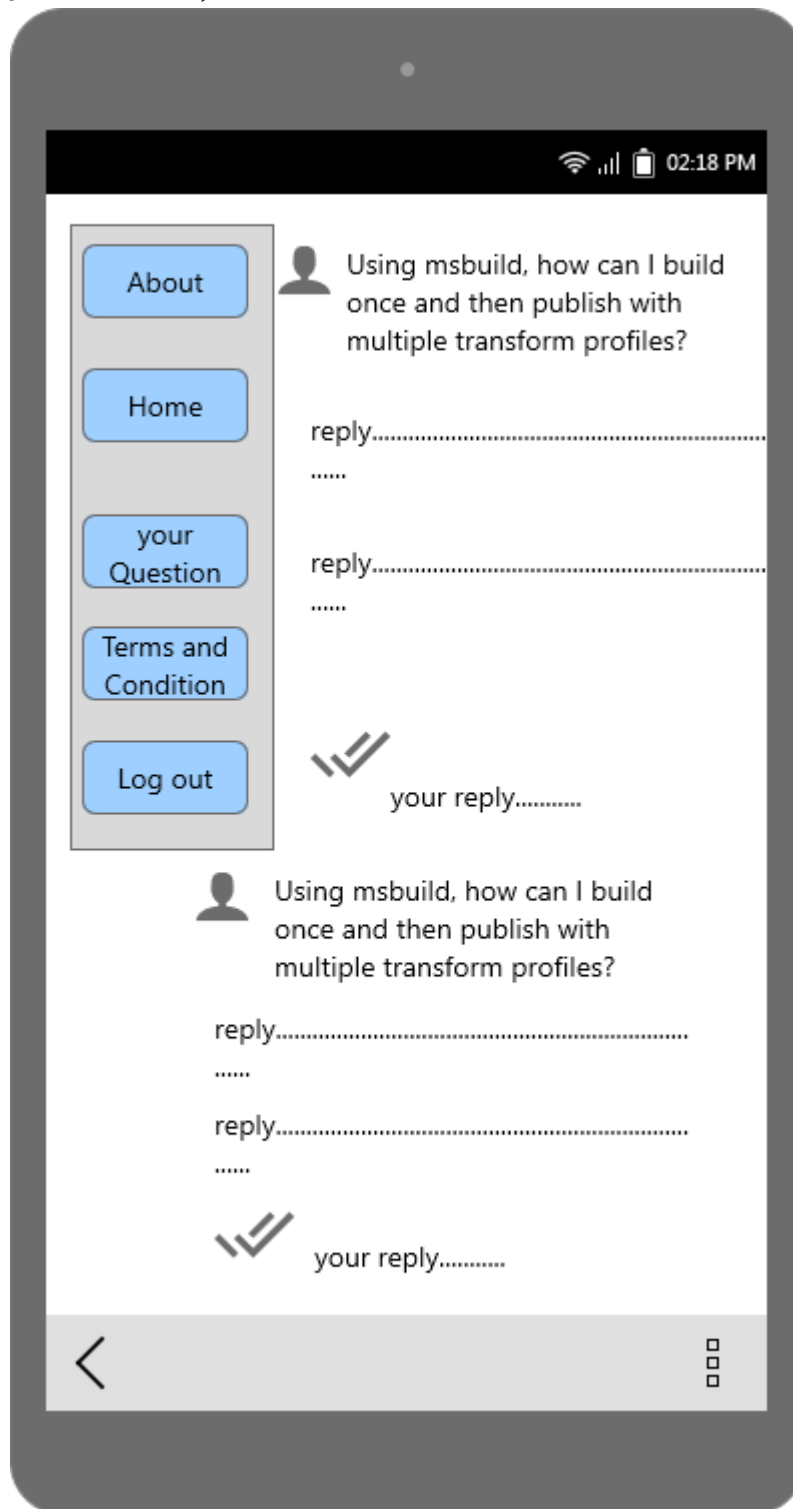


A mobile application login screen mockup. At the top is a grey header bar with a back arrow on the left, an equals sign in the center, and a hamburger menu icon on the right. Below the header is a blue oval button with the text "Log In here". Underneath this is a grey icon of a person with a plus sign. Below the icon are three blue rounded rectangular input fields: the first contains "Email Address", the second contains "password", and the third is a light blue button labeled "Log In". At the bottom of the screen is the text "forgotten password?".

