**CHAPTER I**

This chapter serves as the introduction of the study and will provide background information about the project context, objectives of the study, the purpose of the study, and its scope and limitations.

**Project Context**

Client-preference web applications have been introduced to various kinds of institutions due to the innovation and digitalization of different technologies, this includes Architectural and Building Institutions. Client-preference web application in the field of construction provides a lot of functions that can improve the transaction and estimation of materials to their clients such as user management and Estimation system. Client preference designs is one of the important ways of discussing what kind of design of house or building is what the client really wants to be build. And in the advancement of our technology online transaction has become a trend not just in shopping but also in our day-to-day transaction.

Client-preference web application has been an important part of every institution due to their positive outcome. It grants optimization and ease to the processes happening in different sectors and departments. Institutions like architectural and construction institutions often follow manual processes such as estimation of the materials that cover covers a lot of time to carry out which leads to a slow workflow and adds a burden to the employees. One of architectural and construction institutions that experienced this problem is AEVG builders who is still using a manual estimation and transaction.

Architect Yel Villalon Galang founded the AEVG builders in 2017. Architect Galang began his professional career in Singapore. After 2 years of working in Singapore Architect Galang decided to his own design and construction company at San Pablo, Hagonoy Bulacan. The design and construction company has been operating at a high level of excellence for exactly 5 years, they provide the quality of design and construction and being progressive and competitive in the design and construction industry.

One of the serious problems at AEVG builders is   consumption of working time for the estimation of the materials lack of client knows who is AEVG builders. Admin and staff of AEVG builders are currently using manual estimation. Most of the time, because of the usage of manual estimation, they consumed a large amount of time needed to for the materials.

The solution proposed by the researchers is development of Client-Preference for house and building architectural designs: A web application for AEVG Builders. This will help to resolve the current problems that AEVG Builders is experiencing such as manual estimation. It will also make their work faster and can give the client satisfaction work.

**Purpose and Description**

This study is being carried out to develop a website application for AEVG Builders based on the preferences of their clients. Its goal is to highlight an architect's individual work inside the organization while also assisting with the client's material and financial estimates. The client can also look at the materials required in their plans and make an appointment with the firm's architect.

There are two (2) admin-level users and one end-user in this project. The Primary Owner or Head Admin, as well as the Owner or sub-Admin. The primary owner has full administrative control over the system. While the owner has access to all administrative rights over the system except those restricted to the primary owner, such as adding and deleting of roles accounts. The end-user on the other hand can fully browse the website application but the user must log in to estimate material costs and schedule an appointment with the company's architect. The following people will benefit from the study:

**The Primary owner and owner.** They can simply track, save, and retrieve records of the goods and projects that clients require, as well as their appointments with architects. Control the profile of their employees. They may also show off their personal work by uploading it to the website, allowing them to provide outstanding service to their customers.

**End-users.** Customers could search for a certain blueprint, check material pricing, and calculate the cost of their plans. They could also make an appointment with a firm architect.

**Future researchers.** This study and its conclusions will serve as the foundation for future research on client-preference web application for building and architectures, particularly those that will use web application.

**GENERAL OBJECTIVE**

The main objective of this study is to design and develop a Client-Preference web application for house and building architectural designs: A web application for AEVG Builders.

1. Design and develop a web-based record management system that integrates the following features for the user use such as:

1.1. Login system;

1.2. Home page;

1.3. About us page for contact details;

1.4. Services that AEVG Builders;

1.5. Portfolio projects;

1.6. Construction Materials;

1.7. User Management

2. Design and develop a device responsive web-based system that will integrate different features for the use of the user and employee such as:

2.1. Project Uploads for Portfolio;

2.2. Request an Appointment;

2.3. User profile management;

4. Determine the acceptability of the developed system using software quality evaluation criteria as perceived by the users in terms of:

4.1. Functional Suitability;

4.2. Performance Efficiency;

4.3. Compatibility;

4.4. Usability;

4.5. Reliability;

4.6. Security;

4.7. Maintainability; and

4.8. Portability.

**Scope and Limitation of the Study**

The study aims to create a client-based architectural website system that will allow customers to view projects that this architectural firm is offering. This system can generate information about the project that was created previously, including the details of each project that was created. This study intends to create a website based on the AEVG Builders Company.

This system will be covering a user and client side, which are two different log-in systems. The user side, which are the potential customers, will be given an account which unlocks, a feature to send a direct appointment to the architectural firm. The client side will take part on two user levels, the first one will be the employee, and the superior one is for the employer of the company.

The client will be able to look at the digital footprint of the user, which they will be given the data. The difference between the employee and the employer side of the website, is that the employee has only the ability to edit and manage the website's data, the employee can also upload projects that the company has created. However, the employer has the ability to edit, add, and delete a user or an employer's account.