

A Project Proposal

On

“GharBeti”

Submitted in partial fulfillment of the requirement of

Project – IV (BEG479CO)

of

Bachelor of Engineering (Computer Engineering)

Submitted to:



Purbanchal University

Biratnagar, Nepal

Submitted By:

Bikash Gupta

Laxmi Gajurel

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KANTIPUR CITY COLLEGE

Putalisadak, Kathmandu

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ABSTRACT

We are stuck with technology when what we really want is just stuff that works. With the current paradigm shift in technological field, there is an urgent need to embrace and appreciate the power of technology. Housing sector remains vigilant to face the challenges of change by employing a new strategy that facilitates easy management of rental houses.

Hence there is need to develop a rental house management system that can simplify work for the rental managers so that all their work can be efficient and effective. To get information about how rental houses are currently being managed, before developed these types of application, people prepared questionnaires and submitted them to a number of rental house managers and from the information they gathered and done work manually so that we realized all work was done manually with a lot of paper work involved. Papers can easily get damaged or get lost leading to loss of data. It is also expensive to keep on buying files to store records. A lot of files make a place look untidy and also consume a lot of space. Getting a certain file to check data from many files becomes a difficult task.

Considering those facts, we decided to develop a rental house/shop/flat management system as “GharBeti” that can solve all the problems experienced with the current manual system. The system was developed in such manner that it provides maximum user-friendly interface using Flutter and Django/Node.js Project Organization.

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CHAPTER 1: INTRODUCTION

1.1 Background and Significance

Background

As we all know it is difficult to manage time for daily needs in this fast-moving world. With this case there is a need for change in a technological field, there's an urgent must embrace and appreciate the power of innovative technology. So, there is a vital situation to manage one in all the essential need that's a shelter or home for survival. If we are not known to an individual in some cities and want to rent a house, room, apartment as well as shop then it's difficult to hunt out suitable aim time. Hence, there's a requirement to develop a “Gharbeti” App that will simplify the work for the rental managers and tenants so all their works are often done efficiently and effectively. It's also difficult to hunt out the renter on time, for the owner and property managers. This App will provide the whole knowledge about houses and apartment which is accessible for Rent. It will make easy to hunt out the position of Houses, need of rooms and other facts by the renter. Using this app, the Landlords even have provision to post or update their property details whenever they want.

- GharBeti App is fully static and effective app. It'll provide the knowledge to the tenants about the homes which are accessible for Rent. They can easily search for their needs using keywords like property type, location, etc.
- On the other side, the Landlord has the facility to post or modify their property details with admin approval.
- It can be helpful to easily upload the position, phone number, Expected rent, No. of rooms, Facilities and other information by the

Modules used in this project

This project has two major modules that are:

Landlord:

- Registration by the landlord: First, the owner of the house should register their land with their name, location, contact No, expected rent, No. of rooms, Facilities and other information.
- Login by Landlord: the owner uses the app by login into the app with their login credentials.

- Add Tenants: New Tenant is added by the landlord by entering Tenant personal details with verification ID.
- Update availability: Owner can moderate or update no. Of rooms, area,
- Generate the rent invoice: Monthly bill is generated for the renters.
- Payment status: View payment status and easily detects which tenant has paid, not paid and have balance.

Tenants:

Registration by the tenants: First, the tenant should register themselves by their names and private details like id, contact,

Login by the tenants: The Tenant uses the app by login into the app with their login credentials.

Add Requirements: Tenants can upload their requirements to appear house as per their choice.

Search house's location: they will search about feasible lands and placement in their budget.

Handling Payment: Payment details can be viewed, the status of payment, and submit

Significance

- It helps the owner to find the tenants easily.
- This app verifies both owner and the tenants before they contact each other by using the document which verify them as a real person.
- It helps the tenants to find the room easily without searching from one home to another.
- It provides the actual location of the rental house.
- The tenant and owner easily able to update modify and delete their detail and no. of room and house.
- We are able to contact the owner without the agent.

1.2 Statement of the problem

In Nepal there doesn't have online home, apartment and shop rental management system for who wants to rent home, apartment and shop get a lot of trouble to find room even the room is available. There is no properly allocate room and the system is not easily arranges according to their user interest. And also, the room, home, shop and apartment rental management system almost are done through the manual system.

The administrative system doesn't have the facility to make rental Management system through online and the most time the work done through illegal intermediate person without awareness of the administrative and this make more complex and more cost to find room for the customer. This leads to customer in to more trouble, cost, dishonest and time wastage. The problem found in the current system:

- Complexity of finding home is not easy and more tedious.
- And also, Extra money to find home.
- The system needs more human power.
- The user cannot get information about home when they need.
- There is to match time consumption find home.
- Complexity of the system for payment.
- An emergency repair is required when something in the rental unit has broken and the health or safety of the tenant is in danger or the building or property is at risk until repairs can be made.

Management has become difficult because of issues that include:

i. Data growth:

Data increase day to day. Storing and maintaining all data manually is very difficult.

ii. Lack of computerized system

Currently most landlords/property managers use the manual system in recording and maintaining their property and customers data

iii. Data security is not assured

In a manual way, data is recorded on books/papers which may easily get damaged leading to loss of data.

iv. There is no database to store information

Potential of data loss or damage is very high because data is stored on tangible files. Lack of these crucial requirements makes management of the tenants and houses very difficult as some tenants may end up not paying rent.

1.3 Rationale of the Project

There are many reasons why GharBeti is important for businesses. First, it can help to optimize the use of resources and minimize waste. Second, it can improve customer service and communication between businesses and their customers. Third, it can ultimately save money by reducing the need for manual tasks such as data entry and report generation. Finally, it can help businesses to be more efficient and organized, which can lead to increased profits. All of these reasons make GharBeti an essential tool for businesses of all sizes.

