

System Design Specification

Hardware Requirements

The hardware is one of the components to consider being able to use the system efficiently and effectively. This section list the minimum requirement of the system.

Here are some requirements of the hardware:

Hardware	Specification	Description
Processor	At least Intel Pentium i3	Logic circuitry that responds and processes the basic instructions that drive a computer.
RAM/Memory	At least 4GB	Allows information to be stored and retrieved from the computer.
Hard Disk Drive	At least 500GB	Computer storage device containing magnetic disks or platters rotating at high speeds.
Keyboard	Standard PS/2 or USB Type	To input letters, numbers, and other symbols into a computer.
Mouse	Standard PS/2 or USB Type	Controls a computer screen's cursor or pointer in conjunction with the way it is moved.
Display Resolution	At least 1366 x 60 Resolution	The number of horizontal and vertical pixels on a screen.

Table 3.1 Hardware Requirements

Software Requirements

The following software are needed to be able to run the system.

Software	Specification	Description
Operating System	Windows 7, 8 or 10	Manages computer hardware and software resources and provides services for computer Programs.
User Interface	Metro Framework	To allow effective operation and control of the machine from the human end.
Database	Microsoft SQL Server 2012	An organized collection Of data, generally stored And accessed electronically from a computer system.
Report	SAP Crystal Reports 2016	Allows users to Graphically design data connection(s) and report layout.

Table 3.2 Software Requirements

Human Resources Requirements

The Computerized Attendance Monitoring and Payroll System is designed to be user friendly. A user having little knowledge about computer can run this system effectively.

Entity Relationship – Computerized Attendance Monitoring and Payroll System for St. Ignatius College.

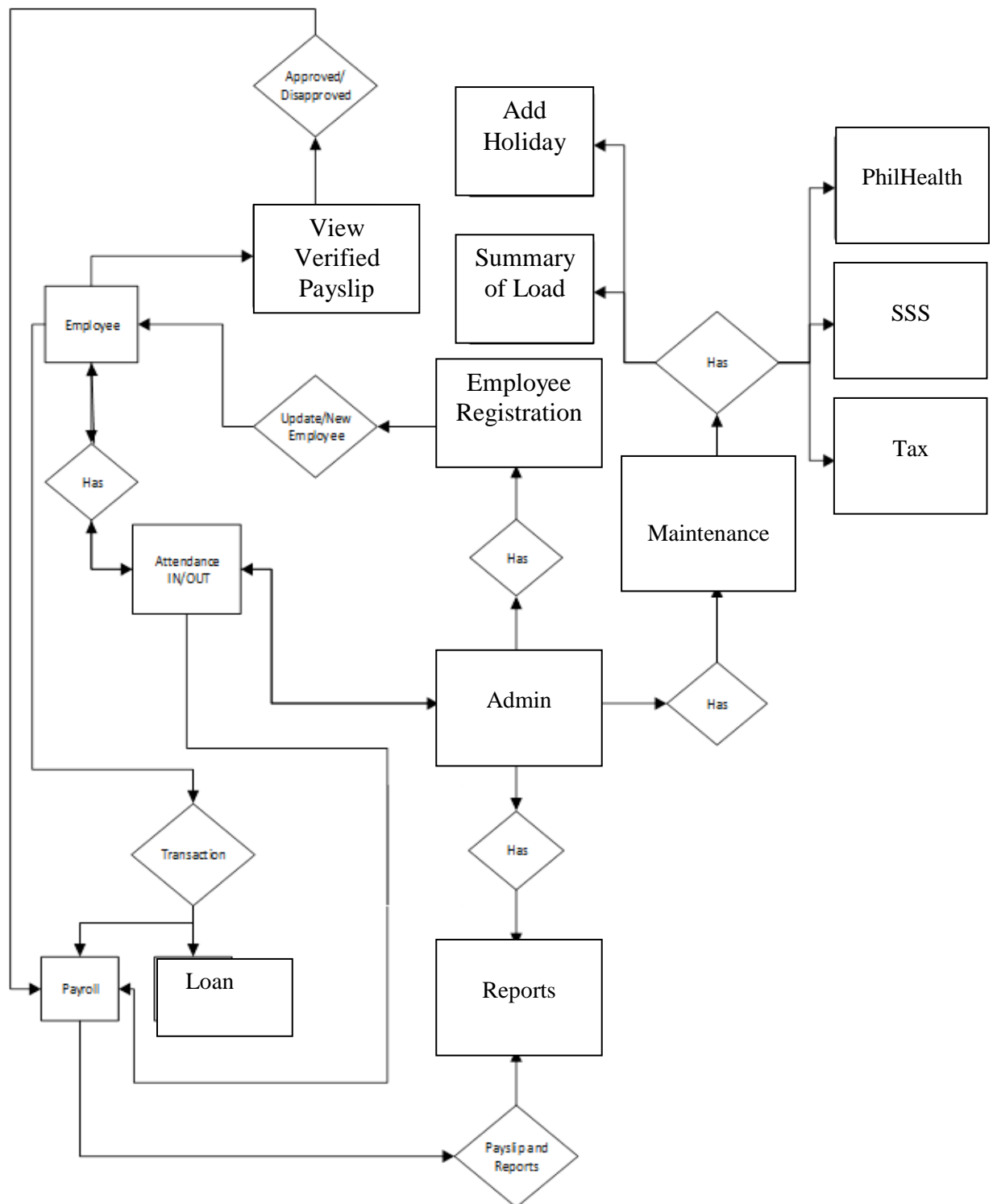


Figure 7: Entity Relationship Diagram

Summary

The developers showed the blueprint of the system using different diagrams. These diagrams explained how the system works and what it is capable of. The design and structure of the Computerized Attendance Monitoring and Payroll System is shown in the Data Flow Diagram. It contains all the user flow and their entities such all the flow of attendance keeping and monitoring, salary computation, salary deduction and login. The Entity Relationship Diagram shows the definition of the system and its entities as well as the relationship of the how they are connected with each other. The Context Diagram displays how a system relates to its environment, users and related systems

Conclusion and Recommendation

Conclusion

By using a computerized system, the processes of the business have been simplified, improved and modernized resulting in a more productive, effective and less expensive mode of operation. The computerized attendance monitoring and payroll system have met their stated objectives. It has been an instrument to conduct faster and well-secured monitoring of attendance to check if there have absent or tardiness and to make easy to compute the salary of their employees. Conflicts and confusions were also avoided because the system had reduced the existence of the time cards for the records of the attendance. Lastly, it is foreseen that this will make the employees more effective which will lessen the time to be consumed in the recording of their attendance.

Recommendation

The developed computerized attendance monitoring and payroll system functions are still limited and this is what the developers are recommending to address in the future.

Adding more functions such as online transactions to view payslip and putting into mobile application to monitor attendance will greatly enhance the system. The developers also recommend this paper to future researchers who might propose the same system