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**Haukainga HomeWinds**

**Project Proposal**

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# Section 1. Overview

## 1.1 Purpose

The main goal of the Haukainga HomeWinds project is to make a website where you can easily book places to stay throughout back-country of New Zealand. But what's special is that this website will focus on Maori culture and traditions. The website will give you a different and unique experience compared to regular booking websites like Air B&B, Bachcare, or Booking.com.

## 1.2 Business Context

At the heart of this project is a New Zealand-based client with a deep connection to its Maori culture. As a fully Maori-owned company, it offers locals in urban and back-country areas to rent their properties and get actual targeted market customers. The primary ambition is to provide visitors with an authentic and immersive encounter with Maori traditions and lifestyle, delivering a truly genuine experience.

## 1.3 Scope

**In Scope:**

* Thoroughly understanding the needs and expectations of the project stakeholders to ensure all aspects are accounted for.
* Developing the website's layout, features, and functionality, followed by various testing to ensure a better user experience, and finally launching the website for public use.
* Creating clear and organized documentation that outlines the project's processes, functionalities, and user instructions.

**Out of Scope:**

* After the project’s successful completion and passing to customer, required maintenance and updates to the website are not within the project's scope.
* The project does not cover the physical deployment of the website on specific servers or locations.

## 1.4 User Characteristics

The website's operational structure includes administrators, property owners and customers. The administrators are typically 1-3 individuals, handle overall website updates and essential administrative tasks. The property owners, ranging from 1 to 12 based on property count, can manage bookings for their respective properties and can adjust property information on the website as needed. Customers, potentially numbering up to 1000, utilize the platform to initiate bookings, with the flexibility to modify or edit their bookings according to their requirements.

# Section 2. Assumptions, Dependencies, Constraints

## 2.1 Assumptions

To specify the requirements, we must analyze which assumptions are taken for granted. We can divide these into several sub-categories. These include technical, maintenance and financial assumptions.

### 2.1.1 Technical

We assume the client will take care of providing the needed IT-Infrastructure. This includes a webserver with properly sized storage and accessibility. As we defined in the scope, this project only includes designing, development, testing and implementation of the website including a database and necessary plugins to provide the functionalities defined by the requirements specified in this document.

We are willing to support the client when comparing different possible strategies to handle the technical requirements we assumed during the development.

### 2.1.2 Maintenance

As stated before, the scope of this project ends with the implementation of the website. Because products like this need constant maintenance to ensure security, functionality and accessibility, we assume that the client will handle the maintenance of our product. This includes future scalability, ensuring operation and performance, backup management, patching and licensing.

We are also willing to support the client in this regard to discuss possible solutions to how the maintenance can be handled.

### 2.1.3 Financial

Concerning the financial capabilities of the client we assume that the budget can be covered. To meet specific requirements in this document it might also be necessary to include third-party products and services which can add to the overall costs of this project. This can also include costs linked to the previously mentioned assumptions.

When there are financial concerns, we are willing to provide support on different solutions to cut expenses regarding certain features, requirements, etc.

## 2.2 Dependencies

For final implementation we are depending on the client to provide additional information throughout the different stages of this project.

For our team, consisting only of international students, to meet cultural requirements we depend on material provided and support from the client. This includes not only images, details and descriptions of the properties. In addition, we also need information about the client, the history of the business, etc.

Furthermore, the Product is dependent on using third-party products and APIs, including frameworks, libraries, packages, plugins and tools for development, testing and implementation.

## 2.3 Constraints

There are several constraints given to this project including legal and privacy requirements, constraints given by third-party solutions as well as future partners of the client.

The New Zealand privacy act 2020 will influence a variety of requirements and functionalities. There can also be other legal requirements concerning privacy, businesses, etc. where we depend on support through the client or project manager.

When implementing or using third-party products, plugins, functionalities into our system we can encounter constraints associated with the use of these products. This can also include further legal and privacy requirements, especially concerning the payment and photo identification functionalities, as well as additional technical, performance and security constraints.

The possibility of future partners for the client was mentioned in the project proposal. At this stage we cannot consider any requirements concerning future partners. This constrains the development and implementation of the project to the state of this document.

We are willing to discuss adding functionalities and requirements associated with future partners considering the state of the project, time management, feasibility and costs, to ensure that the product matches the requirements of the client.

# Section 3. Requirements

## 3.1 Functional Requirements

### 3.1.1 Booking Operations

The main requirement of this project is for users to book properties that are offered on the website. Users can also book multiple properties during their booking process. They can also edit and cancel these bookings. The refund policy that is of high importance in this matter requires communication with the client. The developed website will have a general refund policy, which applies to all properties that are offered on the website. Special refund conditions can be set by the property owners but need to be stated clearly in the descriptions of each property.

### 3.1.2 Minimum Booking and long-term stay

Guests are only allowed to book a property with a minimum stay of three nights. The accepted booking options are three nights from Friday to Monday and from four nights Monday to Friday. The guest needs to leave on the departure day before the required times, set by the property owner. Long-term stays are not possible by default but can be negotiated with the property owners.

### 3.1.3 Property Management on the website

Property owners need to be able to add, edit and remove properties from the website. These features need to be user-friendly, so that quick changes can be completed without big efforts. Changes to the property within the website include adding and removing pictures, editing the property description, changing the property details, etc.

### 3.1.4 Photo identification

The user needs to provide photo identification when booking a property on the website. The basic form of this feature includes the upload of the passport/New Zealand driving license of the user. More advanced options consist of WordPress plugins that come with expense for the client but provide a more secure identification process and an integration of RealMe, which are both out-of-scope for this project.