1.4 Objectives of the project

- To reduce the hassle of searching for rooms on multiple websites.
- To provide a platform for room owners to list their rooms and for renters to find rooms easily.
- To offer a wide variety of rooms in different locations.
- To give room owners the freedom to set their own prices.
- To allow room renters to compare prices and reviews before making a decision.
- To make it easier for room renters to pay for their rental.
- To provide customer support for both room owners and renters.
- To improve the overall experience of renting a room.
- To allow room owners to manage their listings and renters to book rooms easily.
- To provide a safe and secure platform for both room owners and renters.

CHAPTER 2: LITERATURE REVIEW

Literature review is a text written by someone to consider the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Main goals are to situate the current study within the body of literature and to provide context for the particular reader

99ACRES

Created by the popular property search portal 99acres.com, this app offers the same user experience as the website, on the go. The app, which is free for Android users, allows you to browse properties for rent, along with high quality pictures, videos and maps. It is best known for the numerous options it provides, with listings of around 10 lakh properties across the country. It also promises instant contact between landlords and interested tenants through phone calls, text or email.

NOBROKER

This app stands for what everyone looking to rent wants to do: cut the broker out of the equation. It lets us find and rent a house without paying any brokerage. Most of us feel that having to pay a hefty brokerage fee is unfair. The No-Broker app resolves this by letting home owners list their properties easily and then putting them in touch with potential tenants. We can contact the homeowner directly through the app after shortlisting a property.

FLATCHAT

This app provides a platform where homeowners and potential tenants can share their location, find contacts in their vicinity and chat with them. It also allows you to sign up to find suitable flat mates to share a rental with. This can make the otherwise difficult process hassle free, since you can find people with the same budget and location preference as you, as well similar hobbies and habits. So far, the app is only functional in Bengaluru, Mumbai, Pune, and Delhi.

NESTAWAY

This app's appeal lies in the fact that it offers many fully furnished rental options

with standardized amenities, and Nest Away takes responsibility for making sure that these are in working order. Once we shortlist a property, we can schedule a visit through the app, saving the trouble of calling and coordinating with owner or agent. The app stores important documents like rental agreements and receipts for easy access. It also allows us to book prefer.

CHAPTER 3: PROJECT DESIGN AND IMPLEMENTATION

The GharBeti App is utilized to simplify the house related problems of people. The GharBeti App is the best thanks to searching the room, house, Apartment office, Paying Guest, and shop etc.

- Firstly, users install the app on their Android device.
- After the installation process, It will show the available rooms and the featured rooms around their location.
- It'll ask whether registered or not
- If it isn't registered then, it'll give registration option. Otherwise, it'll show the login page.
- After login, it'll attend the home page, where the user can do the posting of their land or search for the rent house.
- Afterwards, they have to finalize the deal by talking to each other.
- Make the payment.

CHAPTER 4: SCHEDULE AND EXPECTED RESULTS

4.1 Schedule

4.1.1. Planning and research (2 weeks)

-Carry out market research on room rental applications to determine the features that are most popular with users and the most successful app models

-Develop a project plan outlining key milestones and deliverables

4.1.2. Design and development (4 weeks)

-Design user interface and front-end features

-Develop back-end infrastructure and database

-Integrate third-party APIs as needed

4.1.3. Testing and quality assurance (2 weeks)

-Test app on multiple devices and browsers

-Conduct user testing to gather feedback

4.1.4. Launch and marketing (2 weeks)

-Submit the app to the app store

-Create marketing materials and launch a campaign

4.1.5. Maintenance and updates (ongoing)

-Monitor user feedback and implement updates accordingly

-Add new features and functionality on an ongoing basis

4.2 Expected Outcomes and Testing

Expected Outcomes

- Application will be a service which will connect Renters and Landlords and vice versa.
- It will save the physical hard work and invaluable time to find room/flat/shop.

- It will save Resources for search the rooms/house/flats/shop.
- It will be an Open-Source Application which can be freely Install in smart Phones or can be accessible through browser too.
- Application will make easy to find rooms/flats/houses/shops for the tenants and upload the location and other information by landlord/room-master.

Testing

This document describes the testing of GharBeti. The objective of this testing is to ensure that the application behaves as expected and meets the functional requirements.

The following tests will be carried out:

1. **Functionality test:** To ensure that the application can perform all the required functions correctly.
2. **Usability test:** To ensure that the application is easy to use and navigate.
3. **Compatibility test:** To ensure that the application can be used on different devices and operating systems.
4. **Performance test:** To ensure that the application can handle different load conditions.
5. **Security test:** To ensure that the application is secure and data is protected.
6. **Stress test:** To ensure that the application can handle high load conditions.
7. **Recovery test:** To ensure that the application can recover from different types of failures.

The results of the testing will show that the application meets all the functional requirements and is stable under different load conditions. There were no security vulnerabilities found during the testing.

4.2 Expected Innovative Points

The GharBeti is expected to provide an intuitive interface for users to manage their rental property. The application should allow landlords and tenants to create, view, and edit rental agreements. It should also provide a way for landlords to collect rent payments and track maintenance requests. The application should allow tenants to view their current balance and make payments online.

CHAPTER 5: PROJECT BUDGET

To develop the room rental management application like , we have to make a project budget. In this budget we have to include the cost for the following:

1. Domain name and hosting fee
2. Application design
3. Application development
4. Quality assurance testing
5. Marketing and promotion
6. Maintenance and support
7. Updates and upgrades

The total cost for the rental management application will be \$50,000-\$150,000. This budget includes the cost for the domain name and hosting fee, application design, development, quality assurance testing, marketing and promotion, maintenance and support, and updates and upgrades.

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