

Bachelors of Science in Information Technology
Gyalpozhing College of Information Technology



Proposal
For
Second Year Project
Bachelor of Science in Information Technology

QUIZIFY

Submitted by
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Gyalpozhing College of Information Technology

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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.

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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
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Application for Final Year Project

1. Project Identification

A. Reference Number:	
(for office use only)	
B. Project Title: QUIZIFY	
C. Project Internal Guide:	
Name:	Ms.Sonam Wangmo
Designation:	Lecturer
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:	

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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	

➤ **Key Words:**

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

University, user, rank, quiz, grade, Android application.

F. Research and Development Theme:

For entertaining and educational purpose

Due to drastic change in technology, people are more advanced into it. Present day handheld gadgets, for example, advanced mobile phones have gotten progressively amazing lately. User can just get into this application whenever they feel bored and test their knowledge from anywhere, at home, work, or even on multiple device – whether that's a smartphone, tablet, laptop, or desktop device. Through this app, users can learn and prepare themselves for tests and exams, and can also use this app for increasing their general knowledge.

G. Project Status:

(Please mark ☐)

☐ New Modification to previous Project

☐ Extension of existing project

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H. Project Duration:

Expected Starting Date: 10/02/2021

Planned Duration in
months: 6 Months

2. Scope, Introduction and Background of the Project

A. Scope of the Project:

System scope:

User can get into my app besides any login information and they are given option to select which area they prefer to do quiz. When user click that particular option they are given to select stage they favor to take a look at in accordance to their IQ. Finally their rating will be display at the end and additionally they are given chance to reattempt the quiz or if they don't prefer to do it they simply have to click on quit button.

User scope:

My project aims the students and staff of Gyalpozhing College of Information Technology.

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.)

Introduction

Modern hand held devices such as smart phones have become increasingly powerful in recent years. However, there are some applications that allow users to flexibly execute tasks which are done by personal computer (PC), laptop etc. As mobile devices become more like PCs they will come to replace objects to accomplish necessary tasks. If any mobile applications has developed to mitigate administrative work as well as fulfill user (other than administrator) requirement, then task can be complete within the smart phone. Online Quiz application, which is developed for Android base platform falls into this category.

In the world of education there are many different ways to teach and to consolidate what has been learned. In years gone by, children were expected to memorize dates, formulae and figures by rote. But this method of teaching can be quite dull, to say the least. One tool becoming more common, especially in online education, is quizzes. A **quiz** refers to a short test of knowledge, typically around 10 questions in length, with question formats often including multiple choice, fill in the blanks, true or false and short answer. A quiz is much shorter than a traditional test or exam. Mobile quiz apps have received a huge popularity in recently. They have brought the well-known game mechanic of a quiz to mobile apps as a new kind of media. Quizzes and underlying Multiple Choice Questions (MCQ) are an established assessment and learning aid. Therefore, quiz apps can be considered as a potential educational tool.

Development of android-based Quiz application is mainly required by students and learners to prepare themselves for different examinations directly through smart phones and tablets in hands. At the meantime, my app provides them fun so that the user can prepare for interviews, entrance tests or any other corresponding purposes in a fresh mood and can't get bored or frustrated due to dullness of app. I have designed the application to facilitate the users to be able to take short quizzes using portable devices such as smart phones and tablets.

Problem Statement:

In the world of education there are many different strategies to educate and to consolidate what has been learned. In years one by, students have been anticipated to memorize dates, formulae and figures through rote. But this approach of instructing can be relatively dull. For confined questions, students have to cover complete books which is aggravating for them. Currently in Bhutan, there is no such quiz app to play when the people feel bored and when students desire to refer questions for MCQ.

Literature Review:

Starting in 2013 commercial quiz apps have received a huge popularity. The German issue of QuizClash, Quizduell, accounts for a player base of almost 27 million accounts (January 2016). This is almost a quarter of the German-speaking population. From Quizzing to Become an Engineer -A Commercial Quiz App in Higher Education by Laura Weitze and Heinrich Söbke, they indicate that the usage of QuizUp has enriched the courses and provided an additional learning media. Most remarkable are the hints that motivation to use the app depend on the purpose. Whereas educational topics required mostly additional encouragement by supervisors, many students readily got involved in entertainment topics. Although QuizUp has been installed to serve the educational settings in the courses, many students ended up having played entertainment topics much more intensively.

