

**Proposal**  
For  
Real Estate Management Website

Submitted to



Submitted by



A.N.Four Soft is a software development agency. We see opportunities to connect with people and ideas to impel impactful tech strategy for our partners.

**Jan 18th, 2022**

## **Introduction**

An4soft is a well-known Information and Communication Technologies(ICT) service provider and software development Company. We provide a complete business solution like software, Application, Website Design and Development, Branding Services, Digital Marketing and many more.

An4soft Pvt. Ltd is one of the professional and expert teams of PHP, Laravel, Node js, Express, WordPress, react js, and other frameworks based IT Company in Nepal. We have a huge pool of happy clients from Australia, the UK, the USA, Nepal and many more countries. Our major services are Website, Software, Android & Mobile application development, Social Media Management Service etc. We have skilful and Qualified IT engineers and a good working environment. An4soft always believes in Best Service, Quality Work and We deliver innovative technology strategies that solve business problems

### **What we offer:**

- Technical Support
- Complete Project Documentation
- Complex Data Structure Analysis
- Flexible UI Designs
- Handle Every Security Issues For your Systems
- Fully Functional as well as cross-platform Design and performance.
- Provide weekly reports for updating works
- The concept in Data Visualisation

### **The most important features include:**

- Content Management Capabilities
- An easy-to-use
- SEO Optimised code and layout
- The ability to scale up with the platform

## **Classified Ads**

### **Project Background:**

The overall project concepts focus on all stages of the home lifecycle: buying and selling. The project is committed to empowering consumers with unparalleled data,

inspiration, and knowledge around homes, and connecting them with the right local professionals to help. In addition, this system develops a comprehensive suite of marketing software and technology solutions to help real estate, rental, and mortgage professionals maximise business opportunities and connect with millions of consumers.

#### **User Type:**

- **Buyers**
- **Agents and seller**
- **Admin**

#### **Scope Of Work**

- **Agent Management**
  - Agent self-registration and approval by admin
  - Agent Can Manage Multiple ads or post
  - Agent Can List Multiple properties
- **Buyer Management**
  - Buyer Can self-register and verify using verified email or phone.
  - Buyer Can Create Custom requests for the property as their requirement. (i need land nearby, under a budget,)
  - This request can be dynamically managed by the admin
- **Property Management**
  - Multiple Options for creating an image gallery of the property
  - Video Attachment
  - Comment
  - Can View analytic reports only the limited accessibility provided by the admins for a specific agent
  - Pin flags as their activity like sold out, available, pending, approved and others
- **Dynamic Filtration and Sorting**
  - Filtration with suggested meta keywords and categories
  - Highly search keyword suggestion
  - Sorting with admin defined parameters like listing duration, pricing, type of land, lease, and others

- **Notification management**
  - Email Notification
  - Push Notification
- **Category and Tags Management**
  - Super Admin can predefined category and suggestion keywords
  - Users can suggest or request for new category and keywords
  - Can filter Listing by categories and keywords
- **Blogs and post management**
  - Contain media library where you can use same media for multiple post or blog
  - Schedule blog or post
- **Advanced Content Management System**
- **Customer as Buyer Feedback Management**
  - Review and Rate listing.
  - Multiple criteria Review.
  - Can edit and delete review
  - The listing owner can flag review and request customer support to look at reviews
- **Advanced Search Engine and Filters**
  - Search Course by the different course keywords
  - Filter Course with the price range, most bought, most rated, recent and others
  - Meta Tags, Categories, etc.
- **Chat System**
  - Improve two-way communication between Buyer and admin as well as Agents and admin

## Technology Used

Services	Technology	Remarks
Server Side	PHP Framework [ laravel ]	Better Optimization, Security and Large Scale Data Clustering
Client-Side	React Js	
Database	MySql	Data Security and Flexibility of Open Source

## Third-Party Service

Note: All the third party is not calculated below development cost

Services	Third-Party	Remarks
Email	Simple Email Service [ses]	AWS
File Service and backup service	S3 Bucket	AWS
Database	RDS	AWS
File Host	EC2	AWS
Queuing	Rabbit MQ	
Chat and Notification	Pusher	
Cache Service	Redis	
Map, Location suggestion, Distance calc, etc	Google Services	

## Tools Used

Services	Tools	Remarks
UI/UX	Figma	
Branding	Adobe Suite	

code	Vs Code	
Security Test	Owasp	

### Why Laravel?

Laravel is an open-source framework built with PHP scripts, and these days there is a very wide community. It's worth noting that Laravel is an open-source MVC framework and is constantly updating and is capable of handling all of the commonly used tasks which web applications usually do.

