Software Design Document

OF

BANKING SYSTEM

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The ***BankMan*** Systems Requirements Document

Revision History

Version	Date	Author(s)	Description
v1.0	10/29/11	Sparsh Saurabh	Initial version/ 2.5 1.3 remaining

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1 Introduction

1.1 Design Overview

The *Bank Management System* is based on the Apache Server and uses MySQL database system and PHP based pages for accessing it. It uses Relational Database Management Systems to handle data. It can be accessed using a web-browser by the user. Bank Management System is based on LAMP(Linux Apache MySQL PHP) software bundle, but can be edited, modified or extended using using any other equivalent bundle based on Apache and PHP.

1.2 Intended Audience

This document is intended for software managers, coders and testers.

1.3 References //change the references

- *Fundamentals of Database Systems, Sixth edition By Elmasri,Navathe.*
- *Practical PHP and MySQL By Jono Bacon.*
- *PHP and MySQL Web Development Third Edition, By Luke Welling Laura Thomson*
- *MySQL Building User Interfaces, By Matthew Stucky, New Riders Publishing*
- Build Your Own Database-Driven Website Using PHP & MySQL by Kevin Yank

2 Detailed Design

For rapid implementation and future expansion, the LAMP software bundle is used as the platform for *Bank Management System*.

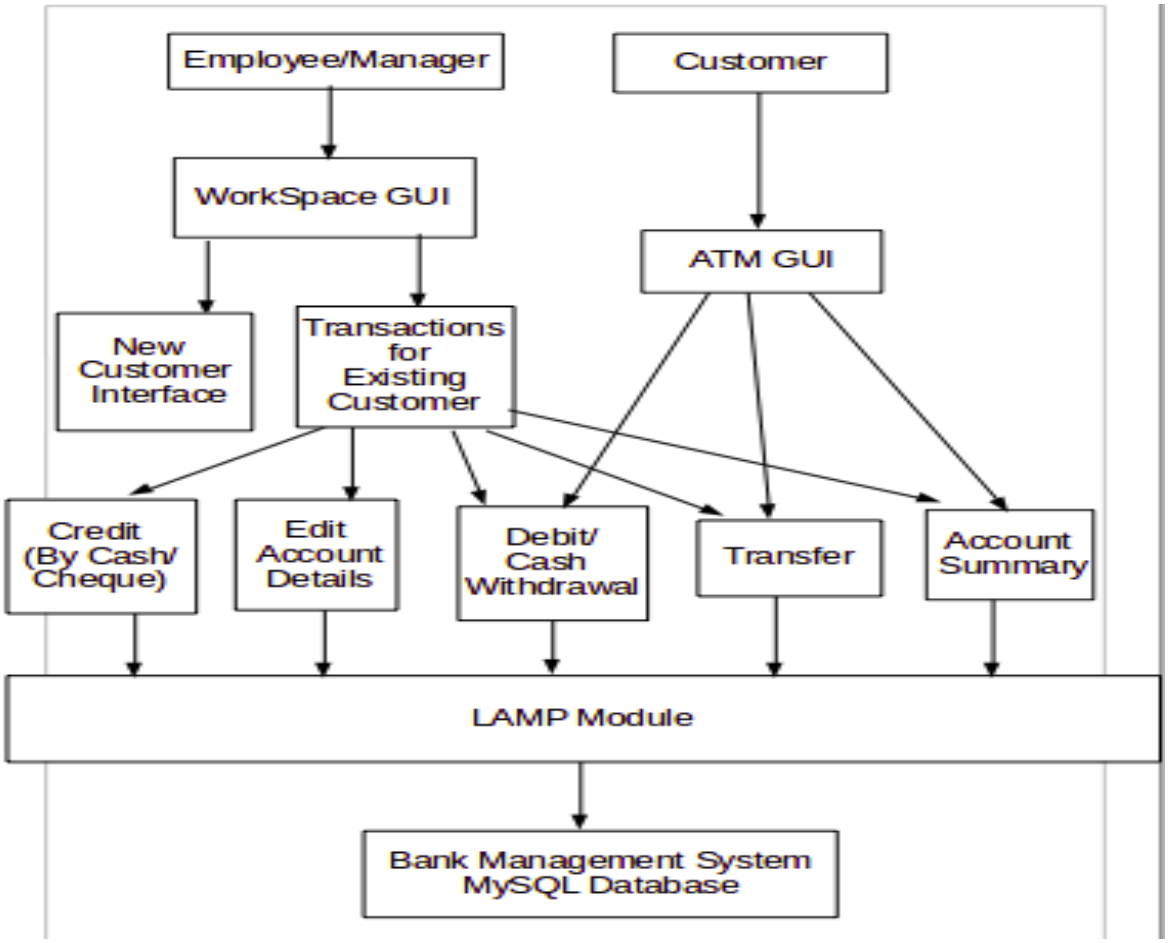

Fig. 1: BankMan Architecture

2.1 Architecture

The *Bank Management System* architecture (Fig. 1) conforms to the basic requirements of functions performed by an employee and an ATM system in a general bank.

Components

The LAMP module is used as-is. Any additional tables can be created using MySQL or PHPmyadmin features.