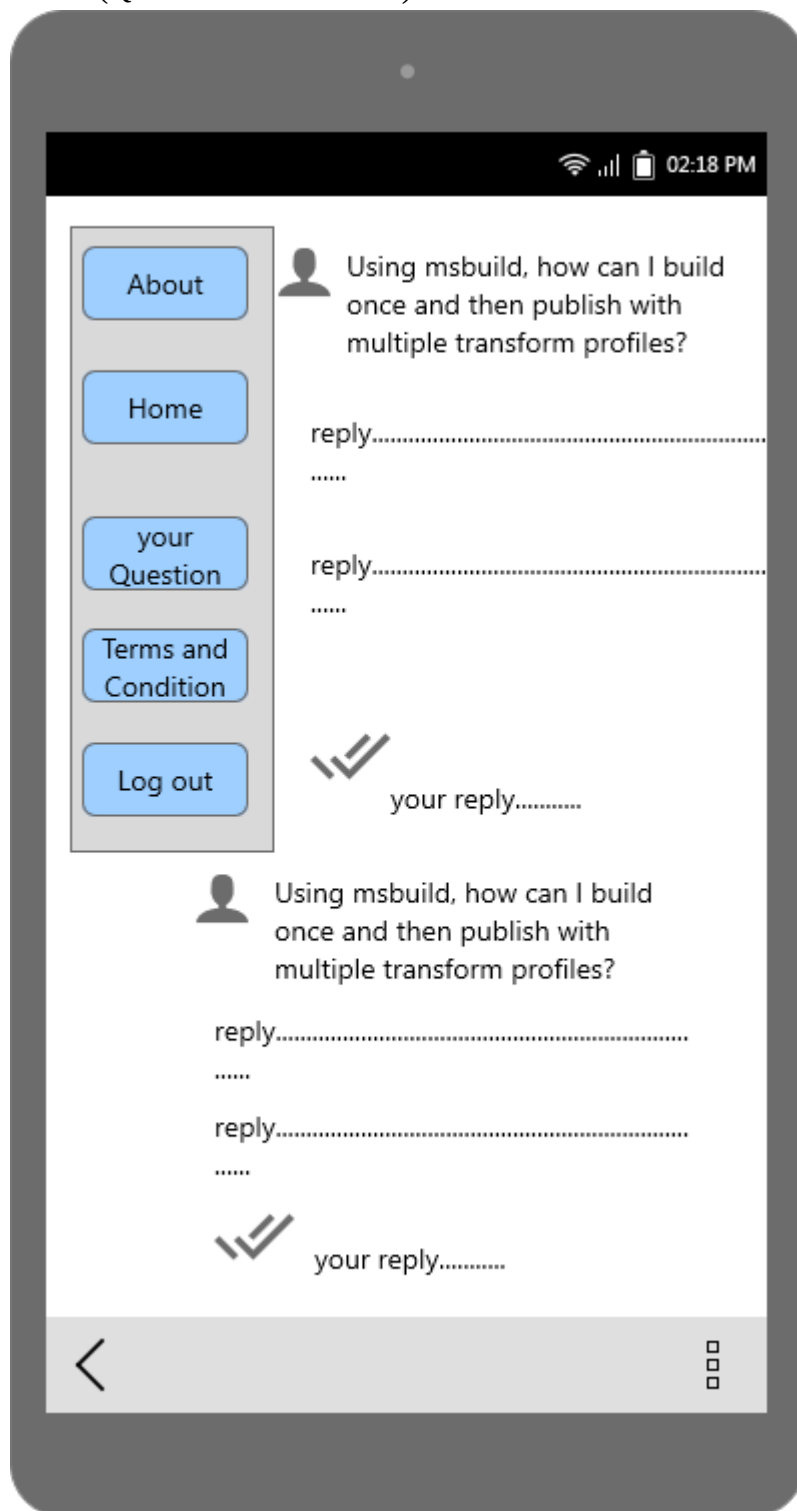
This is the first page of my application. he can upload questions as well as view the discussed content.