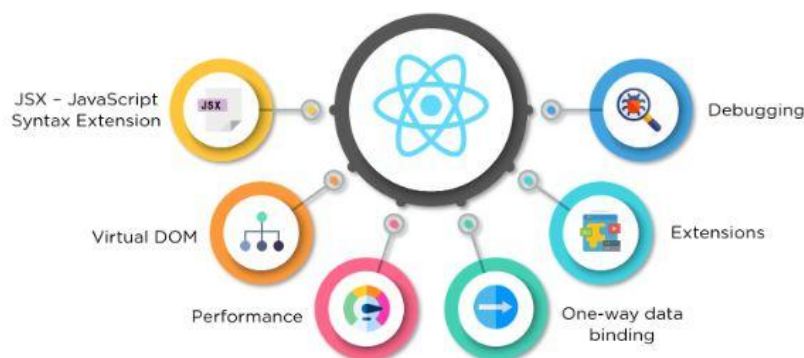
Here are some of the key features of Laravel which is why it is preferred by web developers for large scale projects.

- Advanced Authentication
- High Security
- Enhanced Performance
- Database Migration
- Open Source
- MVC Framework
- Unit Testing

Hence, Php Framework Laravel is one of the most popular for large scale projects because of the important key features so we decided to use Laravel as server-side.

### Why React Js?

React is a declarative, efficient, and flexible JavaScript library for building user interfaces or UI components. It lets us compose complex UIs from small and isolated pieces of code called "components".



It is used by large, established companies and newly-minted startups alike (Netflix, Airbnb, Instagram, and the New York Times, to name a few). React brings many advantages to the table, making it a better choice than other frameworks.

## **Why MySql?**

MySQL is an open-source DBMS that is built, supported and distributed by MySQL(ORACLE). Some of the reasons to use Mysql are

1. Scalability and Flexibility
2. High Performance
3. High Availability
4. Robust Transactional Support
5. Web and Data Warehouse Strengths
6. Strong Data Protection
7. The MySQL Database Server is very fast, reliable, scalable, and easy to use.

## **Github:**

GitHub is a web-based Git or version control repository. It offers the distributed version control and source code management (SCM) functionality of Git as well as adding its new features.

## **How We Work:**

We have been working by dividing the works into different categories according to the nature of work like a requirement and information gathering, data flow, design schema, finding out complexities, finding better solutions and others. In the context of large scale application, we mainly focus on these stages like