The WorkSpace GUIs and ATM GUIs are written as a PHP page with CSS and HTML-5 based design and interface. Parts of these GUIs are also written using above applications. Extensive data validation is done in the to minimize mistakes made by novice users.

The various categories of users access Bank Management System through a browser. Authentication is done by the ATM GUI and Workspace GUI using PHP webpages by verifying username/ATM Number and PIN/Password for each employees, managers and customers. Nobody can access any internal features without proper authentication.

Interfaces

The interface between the brower and the ATM and Workspace GUIs is PHP and MySQL. The internal interfaces are all based on PHP.

2.2 Algorithms and Data Structures

There are no significant algorithms developed for this product. The important tables used for this implementations are the record of Transactions, list of customers, managers and employees with there respective access details (See Appendix A for ER Diagram).

2.3 External Data

Databases

Bank Management System use MySQL based database tables. It creates MySQL entities using PHP. The Management System doesnot creates tables, rather it only maintains them, as necessary for storing these entities and editing them.

Files

The Bank Management System requires the database file in MySQL and the PHP pages are also required. No additional files are needed.

2.4 Performance

The product will be benchmarked on different entry-level and server-class PCs. This will result in a table giving the PC configuration required for a given number of accounts in the bank.

2.5 Miscellaneous

Anything that is relevant, but does not fit into the above sections. In many cases, this section is omitted.

Appendix A

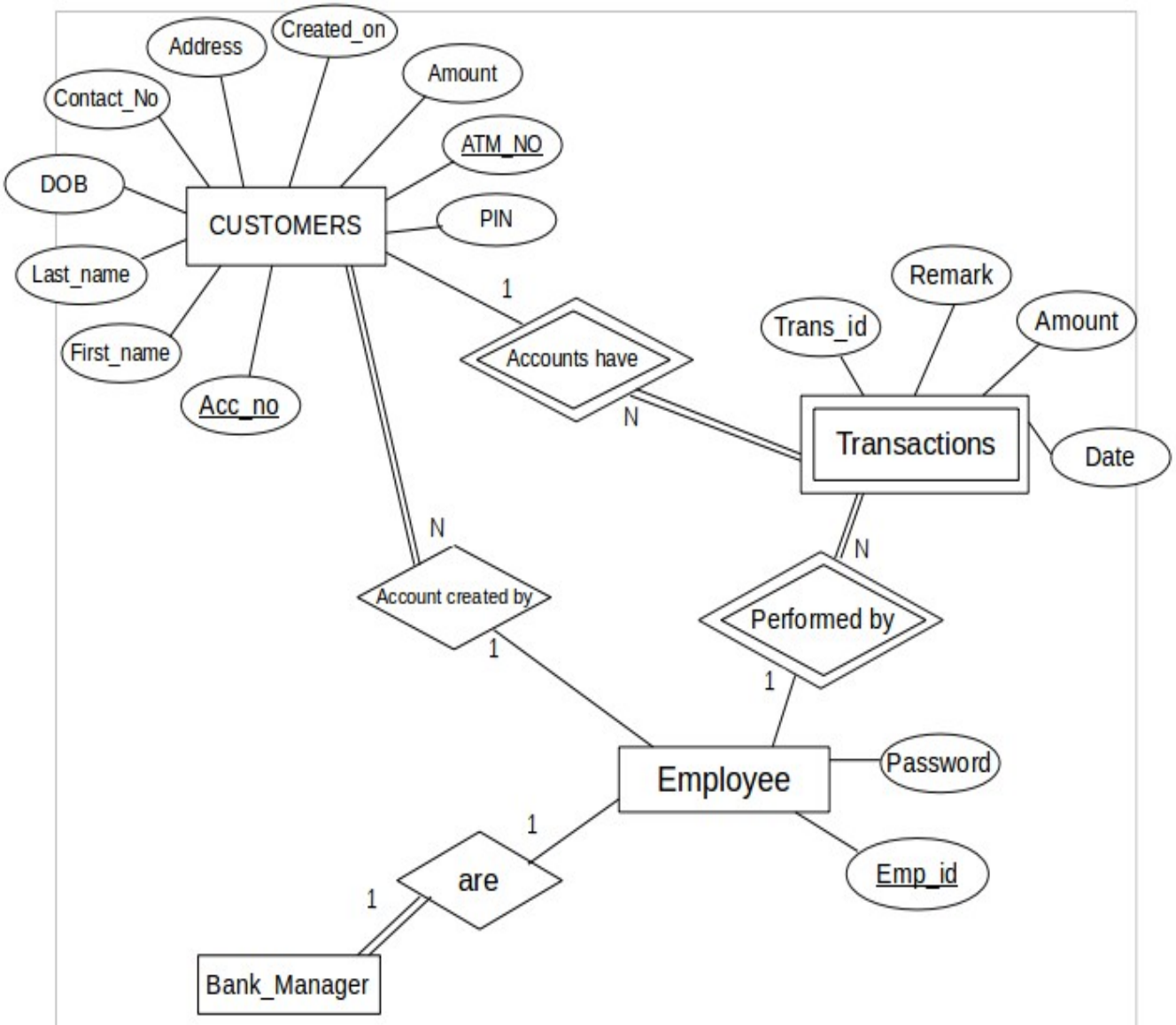

Fig.2: Entity Relation Schema for Bank Management System