



Proposal
For
Second Year Project
Bachelor of Science in Information Technology

Project Name

Submitted by
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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.

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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

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Application for Final Year Project

1. Project Identification

A Reference Number:	
(for office use only)	
B Project Title:	
C Project Internal Guide:	
Name:	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: <i>(Please identify all affiliated organizations collaborating in the project, and describe their role/contribution to the project.)</i>		
D1. Industrial Organizations:		
#	<i>Organization Name</i>	<i>Role / Contribution</i>
	NA	
D2. Academic Organizations:		
#	<i>Organization Name</i>	<i>Role / Contribution</i>
	Gyalpozhing College Of Information Technology	
D3. Funding Organizations:		
#	<i>Organization Name</i>	<i>Role / Contribution</i>
	NA	
E Key Words: <i>(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)</i> LGBTQ(Lesbian, Gay, Bisexual, Transgender, Queer or Questioning), Sexual orientation, come out(to share ones sexual orientation openly to another person or people)		
F Research and Development Theme: Develop a functional LGBTQ communication mobile application in Mongar.		
G Project Status: (Please mark <input checked="" type="checkbox"/>) <div style="display: flex; align-items: center; margin-top: 5px;"> <input checked="" type="checkbox"/> New Modification to previous Project Extension of existing project </div>		

H Project Duration:

Expected Starting Date: 14/03/21

Planned Duration in months: 3 months

2. Scope, Introduction and Background of the Project

A Scope of the Project:

System Scope:

- ◆ Register
- ◆ Login
- ◆ Delete personal account
- ◆ View Profile of other users
- ◆ Upload and update personal profile
- ◆ Delete personal profile
- ◆ Search other users
- ◆ Send request
- ◆ Accept request
- ◆ Add to friend list
- ◆ Remove from friend list
- ◆ Two way messaging through text
- ◆ Create groups.

User Scope:

- ◆ LGBTQ (Lesbian, Gay, Bisexual, Transgender, Queer or Questioning) of Mongar Dzongkhag.

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.)

Sexual orientation is an enduring feelings, romantic, or sexual attraction that a person feels toward another person. There are various types of sexual orientation, such as heterosexual(straight), homosexual(gay or lesbian),bisexual and asexual. Heterosexual people are romantically and physically pulled in to opposite sex. Homosexual individuals are romantically and physically attracted to same sex. Bisexual people are attracted(romantically and physically) to both genders. Asexual people may not be interested in sex yet still feel emotionally close to other person. The acronym 'LGBT' or "LGBTQ" is used to describe the sexual orientation. "LGBTQ" stands for "lesbian, gay, bisexual, transgender and questioning. However, the "T" in "LGBTQ" is not sexual orientation but rather a gender identity. Transgender individuals have body of one sex but feel that they are the inverse gender. Individuals who are trans are generally assembled in with lesbian and gay as an approach to incorporate individuals who do not feel they fit into the classification of being "straight." Questioning people are individuals who are still in the process of exploring, unsure and troubled about applying a social label to themselves.

Medical experts, including those at the American Academy of Pediatrics (AAP) and the American Psychological Association (APA) state that being straight, gay, or bisexual is not something that an individual can choose or choose to change. In reality, individuals do not select their sexual introduction any more than they select their tallness or eye color. However, not everyone can accept the fact that there is nothing wrong about being LGBTQ. A 2012 study by the Human Rights Campaign tracked down that 92% of LGBT youngsters had heard negative comments about being lesbian, gay, bisexual, or transgender. Everyone has times when they stress over situations such as school, college, sports, work or friends and fitting in. In expansion to these concerns, LGBT individuals have an additional layer of situation to consider, including whether they need to hide their identity. Fears of prejudice, rejection, or bullying can lead people who are not straight to keep their sexuality a secret, as well as from friends and family who could support them. In spite of the fact that there is developing acknowledgment for LGBT individuals, numerous teenagers do not have grown ups they can converse with about sexual orientation. Some live in communities or families where being gay is not accepted or regarded.

