**Chapter 1**

THE PROBLEM AND ITS SETTING

**Introduction**

Attendance plays an important role in every organization. It helps determine whether or not a business can be successful in the future. And through the attendance monitoring, the employees will also help train themselves to become more punctual, thus resulting to a day-to-day task being fulfilled on time. Attendance will also serve as a basis in deciding which employees are most likely to stay in the company for a longer time.

Other than being a basis on determining the possible effects for the company and its employees, attendance also serves as an aspect that can affect the relationship of its employees. Some employee might fabricate their attendance records which would be unfair to others because the ones who fabricated their records would earn more or just the same as the others without rendering the same time or amount of work that should’ve been done. This kind of situation greatly affects the work environment and can change the mood or work attitude of anyone.

Also, the attendance of the employees will serve as a basis on computing the employee's’ pay slip more accurately. Thus with a proper attendance monitoring, the generation of every employee's’ salary would be made in an accurate way.

**Background of the Study**

Advancement of technology these days is continuously flourishing, all for the betterment of our daily activities, but some people are obstinate about it, insisting that manually doing the job is more reliable. Well, human error is something that can’t be prevented no matter how careful one is for it is a deviation from intention, expectation or desirability, what’s more if it is intentional caused by greed or desire to get ahead in life, and so the possibility of relying on technology shouldn’t be disregarded completely.

Currently, some organization still uses the old ways of monitoring the attendance records of its employees, such as time cards and log books that is guarded by a personnel by the entrance of the company. People, or in this case, employees, are not as honest as they say they are and could do dishonest things to turn the situation in their favor, like since the records are guarded by a personnel who could have needs and could be bribed to lower his/her morale, an employee could take advantage of that personnel in order to cheat his/her attendance record, or an employee who is “friends” to the personnel in charge thus could come and leave work regardless of the office hours but still getting paid normally. Such actions will then generate an unreliable and fabricated records that will affect the other employees – as it will be unfair to those who goes to work on time, and the organization – paying a salary that shouldn’t be paid.

The proposed system, the DTR Using Face Recognition and Payroll System for Government Institutions, will be a more practical decision for an organization to use as it will generate a reliable and not fabricated attendance records of its employees as they come and leave the company premises, thus produces a precise paycheck that each employee deserves.

**Objectives of the Study**

The general objective of this Study is to develop an Intranet-based Payroll System for Government Institutions using Facial Recognition.

Specifically, it aims to:

1. Design the system with the following features:
2. Monitor Attendance of employees using Facial Recognition;
3. Check for Leaves, Absences;
4. Calculate Deductions (SSS, PhilHealth, Pag-ibig, etc.), Gross Income, Total Salary, and etc.;
5. Generate Pay slip;
6. Notify Employees of their salary via SMS; and
7. Create a forum or board for Announcements and Event Scheduling.
8. Create the system using:
9. Sublime Text 3;
10. Adobe Photoshop CC;
11. XAMPP; and
12. Visual Studio 2015.
13. To test and improve the system’s functionality, accuracy, responsiveness, and portability.
14. Determine the acceptability level of the system using ISO 9126.

**Scope and Limitations of the Study**

The study focuses on developing, creating, testing and improving of the DTR Using Face Recognition and Payroll System for Government Institutions. The system is an intranet based and can only be accessed if the user is within the scope of the network in the organization, for security purposes.

The users can access the system through their laptop, desktop and cellular phones; it will be responsive on any medium. The access level of each feature/sub-system differs.

The scope of respondents will be all of the employees of the organization whom will have their own account with an access level.

The users can view their DTR and Payroll records through accessing their employee’s account for their performance reference in the past months.

For questions and inquiries with regards to the DTR and Payroll processes of the system, users can message the admin using their respective employee’s profile.

The system aims for the advancement of the organization through the use of modern technology. Also, a camera is attached as the device to capture image and identify the employee. The system as much as possible suggests using a high-definition camera so that there will be no inconsistency and poor lightning background problems which can result into an inaccurate result of comparing the face templates.

**Significance of the Study**

The system’s purpose is for the benefit of the organization as it will help improve the punctuality of employee, speed-up work and will help produce a precise computed employee salary. Another aspect that the organization will benefit from is that the reports of the employees’ attendance and pay slip won’t be fabricated. The process in getting each employees’ salaries would then be more reliable. In this manner, every result will be produced in an easier and faster way, thus, will increase the productivity in the organization.