- upload(Questions,doubt).



- view discussion(Questions and answers).



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

Advanced mobile phones with the mobile applications playing a major role, web-based media and large information have altered the manner in which we work, learn and organize our lives. Now, every organization and people are adopting the evolving technologies to enhance their every day life. Similarly, the educational institutions are utilizing these revolving innovations to improve the social and academic functioning of the learners such as building a website or an application to enhance online discussion.

Since interaction is a key component in the quality of learning system. discussion Forums enable instructors to understand and intervene in learning activities, and students have time to think and formulate answers. Individuals collaboratively build knowledge while collaborating in an asynchronous online environment . Therefore, a well-coordinated educational forum is a valuable tool to promote reflection on learning, share information and perspectives, and connect students .Those who discuss frequently with others have time to elaborate their answers and reflect on what they want to post. The conversations tend to be deeper, because you see that message, reflect on it, and get a chance to better work on your idea.

Now it become necessary to have application that provide platform to discuss individuals doubt and problems of academic related. Therefor,i am developing and discussion application for Gyalpozhing college of information technology lectures and students. The application with the features that enable: discuss(question answer) with your friends and tutors and upload the important and useful files.

Literature Review:

Online discussion forums are considered an extension of traditional learning that promotes dialogue, reflection, knowledge construction, and self-assessment . Given their potential benefits, online discussion forums have been widely adopted as tools for online learning. Online discussions have the potential to improve students' critical thinking and problem solving skills, decision-making ability, and written communication skills and contribute to students' ability to organize and analyse information . Combining the online discussion forum with a case study method, a common pedagogical technique used in many business schools, is considered to be an effective method that encourages students to relate theory to practice. Many academics therefore have started using online discussion forums for teaching via the case method. While learning goals of online case discussions and face-to-face case discussions are generally the same, there is relatively little research focusing on the online case-method pedagogy and assessment in business and accounting education. Effects of these hybrid models of learning that combine traditional classroom case study pedagogy with the asynchronous media such as online discussion forums on learning outcomes and processes are, however, not well understood . With the widespread adoption of course management systems (CMS) and learning management systems (LMS) by the academic institutions being a recent phenomenon , further studies to offer insights into the current and future directions of this field are necessary.

In addition to the above, other studies have reported challenges of online learning. For example, Valaitis et al reported confusion about the navigation of online environment by nursing students that has overshadowed the learning , while Concannon et al. observed tendencies of accounting students to overlook critical aspects of the online environment as they are not particularly fond of computer technologies. Zhu's analysis of topical discussions in several undergraduate, graduate, and professional courses found that only 15–25% of the content was judged as cognitively deep. Similarly, in an analysis of education students' discussion of authentic cases, Angeli et al. found that only 9% of contents posted were justified (theoretically based) claims or opinions, while 49% were unsupported or personal opinions questioning the cognitive engagement of students. While Garrison and Vaughan and de Wever et al. found low levels of critical thinking, Hara et al. observed high levels of critical thinking in the online discussions. Lambiase, for example, observed topic decay with the percentage of posts on the topic decreasing steadily from 65% to 33% during the first nine days of discussion. In general, online discussions in higher education learning environment are feasible and viewed positively by students and the process and outcomes are as good as its face-to-face version. While some studies examined educational applications of online technologies in broader terms, others have suggested best practices and strategies

C Challenges:

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

For Developers:

Connecting database with the application since there are many information to stored.