Therefore, there are various online platforms, including mobile applications which has been built solely for LGBTQ to meet and converse with their allies. A platform where they can express themselves, share their opinion in a protected space and welcoming environment. Moreover, these platforms provide an alternative for LGBTQ to obtain guidance and support regarding essential aspects of their life such as dealing with friends, families and on dating as well, from a community who could empathize with them. Some of the mobile applications developed for LGBTQ are LGBT+ Amino, Grindr and Her. These applications are provided with extremely good reviews from the clients. Furthermore, these applications provide several features such as to chat with

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LGBTQ people, connect in all kinds of ways, to find LGBTQ parties, hosting fun queer games, match making with just a swipe and most importantly to express themselves. Truly, mobile applications such as Grindr, LGBTQ+amino and Her has helped in developing the confidence and mental health of LGBTQ and no doubt, the equality and empowerment of LGBTQ community is enhanced as well.

Similar to every other countries, there are Bhutanese Lesbian, Gay, Bisexual and Transgender. Many battle to forge their own identities in a kingdom with no portrayal of LGBT individuals. Bhutanese might be hesitant to come out as they dread rejection, a feeling of disgrace, and embarrassing their families. In this traditional society, families are hugely important. However, perspectives do appear to be evolving quickly. With the spread of internet and social media, LGBTQ activists have set up Facebook pages which go about as a common space for the LGBTQ people group, and are in addition used to campaign for greater recognition. Bhutanese are coming up with small steps daily to raise awareness of the existence of LGBTQ and the hardships they go through, such as the talk show known as “Queer talks” hosted by Namgay Zam. In this show, the stigmatization, acceptance issue and discrimination faced by LGBTQ are discussed with the LGBTQ members. Nevertheless, there is no proper platform for LGBTQ to come together, share their real personal experiences, meet and be friend with.

As a result, a mobile application would be the right solution that would enable LGBTQ to communicate and make friends with individuals of same identity. An application which is inclusive of the fundamental features. For instance, to chat, express oneself, report threats, meet people of similar interest, or unfriend people with completely contradicting personalities. Additionally, an environment that would treat them with no differences, where they can get the support and guidance from people who have been through the same route. Above all, an environment where they feel safe and loved. Although there are alternatives to mobile applications namely online websites, a well-designed mobile applications can perform more rapidly as compared to websites. Through mobile application that is built mainly for the purpose of LGBTQ communication, LGBTQ can easily get connected to like minded people and be welcomed. Utilizing mobile application for LGBTQ communication would not only boost the confidence and self esteem of a person but also, they would get an opportunity to encounter with LGBTQ people who’s been hiding, afraid of coming out and instantly be their savior.

Literature Review:

- ◆ They article of Nemours, "Teens Health" defines sexual orientation as the gender (that is, male or female) to which a person is attracted. Types of sexual orientation has been explained-Heterosexual, Homosexual, Bisexual and Asexual. Transgender is identified as gender. They explained what it is like for LGBTQ teens. They stated for many LGBT people, it can feel like everyone is expected to be straight. Because of this, some gay and lesbian teens may feel different from their friends when heterosexual people around them start talking about romantic feelings, dating, and sex.
- ◆ According to the study of Carey Candrian and Hillary Lum stated that Lesbian, gay, bisexual, and transgender (LGBT) people experience the burden of serious illnesses alongside long-term effects of negative social attitudes when accessing the healthcare system. Moreover, they often feel uncomfortable self-disclosing their sexual orientation, which has health implications around symptoms that could be early signs of disease. He highlights some of the communicative tensions LGBT people with serious illness, their familyface, with the goal of identifying communication strategies that facilitate conversations that are inclusive of difference and responsive to individual's values, goals, and informed choices.
- ◆ "Grindr" is a mobile application developed by Joel Simkhai in the year 2009 in March 25. It was developed in Los Angeles, California and was launched as an IOS application. It was one of the first geosocial apps for gay men. It is now available on iOS and Android devices in both free and premium versions. The app allows user to create a personal profile and use their GPS position to place them on a cascade, where they can browse profiles of other users sorted by distance and be viewed by nearby and faraway members depending on one's filter settings. Selecting a profile photo in the grid view will display that member's full profile and photos, as well as the option to chat, send a "tap," send pictures, video call, and share one's precise location.
- ◆ "LGBT+amino" is an online mobile application Narvii, Inc. It was made by Yin Wang and Ben Anderson in 2014. The features included are; meet and chat with other LGBT people, discuss LGBT issues and their experiences being LGBT, share their resources, opinions, and unique point of view, get advice on and support with dealing with friends, family, school, even dating from an understanding community.
- ◆ "Her" is a mobile application founded by Robyn Exton and launched in September 2013. geared towards lesbian, queer, bisexual and straight women. It is available for iOS and Android. Users can join the app with their Facebook account or email address. Cisgender men are not allowed to create profiles on the platform. As of May 2018, the application was available in 55 countries.

