Proposal

For

Second Year Project

Bachelor of Science in Information Technology

PetAdoption

Submitted by

TSHERING DAWA **(12190091)**

Gyalpozhing College of Information Technology

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.

Gyalpozhing College of Information Technology

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

Sonam Wangmo
sonamwangmo.gcit@rub.edu.bt

Table of Contents

Note: To update the table of contents, right click in the table and select '*update field*' and then select 'Update Entire Table'.

Application for Final Year Project

1.   Project Identification

A. Reference Number:
(for office use only)

B. Project Title: PetAdoption

C. Project Internal Guide:

Name:	
Designation:	
Organization:	
Mobile # :	Tel. # :
Email:	

C1. Project External Guide:

Name:	**NA**	
Designation:		
Organization:		
Mobile # :		Tel. # :
Email:		

C2. Student Group Lead:

Name:	Tshering Dawa	
Roll No:	12190091	
Department:	BScIT	
Mobile # :	17721741	Tel. # :
Email:	12190091.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	

D2. **Academic Organizations:**

#	Organization Name	Role / Contribution

D3. **Funding Organizations:**

#	Organization Name	Role / Contribution
	NA	

E. **Key Words:**

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

Animal Shelter, Pet Adoption, Adopters, Animals, Android application.

F. **Research and Development Theme:**

For convenient pet adoption

The adopters in Bhutan usually search through Facebook and other social media app if they want to adopt the animal. Searching through social media app is time consuming as well the adopter have to the know animal shelter page name to search view animals. Through my app, adopters can easily search for the animal they want and contact the shelter and process the adoption process.

To help animal shelter for adoption

Since there is no proper platform to advertise the shelter animals, my app is going to give them a platform to advertise the animals and help them with quick adoption of the animals.

G. Project Status:

(Please mark ☑)

☑ New   Modification to previous Project

Extension of existing project

H. Project Duration:	
Expected Starting Date:	10/02/2021
Planned Duration in months:	4 months

2. Scope, Introduction and Background of the Project

A. Scope of the Project:

The scope of our project is divided into two categories.

System scope:
My project will allow only the trusted animal Shelters to register in our mobile app. The registered shelters can then login to the app whereby they can perform actions like post details about the Animals, modify the posted animal's details.

The adopter can login through email and search for the animal they want to adopt. If they like the animal they add them into their favorite. They can view information about the shelter and contact the shelter for the adoption process.

There is also 'learn' feature where the users can learn about different types of dogs, their behaviors and the food they like.

User scope:
My project aims to provide a platform for the animal shelter (Dogs and cats only) of Thimphu allowing all the pet adopters in our country to apply for the pet Adoption.

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.)

When it comes to adding a furry member to the family, we all want to ensure that we've found the right fit for ourselves as well as our new companion animal. There are so many important factors to consider: lifestyle, location, family, existing animals, income, and work schedule are just a few examples. Truth be told, the adoption process — and all its attendant stressors — can often be overwhelming for even the most seasoned pet guardian.

Pet adoption is the process of taking responsibility for a pet that a previous owner has abandoned or released to a shelter or rescue organization. Common sources for adoptable pets are animal shelters and rescue groups. Some organizations give adopters ownership of the pet, while others use a guardianship model wherein the organization retains some control over the animal's future use or care. But helping an animal find a forever home doesn't have to be complicated. With the advent of new technologies, such as mobile phone applications, identifying an animal to adopt no longer needs to be such a protracted process. So, if you're looking for a cat or dog of a specific breed, size, age, or temperament, look no further than the smartphone in your hands.

Currently, the adopters in Bhutan search through Facebook and other social media app if they want to adopt the animal. Searching through social media app is time consuming as well the adopter have to the know animal shelter page name to search view animals. Thimphu currently have five shelters where they feed the animals and foster them. Since these shelters do not have proper platform to post the animals, my app can provide them the platform they need. Instead of having to travel to various shelters, potential pet parents can search the database to get an idea of which pet they'd like to adopt.

With introduction of my app, the animal shelter can easily post about animal details.

The adopters can easily view the animals and if they are interested in adopting the specific animal, they can view and contact the shelter for further adoption process. My app is going to act as an intermediary between the adopters and the shelters.