### 3.1.5 Implementation of Google Maps

The properties that are added by the homeowners need to be shown on a map. This creates more user-friendly environment and improves the usability of the overall website. This feature includes a map that shows all the offered properties for a better way to find the desired property. It also includes an optional map, which is part of the description of each offered property and can easily be added/removed by the property owner on the website.

### 3.1.6 Ratings and Feedback

The website has a feature that allows users to rate the property they stayed in. They can also give feedback about their stay and can share their experiences during the trip. This rating feature can be implemented in various ways and needs to be specified by the client. We propose a basic rating process, where users receive emails with inquiries about their previous stays in one of the properties. Within this mail is a link, which will lead the user to a formular that allows precise feedback of their experience. This information will be sent to owner of the property. They can, then, publish these ratings, if they wish to. With this approach, the owner of the property has the responsibility and authority, how the feedback is handled on the website, which may result in a misleading presentation of the property, but protects the owners from too many bad reviews in form of spam accounts. This is only one possible implementation and will finally be decided by the client.

### 3.1.7 Search and Filter functionality

The users have different options to search for the properties. In the search bar, they can enter the name of the property or a certain location. This will help the users to find their desired property. With the filter function, the user can look for properties with specific requirements. These filters include the region of a property, the overall atmosphere (in a major city or in a rural region), the price of the property, allowance for animals, etc. All these filters enable a more user-friendly experience and help the users to find their desired property.

### 3.1.8 Profile Management

Users can view property descriptions and information about the different locations without the need to create an account. Users are required to create an account if they want to book a property. During this process, they need to enter their names and email addresses. All these credentials will be stored securely on a database in accordance with the Privacy Act of 2020. After logging in, the user of the website can logout at any time, which restricts the user to book properties, as mentioned before. The User of the website can also delete the entire account. This feature will delete all sensitive information stored about the user to be deleted from the database. Another very important feature is the possibility to edit the account details (e.g. change of email address).

## 3.2 Non-Functional Requirements

### 3.2.1 Property-only Bookings

Haukainga HomeWinds focuses on a property-only booking system. This means that it is not possible for users to book certain rooms. The website users can only decide between the offered properties and need to book the entire property.

### 3.2.2 Focus on Maori themes

The website takes a special focus on Maori themes, which will create a unique customer experience in contrast to basic property/room renting websites like AirBnB and Bachcare. This will include images, texts and the overall design and structure of the website.

### 3.2.3 Sustainability of the properties

It is important to promote the sustainability of the various properties. Users of the website should clearly see, that the properties are sustainable, which will be stated in each property description or as a general part of the website. The latter options would promote the sustainability of the all the properties. The decision about this part of the website design needs to be made by the client, because it is based on personal preferences and is of high importance for the client.

### 3.2.4 Summer and Winter rates

The website provides the user with all the required information regarding the prices of the property. This includes details about summer and winter rates, where the prices for the properties vary depending on the season. The different prices need to be set by the property owners. It is also possible for property owners to stick to one price across the different seasons. All these details need to be presented properly, so that the user can clearly identify the prices. Since hospitality is an important aspect of the Maori culture, this website tries to be as transparent as possible, when it comes to prices and customer service. This means that no hidden charges should be applied in addition to the shown prices.

### 3.2.5 Multiple payment options

Users of the website should have the possibility to pay their bookings with various methods. The basic payment option will be PayPal, since this feature is easily implemented and comes without any fees. Other payment options like the credit card, visa card, etc. are highly recommendable, but often come with expenses for the client. Since this needs the approval of the client, the basic version of the website does not include these options.

### 3.2.6 Support of multiple languages

In addition to Maori texts all across the website (to support the Maori themes), the user can change the language settings of the website. This will affect the overall language of the website, so that international visitors have a better user-experience. Property owners do not need to provide property descriptions in different languages, since they will be translated automatically, which might lead to minor errors in the translation, but reduces the workload of the property owners.

### 3.2.7 Sensitive Data Management

Sensitive Information that is gathered on the website is stored on a database and is handled in accordance with the Privacy Act of 2020. This includes details of created accounts, credit card information, photografic identification, etc. The sensitive data needs to be deleted once it is no longer of use. The security of sensitive information is of high importance, because data leaks (confidential data is shared with the internet) can quickly ruin the reputation of the website.

# Section 4. Budget

The budget of this project includes the steps outlined in the project scope and does not include costs for third-party products, licensing, IT-infrastructure, maintenance and other expenses not specified in this document.

**Breakdown of costs:**

+ 1,200 NZD; Analysis 10 %

+ 3,600 NZD; Design 30 %

+ 2,400 NZD; Development 20 %

+ 3,600 NZD; Testing 30 %

+ 1,200 NZD; Implementation 10 %

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SUM + 12,000 NZD 100%

+ 1,200 NZD; Contingency fund (+10 %)

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**TOTAL** **+ 13,200 NZD**

The costs for this project were calculated using the estimated overall workload of 30 hours per week, for a project span of 8 weeks (about 2 months), distributed between 3 team members, and a pay of 50 NZD per hour. Tracking and documenting the project progress throughout will help ensure staying within budget and guide cost management.

Any changes made to the requirements specified in this document can impact on the budget and may require a readjustment and discussion. To minimize the risk of exceeding the budget it will be necessary to stay in close communication throughout the different stages of the project.

# Section 5. Open topics for discussion

Throughout the entire project, close communication between the client and the developers is essential to create the best possible product that meets all the requirements set by the client. After assessing the initial requirements given by the client, there are a couple of topics, that are already open for discussion. A short list of open topics, that need to discuss with the clients can be seen below:

* Refund policy
* Deployment process (Cloud solution or own hardware)
* Implementation of (paid) third-party services (payment and photo identification)
* Maintenance suggestions
* Recommendations, discounts, and promotions for certain users