C Challenges:

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

- Securing user data privacy
The data bundles sold to third-party companies could potentially contain users' sensitive personal information such as HIV status.
- User Location Triangulation
Triangulation is the process of determining the location of a point by forming triangles to it from known points. The relative distance measurements could facilitate triangulation, thereby pinpointing individual users' near-exact location. Also, the location of user was still visible even when it was being hidden from public display.
- Offensive speech by users
The display of offensive, racist, and homophobic language by some of its users.

D Motivation and Need:

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

The affirmation of the existence of a Bhutanese gay population only happened with the creation of the Facebook page and Twitter handle "LGBT Bhutan" (Lesbian/ Gay/ Bisexual/Transgender). Bhutanese LGBTQ were being confronted with judgments and being called offensive names, such as, "Chaka" and "Pholaymolay," which indicated that some Bhutanese individuals had little information on sexual orientation and exhibited their homophobic nature. Now, there are numerous Facebook pages where LGBTQ members(who have gathered the strength) come out and share the circumstances they went through, how they dealt with issue such as discrimination and how it feels to be LGBTQ member. Subsequently, this strategy proved to help people who are non LGBTQ member to hear them and accept the fact that everyone is born different and be treated with equal importance.

However, there is no proper platform designed mainly for LGBTQ members, where they could be who they are without any hesitance and without the fear of rejection. Therefore, there is a need of platform for LGBTQ members who are still not ready to come out and LGBTQ members who want to meet and interact with the same sexuality. Today, the concerns of LGBTQ are not necessarily to change the people who are unwilling to accept the sexuality spectrum, but rather to accept themselves as who they are, meet people of their identity, talk to someone who could relate to them and feel safe and feel home. Thus, a mobile application solely developed for the purpose of LGBTQ member communication.

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 an effective communication mobile application for LGBTQ who are yet unable to come out and also for the LGBTQ who wants to have conversation with their preferred sexual orientation.

OBJECTIVES

- ◆ To develop a safe environment for LGBTQ by writing a secure code, using high level authentication and encrypting user data.
- ◆ To implement a platform with features such as adding to friend list and deleting friend from the list and subsequently have control over who they interact with.
- ◆ To identify individuals of the same sexual orientation through the feature which incorpor profile of the user which in turn consist of the information such as user's sexual orientation.
- ◆ To develop a mobile application where LGBTQ can enlist through registration feature, then come together and have conversation. Besides, in the event that they would not prefer to utilize the application any longer, they can simply erase their record utilizing the delete feature.

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 stage centers around perceiving the issues looked within the community and thrives to build up an application that serves to be the answer for the expressed issue.

Literature Review

- The extensive outline of past research paper on related point is completely talked about in this stage. It incorporates articles, books and different sources applicable to specific subject.

Requirement gathering and analysis

- When the collecting of related and expected data to expressed issues from different sources, for instance, existing framework and exploration papers are done, the project group at that point works on understanding the detailed problem. It involves conducting several brain storming and survey related to the issue. The Software Requirement Specification report is arranged all the while which will fill the need of contribution for configuration stage. This assists with giving extra innovative thoughts and data 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 effective framework plan the task is separated into modules and genuine coding is started. This is the longest phase software development life cycle.

Testing

- Subsequent to coding, it is tested to ensure that the item is really serving the necessities tended to and assembled during the prerequisite stage. It ensures that the framework functions as indicated, kills any issues and blunders in this stage.

Documentation

- At last, after fruition of all the coding and accomplishing every one of the highlights of the application, project document is made.

Agile Software Development Model

- ✓ The Agile software development methodology is quite possibly the most clear and fruitful cycles to change a fantasy for a business need into programming courses of action. Agile is a term used to depict software development approaches that employ persistent arranging, learning, improvement, group cooperation, revolutionary development, and early delivery. It urges adaptable reactions to change.
- ✓ The agile software development emphasizes on four core values.
 1. Working software over comprehensive documentation
 2. Responding to change over following a plan
 3. Individual and team interactions over processes and tools
 4. Customer collaboration over contract negotiation.