Literature Review:

Petfinder was started with Betsy and Jared Saul in 1995, who came up with the concept on the way to dinner on New Year's Eve. Both were animal lovers who were interested in ways to get more pets adopted, so connecting shelter pets with potential adopters through the internet seemed like a great way to help. Eventually, Betsy sought corporate sponsorship to expand the website's capabilities and ensure it could remain free for adopters and shelters.

Since then, Petfinder launched a foundation and has donated more than $10 million to shelters and animal rescue groups. They've even launched an iPhone app.

Petfinder's primary purpose is to match potential pet parents with adoptable pets. And it uses the power of search technology to help users find the perfect pet for their home and family. Instead of having to travel to various shelters, potential pet parents can search the database to get an idea of which pet they'd like to adopt. In the beginning, Betsy called shelters and they faxed information about adoptable pets to the couple. They then put up information about pet adoptability on their website. The website went national in 1998 and added Canadian groups in 2000.

C. **Challenges:**

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

1. **Completion of task on time**
2. **Awareness and productivity issue**
3. **The animal shelters may not update animal's details on time**
4. **Difficult to gain trust from the animal shelters**
5. **Illiterate person cannot use our app**

D. Motivation and Need:

Motivation:

Without a proper platform for the animal shelter to advertise the animals in Bhutan, it has helped me to come up with this topic. Taking inspiration from His Majesty's speech during his visit to Gyalpozhing College of Information Technology college, His Majesty inspired us to come up with this idea as there is no trusted platform where the job seekers and the employer in our country. So, being an IT student, we can contribute to make our country a better place to live in. This motivated us to do this project.

Need:

Without a proper platform for the animal shelter to advertise the animals in Bhutan, it has helped me to come up with this topic.

Simplify the process of adopting a pet. Help potential adopters to find a pet that fits their lifestyle. Dispel the myths regarding shelters and shelter animals.

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

---

3. Aim and Objectives of the Project

AIM and OBJECTIVES :

Aim:
- ✔ To build an online platform for trusted animal shelter to advertise their animals and for interested users to adopt the animal.

Objectives:
- ✔ *Efficient and convenient way for animal shelters to advertise the animals*
  In the current situation, the shelters have to advertise the adopting animal in Facebook or other social medial app which is not so convenient as there will be less users since they do not much about that specific shelter. If adopters use our platform then the animal shelter can advertise post animal details for less money and the chance for an adopter to get information is more.

- ✔ *Reduce strays in the country*
  Thimphu alone has more than 15,000 stray dogs. Most of the strays has been foster in different animal shelters and some of them being adopted. With the introduction of my app, adopters can have more access to information about the dogs and can easily adopt them which will indirectly reduce the number of stray dogs in the county.

- ✔ *To help adopters to easily search for animals*
  Using my app, those who is interested to adopt an animal can easily search for the animal they want to adopt. It will be easier as well as convenient for the adopter and the animal shelters.

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 key actions that are involved in development of our project:

Problem statement:

Millions of animals are currently in shelters and foster homes awaiting adoption. For this design exercise, my goal was to create an experience that will help connect people looking for a new pet with the right companion for them.

To solve this problem, I researched and developed a conceptual prototype design for a pet adoption app. The purpose of the experience is to help an adopter find a pet which matches their lifestyle, considering factors including breed, gender, age, temperament, and health status.

My work included practical techniques for researching and designing mobile app experiences.

Literature review:

The comprehensive summary of previous research papers on related topics is thoroughly discussed in this phase. It includes articles, books and other sources relevant to our project.