Exploration of android development in details will take time as we are not yet fully introduced with how to develop the Mobile Application.

Being in line with the work plan schedule since the duration is for only 1 semester.

For Users:

Adoption of the application since there are other online application/platform to discuss.

D Motivation and Need:

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

The motivation and need behind my project are as follows;

discussion is one of the source of knowledge,sharing information and gain extra experiences.

There is no formal environment within teacher and students to discuss and interact In the digital forefront.

students participation will be more.

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 build a well-designed, user friendly android application in order to provide a platform to discuss the students doubts without any hesitation.

OBJECTIVES

- ◆ To improve students academic performance.
- ◆ To enhance students participation in learning system.
- ◆ To share information and perspectives, and connect students and teachers.

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

Following are the software processes which will be used in the developing the project; **Problem Statement**

- This phase focuses on identifying the issues faced within the community and thrives to develop the application that serves to be the solution for the stated problem.

Literature Review

- The comprehensive summary of previous research paper on related topic is thoroughly discussed in this phase. It includes articles, books and other sources relevant to particular topic.

Requirement gathering and analysis

- When the gathering of related and required information to stated problems from various sources such as existing system and research papers are completed, the project team then works on understanding the detailed problem. It involves conducting several brain storming and survey related to the topic. The Software Requirement Specification document is prepared simultaneously which will serve the purpose of input for design phase. This helps to provide additional creative ideas and information while designing.

Design

- In this phase the design is prepared from the requirement specification which is studied in the former phase. It helps specify hardware and requirements of the system.

Implementation

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

Testing

- After coding, it is tested to make sure that the product is actually serving the needs addressed and gathered during the requirement phase. It makes sure that the system functions as specified and eliminates any issues and errors in this phase.

Documentation

- Finally, after completion of all the coding and achieving all the features of the application, project document is created.

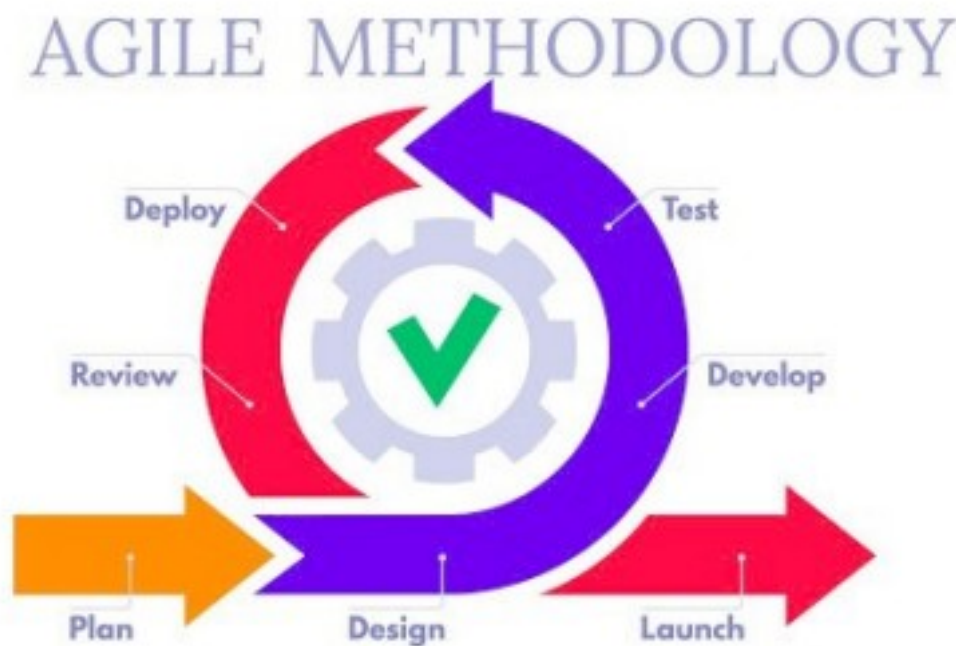
Agile Software Development Model

- The Agile software development methodology is one of the most straightforward and successful cycles to transform a dream for a business need into programming

arrangements. Agile is a term used to describe software development approaches that employ persistent arranging, learning, improvement, group cooperation, revolutionary development, and early delivery. It encourages flexible responses to change.