The Web based expert system, by (Sana, I) is an online learning center. This is the Student Edition for learning and preparation. It is a multiple choice quiz. After each and every question, five choices are given. Users can select a single choice at a time. After giving answer to all of the questions, users will submit the answers, and then a result or progress report is displayed containing total number and accuracy of correct, incorrect and un-answered questions. Email facility is also provided in HTML or Text format; one can email or send results to his/her own id, to instructor, to the TA and others.

Increasingly, companies use technological tools to manage their daily operations. The same happens to public institutions such as schools and universities that have invested in the provision of technical equipment (computers, tablets, etc ...) for teaching and learning activities. In 2002, there were 13 students per computer while in 2011 there were only 2,8 students per computer in non-university education (primary and secondary levels). Students' response tools such as quiz game applications are considered as relevant sources to build complementary education material that supplement the master classes. Generally speaking, these tools allow building online quizzes and games, which can be used in the education context to develop questionnaires for reviewing the concepts already covered during the master class. Andrés, B. (n.d) states that from this kind of tools teachers are able to create quizzes with different questions to assess the students' understanding and comprehension.

C. Challenges:

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

1. Completion of task on time

- Completing the development of the application may not go as scheduled.

2. Implementing features

- Difficult to implement the features as we are given limited time.

3. Security issues

- Security issues can be a nagging concern as malware problems may arise and software/hardware fragmentation only adds to the list of troubles.

D. Motivation and Need:

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

Android is rapidly getting famous day by day, and the number of its users are increasing with each passing day, because it is easy to access the necessary Android-based applications on smartphones and tablets. Therefore, I found this idea easy and time efficient to facilitate the users in this way without any difficulty. There are many online quiz applications available on the internet, but most of them are only for entertainment and fun. Moreover, if one is going to appear in any test or interview, then it is time-consuming for them to read the full books or articles related to specific fields for the preparation or revising their knowledge. So, I come up with general knowledge and educational based quiz application for the users.

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 make useful and entertaining mobile application for user.

OBJECTIVES :

1. For educational purpose and to test their level of IQ
2. To provide entertaining platform

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 process that will be involved in developing the project:

Problem statement:

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

Literature review:

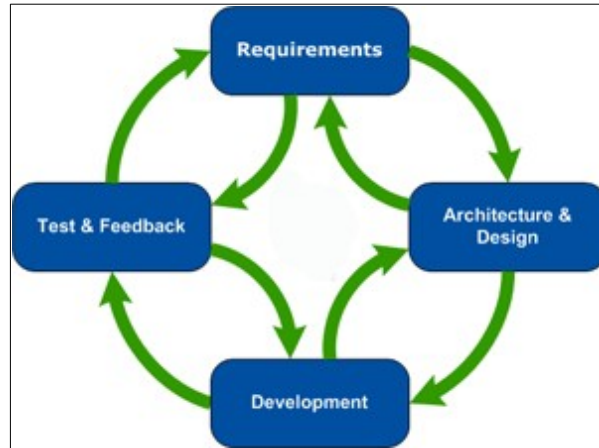
The comprehensive summary of previous research paper on related topic is thoroughly discussed in this phase. It includes articles, books and other sources relevant to particular topic.

Requirement gathering and analysis:

When collection of all relevant information from research papers and existing system related to stated problems are completed, the team then works on understanding the detailed problem. It involves conducting several for brain storming and survey related to the topic. The SRS document is prepared simultaneously which will serve the purpose of input for design phase. This also 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 first 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:

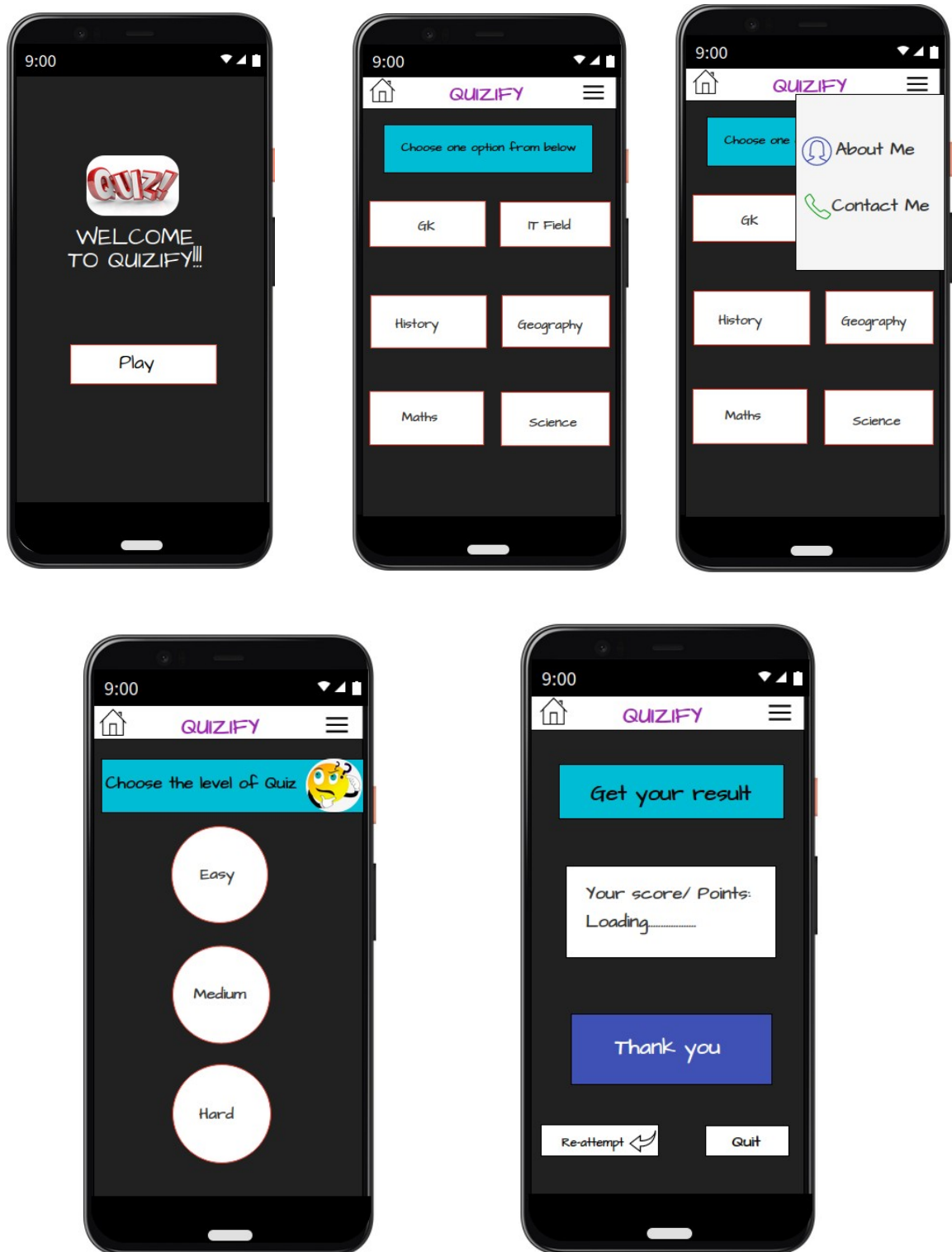
Finally, after completing all the coding and fulfilling all the features of the application, project document is created.

Agile Software Development Model:

Reason for choosing the Agile Waterfall model for our project are:

1. Elasticity is very high.
2. The speed to change is high as they are iterative in nature and adapts to the changing requirements.
3. It is inexpensive while meeting the changing requirements as the working software is frequently delivered to the user.
4. This model draws the inference that the needs of the end user do not remain the same so it require limited planning to begin the process of the project
5. Availability of risk identification factor.
6. High customer satisfaction.

Prototype



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.)

Installation of software and tools:

- Installing android studio version (2 and above), Android SDK, Java Development Kit (v8 or more) and SQLite for database.

Sources from which I will be referring from:

1. Referring books, video tutorials, online reference related to android app development, art programming language.
2. Designing of user interface, database and of flow of the data by adapting numerous strategy.
3. In the Development progress the design needs to be brought into existence through coding while making use of android framework.
4. For the testing the developed product will be done unit testing to ensure that each unit performs dedicated functions properly before integration and then integration testing to ensure result function after combining all the units.
5. In the Final documentation I will be completing all the required phases I would prepare the final documentation which consist of the report documentation and will be concluded with presentation.

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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
1	10/02/2021 - 25/02/2021	Topic Selection	Finalization of the project topics that is effective.
2	26/02/2021 - 14/03/2021	Feasibility	literature review
3	15/03/2021 - 25/03/2021	Requirement gathering and analysis	Software requirement specification document (SRS).
4	26/03/2021 - 07/04/2021	Design	ER diagram,UML diagrams, User interface design.
5	8/04/2021 - 5/05/2021	Coding	Implementing of functional features and generating of source code.
6	6/05/2021- 20/05/2021	Testing	Test case
7	10/02/2021 - 28/05/2021	Documentation	All document combined together and ready

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

- A.** Fun and useful platform for the user
- B.** Provides them the facility to revise their knowledge or to learn something advantageous at one place without wasting their time.