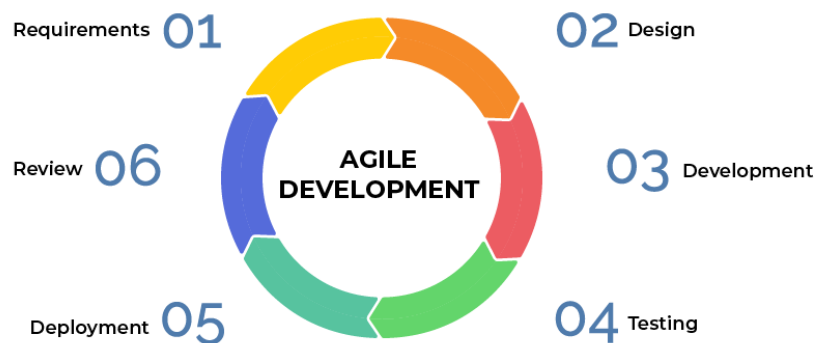


Figure 1: agile software development diagram

I adopted Agile model for the following reasons;

- It is responsive to changes due to their iterative nature.
- Risks are detected earlier.
- It is not costly as working software is frequently delivered.
- There is a high customer satisfaction.
- It is responsive to changes in the requirements.

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B Project Team:	
<i>Title / Position</i>	<i>Number</i>
Project Internal Guide	17391134
Project External Guide	
Student Team Members	77354374
Others (please specify)	
Add more rows if required	

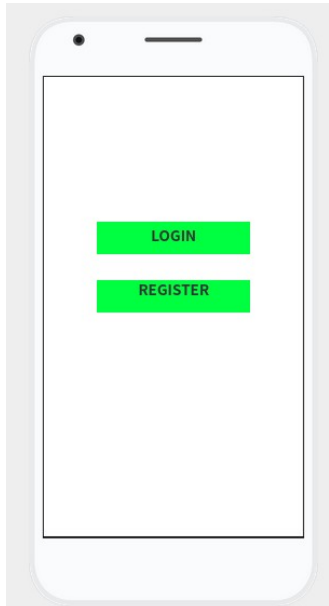
C Project Activities:

(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 (Android SDK, Java Development Kit (v8 or more), java , MySQL),
- I will be referring books, video tutorials, online reference related to android app development and java programming language.
- Designing of user interface, database and flow of the data by adapting different strategies.
- Implementation of pre-designed product.
- Unit testing and Integration testing will be done on the product.
- End product would consist of the report documentation.

Prototype

1. Homepage

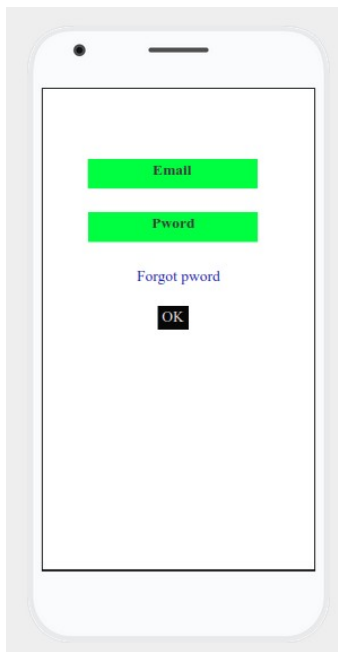


2. After clicking on Register button



A mobile app registration screen with a white background and rounded corners. It features six red input fields stacked vertically, labeled NAME, EMAIL, SEXUALITY, DOB, PWORD, and CONFIRM PWORD. At the bottom, there are two black buttons labeled BACK and OK.

3. After clicking on login button



A mobile app login screen with a white background and rounded corners. It features two red input fields stacked vertically, labeled Email and Pword. Below the Pword field, there is a link labeled Forgot pword in blue text. At the bottom, there is a black button labeled OK.