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.
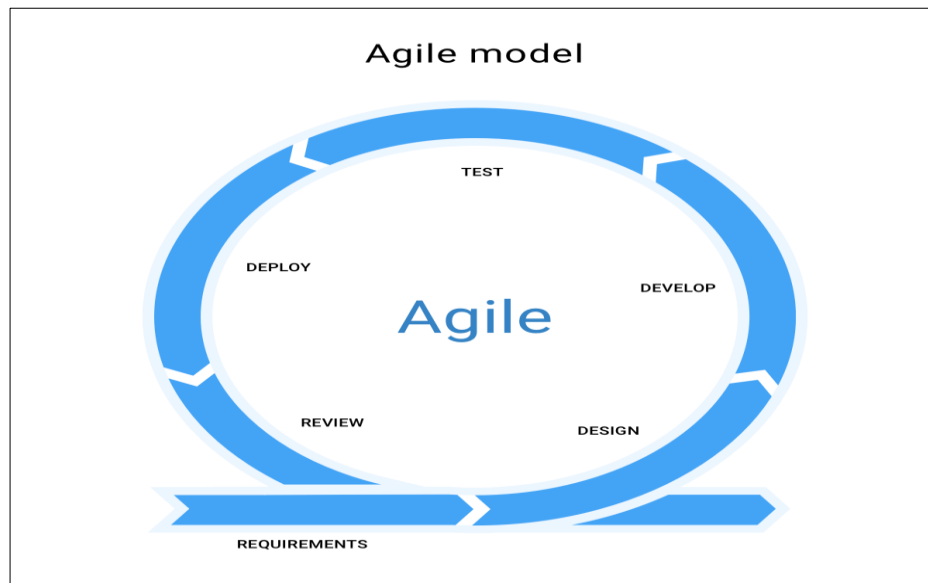
Design:

In this phase the design is prepared from the requirement specification which is studied in the first phase. It helps specify hardware and software 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 of every interface, the unit testing will be implemented in order to ensure that all the functionalities of that particular interface are met with the documentation of the code to test before progressing to next unit. After unit testing phase, the individual components or the interface are integrated logically and tested in a group to check its functionalities. After the integration testing phase, the completed and fully integrated system is validated evaluating the end-to-end system specifications in system testing phase.

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.

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:

(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).

Sources from which we will be referring from:
- Referring books, video tutorials, online reference related to android app development, art programming language.

➢ Designing of user interface, database and of flow of the data by adapting numerous strategies.

➢ In the Development progress the design needs to be brought into existence through coding while making use of android framework.

➢ 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.

➢ In the Final documentation we will be completing all the required phases we would prepare the final documentation which consist of the report documentation and will be concluded with presentation.

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 to 17/02/2021	Topic selection	Finalization of the project topics that is effective.
2	17/02/2021 to 23/02/2021	Content discussion	Discussion of the app's features, benefits and user authentication.
3	1/03/2021 to 13/02/2021	Proposal preparation	Gathering information of the project for the proposal.
4	14/03/2021	Proposal submission	
4	15/03/2021 to 31/03/2021	Design	Software requirement specification document (SRS).
	1/04/2021 to 1/06/2021	Coding and implementation.	Implementing of functional features and generating of source code.
8	1/06/2021 to 15/06/2021	Testing	Test case

(Please add more rows if required.)

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

1. Best platform advertises shelter animals.
2. Pet adopters can view the animals they want to adopt.
3. Easily access to shelter animals for adoption. No fake shelters can register.
4. Expenses of both the applicants and the employer are reduced.
5. The app is accessible with better accuracy.
6. The app is reliable as it avoids accidental mistakes.

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:
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 I am making use of free software available online so budget risk is relatively low while developing our project.-

7. Project Approval Certificate

Project Review Team:

SI #	Name	Signature

(Please add more rows if required.)

Project Coordinator

Name:

Designation:

Email:

Date: Signature:

Competent Authority – Head of Department
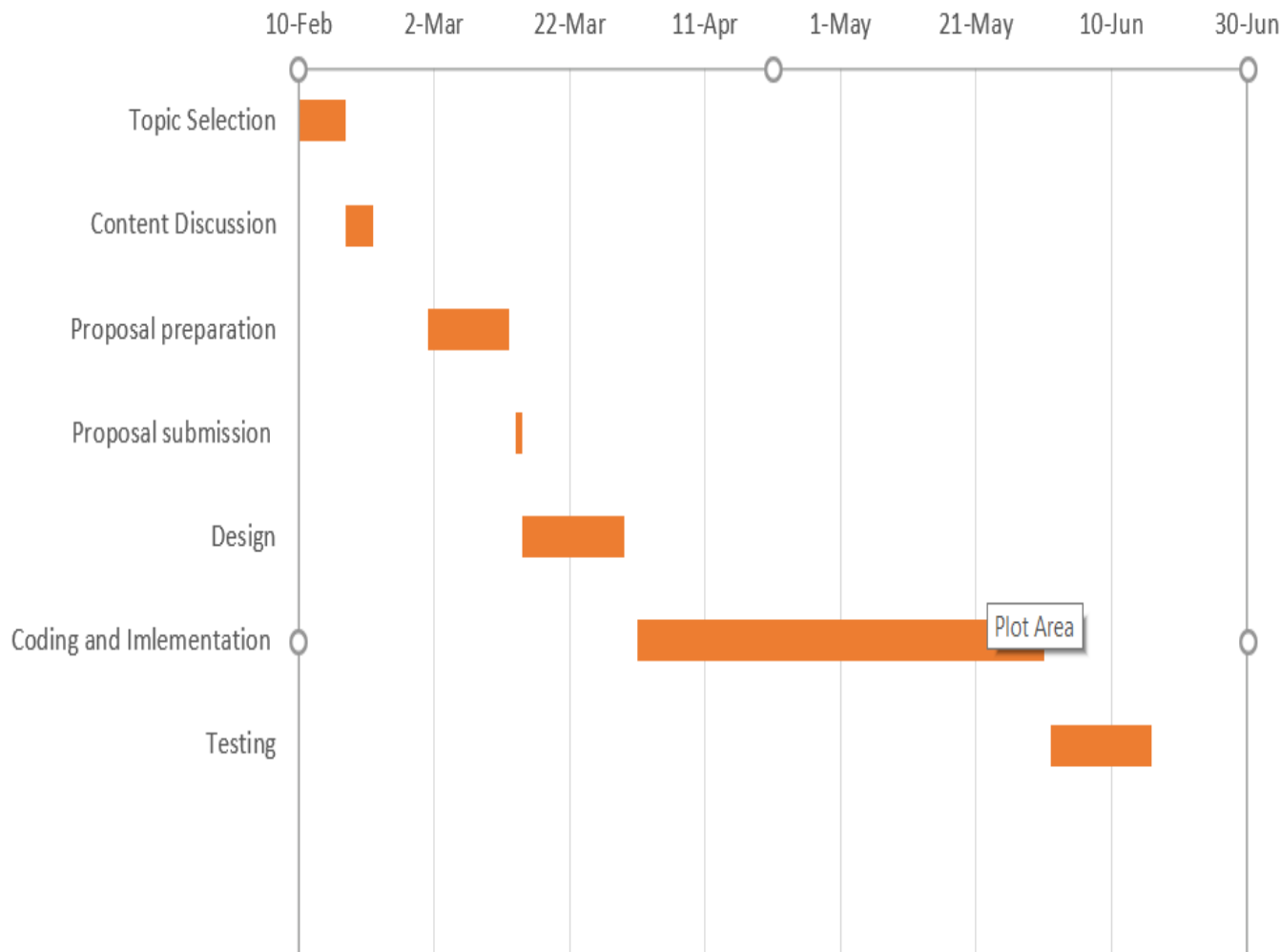
Name:

Designation:

Email:

Date: Signature

& stamp:

8. Reviewers Panel Comments

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

Lansdowne, M. (2015, January 30). *6 Apps That Help Adoptable Animals Find Forever Homes*. One Green Planet. https://www.onegreenplanet.org/animalsandnature/apps-that-help-adoptable-animals-find-forever-homes/

Top reasons to adopt a pet. (n.d.). The Humane Society of the United States. https://www.humanesociety.org/resources/top-reasons-adopt-pet

Birulia, O. (2019, April 23). *Designing Pet Adoption App — Case Study - Prototypr*. Medium. https://blog.prototypr.io/designing-pet-adoption-app-case-study-44d97a656435

Pet Adoption App. (n.d.). ELISHA DORSEY. https://www.elishadorsey.com/pet-adoption-app

Lansdowne, M. (2015b, January 30). *6 Apps That Help Adoptable Animals Find Forever Homes*. One Green Planet. https://www.onegreenplanet.org/animalsandnature/apps-that-help-adoptable-animals-find-forever-homes/

WeRescue – Adopt a Pet. (2014, November 13). App Store. https://apps.apple.com/us/app/werescue-adopt-a-pet/id918610594

Plotts, E. (2020, April 30). *Petfinder: Everything You Need to Know*. Pawlicy Advisor. https://www.pawlicy.com/blog/petfinder/