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 <input checked="" type="checkbox"/> where applicable)	Low	Medium	High
Technical risk		<input checked="" type="checkbox"/>	
Timing risk			<input checked="" type="checkbox"/>
Budget risk	<input checked="" type="checkbox"/>		

A1. Comments(Describe the risk):

Technical risk:

For my project the technical risk is relatively medium as with the advancement in many upcoming technologies to carry out the project.

Timing risk:

The most challenging factor is the difficulties in completing project task on time.

Budget risk:

For my project we are making use of free software available online so budget risk is relatively low while developing our project.

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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:

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:

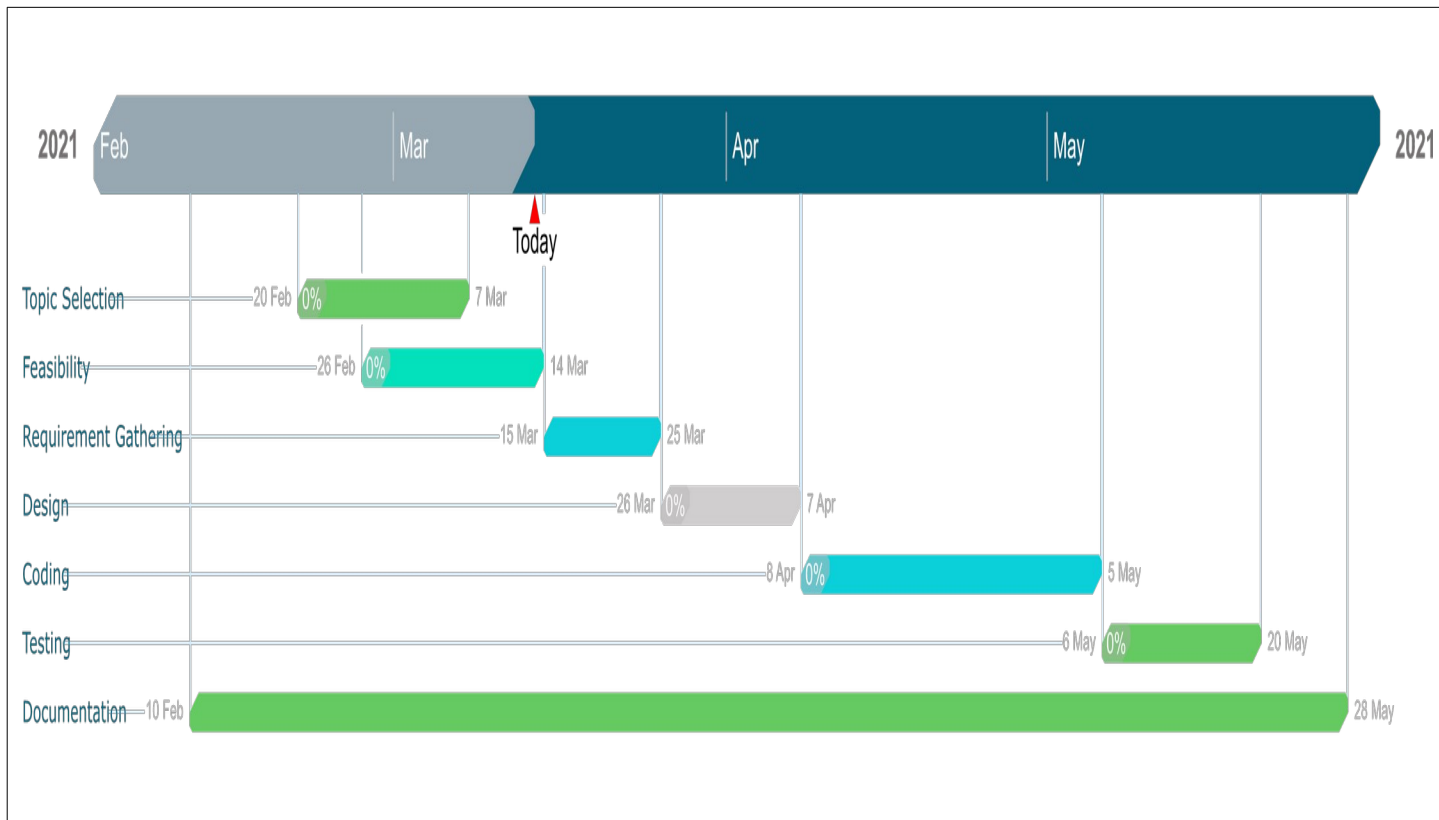
8. Reviewers Panel Comments

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)

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13. Report Writing Guidelines



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

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Bibliography

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