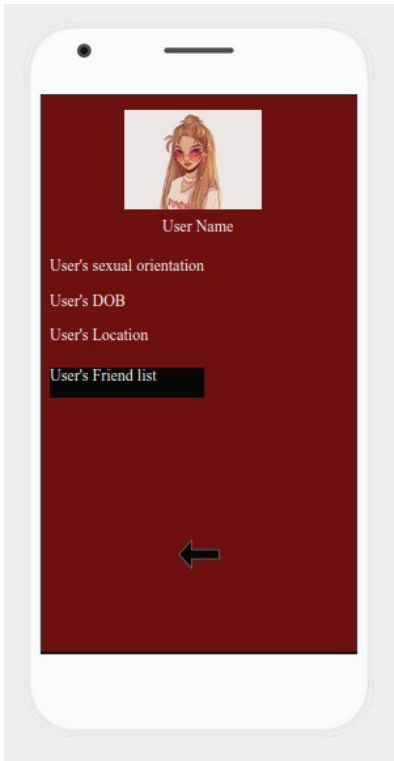
4. After logging in successfully



5. Options provided by menu button



6. After clicking on profile button



7. After clicking on search people



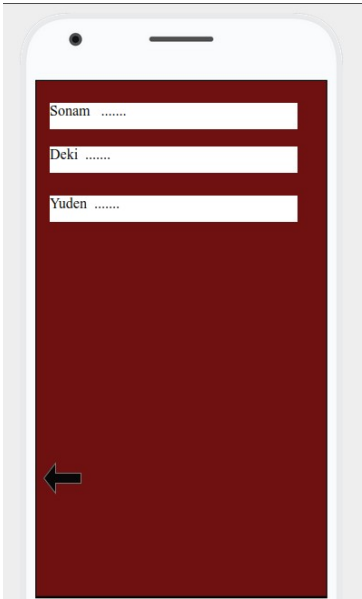
8. After clicking on settings



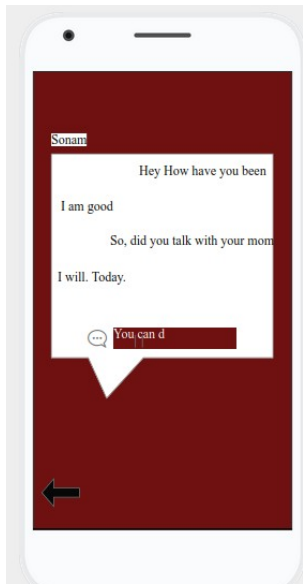
9. After clicking on Friend request



10. After clicking on message button



11. After clicking on one of the conversation with their friends



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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
	-	Commencement of the project	
	09/02/21-10/03/21	Topic selection	Selected the topic to develop the mobile application
	14/03/21	Project Proposal	Submission of the project proposal.
	17/03/21-06/04/21	Requirement gathering and Analysis	Software requirement specification document(SRS).
	07/04/21-09/04/21	Software installation	Installing necessary environment set up for development stage.
	10/04/21-05/05/21	Design	ERD design, relational diagram, database design, user interface design and architectural design.
	06/05/21-24/05/21	Implementation	Implementing of functional features and generating of source code.
	25/05/21-01/06/21	Testing	Test case
	02/06/21-05/06/21	Completion of development	Completing development of the application
	06/06/21	Final documentation	Final documentation report
(Please add more rows if required.)			

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

The 'pride' mobile application would built a safe surrounding for LGBTQ, where there would not be discrimination and stigmatization. They would have the option to perceive individuals who are being laid with same kinds of enduring as them and thereafter talk it out. Besides, individuals who are not prepared to come out can have conversation with their kind and seek some support and solace as well.

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

- ◆ 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 costumers environment.

Timing risk

- ◆ The timing risk of my project is high as my 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 I 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:

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:

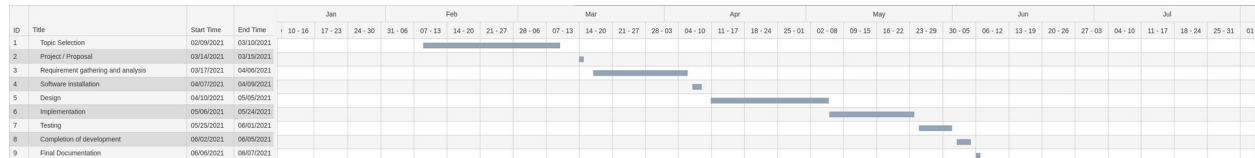
8. Reviewers Panel Comments

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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

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- [5] Wikipedia contributors. (2021a, March 10). *Her (dating app)*. Wikipedia. [https://en.wikipedia.org/wiki/Her_\(dating_app\)](https://en.wikipedia.org/wiki/Her_(dating_app))
- [6] Wikipedia contributors. (2021b, March 13). *Grindr*. Wikipedia. <https://en.wikipedia.org/wiki/Grindr>