**Stage1: Planning and requirement analysis**

**Stage2: Defining Requirements**

**Stage3: Designing the Software**

**Stage4: Developing the project**

**Stage5: Testing**

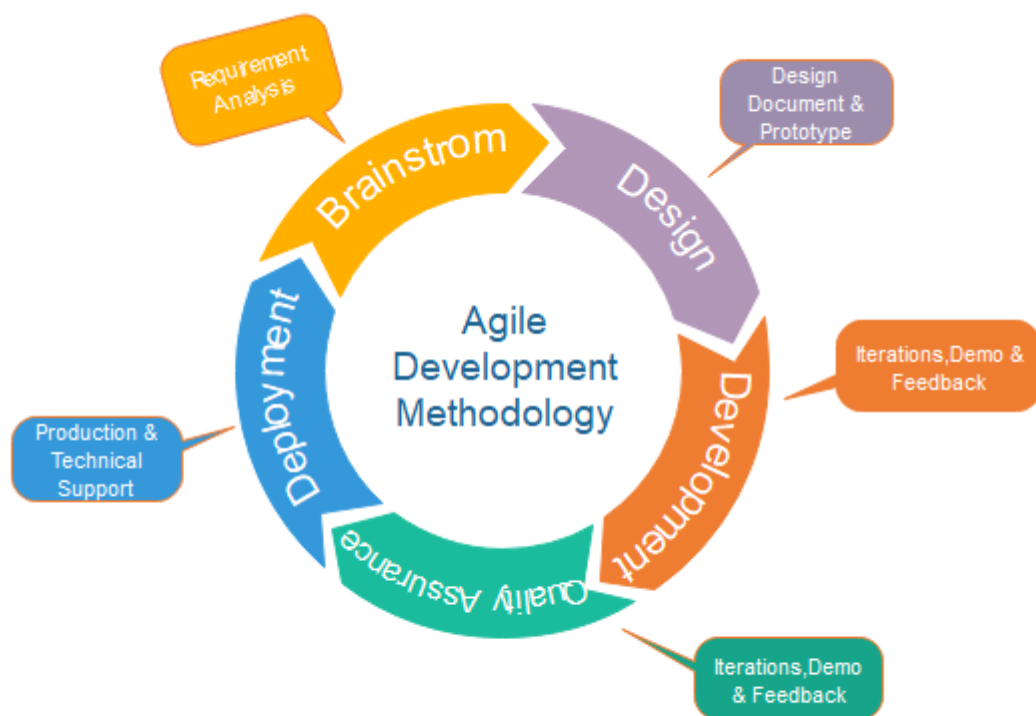
**Stage6: Deployment**

To accomplish the above stages we are using the agile model which helps complete tasks parallelly

## Agile Model

The meaning of Agile is swift or versatile." **Agile process model**" refers to a software development approach based on iterative development. Agile methods break tasks into smaller iterations or parts that do not directly involve long term planning. The project scope and requirements are laid down at the beginning of the development process. Plans regarding the number of iterations, the duration and the scope of each iteration are clearly defined in advance.

Each iteration is considered as a short time "frame" in the Agile process model, which typically lasts for 15 days. The division of the entire project into smaller parts helps to minimize the project risk and to reduce the overall project delivery time requirements. Each iteration involves a team working through a full software development life cycle including planning, requirements analysis, design, coding, and testing before a working product is demonstrated to the client.



**Fig. Agile Model**



## **Phases of Agile Model:**

Following are the phases in the Agile model are as follows:

1. Requirements gathering
2. Design the requirements
3. Construction/ iteration
4. Testing/ Quality assurance
5. Deployment
6. Feedback

**1. Requirements gathering:** Each software development life cycle model starts with the analysis, in which the stakeholders of the process discuss the requirements for the final product. The goal of this stage is the detailed definition of the system requirements. Besides, it is needed to make sure that all the process participants have clearly understood the tasks and how every requirement is going to be implemented. Often, the discussion involves the QA specialists who can interfere with the process with additions even during the development stage if it is necessary.

**2. Design the requirements:** When you have identified the project, work with stakeholders to define requirements. You can use the user flow diagram or the high-level UML diagram to show the work of new features and how they will apply to your existing system.

**3. Construction/ iteration:** When the team defines the requirements, the work begins. Designers and developers start working on their project, which aims to deploy a working product. The product will undergo various stages of improvement, so it includes simple, minimal functionality.

**4. Testing:** In this phase, the Quality Assurance team examines the product's performance and looks for the bug.

**5. Deployment:** In this phase, the team issues a product for the user's work environment.

**6. Feedback:** After releasing the product, the last step is feedback. In this, the team receives feedback about the product and works through the feedback.