➤ The agile software development emphasizes on four core values.

1. Individual and team interactions over processes and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan



I had adopted Agile Waterfall model for the following reasons;

It is responsive to changes as they are iterative in nature.

Inexpensive while changing requirements as the working software is frequently delivered to the user.

Availability of risk identification factor.

High customer satisfaction.

B Project Team:	
<i>Title / Position</i>	<i>Number</i>
Project Internal Guide	Mrs. Sonam Wangmo
Project External Guide	
Student Team Members	Tashi Namgay(12190086)
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.)

- Installation of software and tools: Installing android studio version (2 and above), Android SDK, Java Development Kit (v8 or more), flutter, java programming language, MySQL.
- We will be referring the following resource materials:
- ✕ books, video tutorials, online reference related to android app development, flutter, java programming language.
- Designing of user interface, database and flow of the data by adapting various strategies.
- Unit testing and Integration testing will be done on the product.
- End product would consist of the report documentation.

D Key Milestones and Deliverables: (Project Schedule / Milestone Chart /Work plan)

(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,

<i>commissioning of equipment, completion of test, etc.) The timing of milestones is also to be shown in the Gantt chart in Section 8.</i>			
<i>No.</i>	<i>Elapsed time from start (in months) of the project</i>	<i>Milestone</i>	<i>Deliverables</i>
	08/02/21 - 12/02/21	Topic selection	Selected the topic to develop the mobile application
	13/02/21- 27/02/21	Content gathering	Collected the required information
	27/02/21- 14/03/21	Project proposal	Preparation and submission of the project proposal.
	14/03/21- 22/03/21	Requirement gathering and Analysis	Software requirement specification document(SRS).
	23/03/21- 29/03/21	Software installation	Installing necessary environment set up for development stage.
	30/03/21- 15/04/21	Design	ERD design, relational diagram, database design, user interface design and architectural design.
	15/04/21- 15/05/21	Implementation and coding	Implementing of functional features and generating of source code.
	15/05/21- 22/05/21	testing	Test case
	22/05/21- 28/05/21	Completion of development	Completing the development of the application

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

Some of the benefits or outcomes of my application are;

1. Can help improve student's academic performance.
2. Can strengthen the bond between students and teachers.
3. Save time for both students and teachers.
4. Can be helpful in times of global pandemic.
5. students can ask their doubts or questions without any hesitation.

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

- The technical risk of my project is low, as the pre-project activities are found to be viable, all the technologies and tools are well understood, all the required environments are available and there are numerous existing projects with the same goal as mine, which are highly effective in the customers environment.

Timing risk

- The timing risk of my project is high as our project includes features that requires more time to be developed than the given time period.

Budget risk

- The budget risk of my project is medium as there are free software available to built the application but the hardware requirements are little more than what we own.

7. Project Approval Certificate

(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:

SI # 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 13. Report Writing Guidelines

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

Bibliography

- B. Apostolou, J. M. Hassell, J. E. Rebele, and S. F. Watson, "Accounting education literature review (2006–2009)," *Journal of Accounting Education*, vol. 28, no. 3-4, pp. 145–197, 2010.
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- Stommel, J., 2021. *The Discussion Forum is Dead; Long Live the Discussion Forum*. [online] Hybrid Pedagogy. Available at: <<https://hybridpedagogy.org/the-discussion-forum-is-dead-long-live-the-discussion-forum>>.