## Agile Testing Methods:

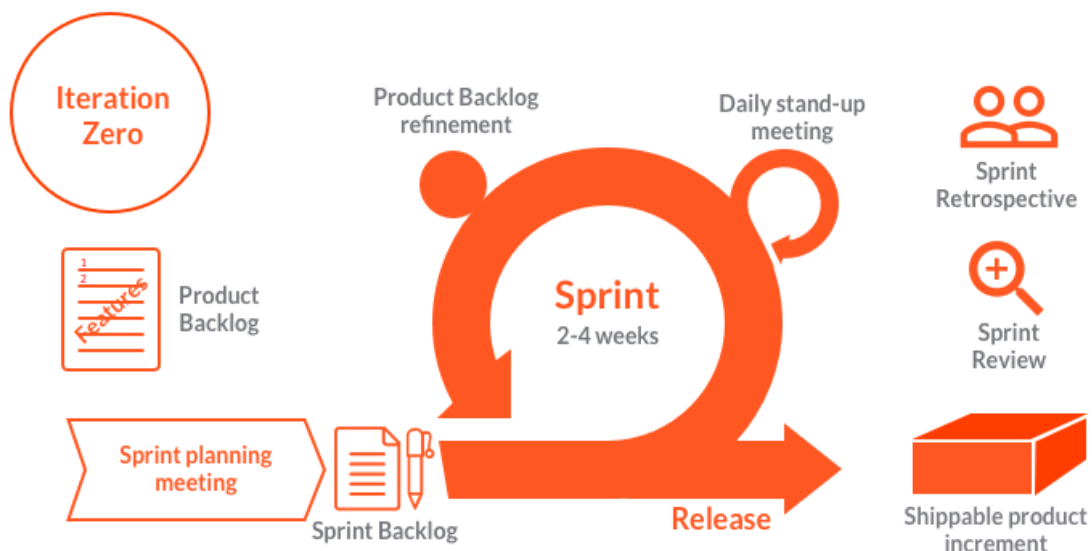
### Scrum

SCRUM is an agile development process focused primarily on ways to manage tasks in team-based development conditions.

There are three roles in it, and their responsibilities are:

- **Scrum Master/Project Manager:** The scrum can set up the master team, arrange the meeting and remove obstacles for the process
- **Product owner:** The product owner makes the product backlog, prioritizes the delay and is responsible for the distribution of functionality on each repetition.
- **Scrum Team:** The team manages its work and organizes the work to complete the sprint or cycle.

## Sprint



### Our Dedicated Team

In any project, At the beginning of the project, the Project manager will understand the business or system problems and find out the possible solution to the project. In the below table we have specified all the experts that need to build any scalable system. This is the working culture of our company where we sort out any problematic issues in the beginning.

*[Note: We also manage the team as per your requirement too ]*

Experts	No. People	Working Hours ( Per Day )
Project Manager	1	8 hours
Team Lead	1	8 hours
DevOps	1	8 hours
UI / UX	2	8 Hours
Backend Developer	2	8 hours
Frontend Developer	2	8 hours
QA	1	8 Hours
Mobile Application Developer	1	8 Hours

## Web Application Development Timeframe

Task	Estimated Time	Estimated Pricing(Rs.)
UI / UX Design	15 Days	37290
Agent Management	7 Day	17406
Buyer Management	3 Days	7458
Property Management	15 Days	37290
Dynamic Filtration and Sorting	5 Days	12433
Notification management	5 Days	12433
Category and Tags Management	5 Days	12433
Blogs and post management	5 Day	12433
Advanced Content Management System	7 Days	17402
Customer as Buyer Feedback Management	2 Days	4972
Advanced Search Engine	5 Days	12433
Chat System	5 Days	12433
Google Map Integration (Optional)	5 Days	12433
Analytics	2 Days	4972
Data presentation in graphical representation	5 Days	12433
Total		<b>226254</b>

## Mobile Application Development Timeframe

Note: Includes both Agent and Buyer app

Task	Estimated Time	Estimated Pricing(Rs.)
UI / UX Design	15 Days	37290
API Development	15 Day	37290
Widget and design implementation	20 Days	49720
API integration	20 Days	49720
Total		<b>174020</b>

Total Cost Web Application Development: Rs.226254

Total Cost Mobile Application Development: Rs.174020

Total Cost for both : Rs.174020+Rs.226254 = **Rs.400274 ~ Rs.4,00,000**

### Support:

We will continue to support you if there is any problem in the system or if you need any support for training. Our annual support does include the addition of new features to the websites. If there are minor adjustments in the existing features then it will be covered in the annual support itself. However, if there is any new functionality to be developed then we can determine the cost after discussion.

**Note: We will provide a Sample web page upon your request.**

We appreciate the opportunity to provide this proposal and look forward to working with you.

Thank You

*Let's Discuss...*