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Dillibazar, Kathmandu

Nepal.

A Project Proposal on

"THRIFT: OFFICE MANAGEMENT SYSTEM"

Submitted to:

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1. INTRODUCTION

Thrift is an automated office management system which is capable of handling all basic functionality of a medium scale business in two major interfaces as upper level management and lower level management. It is system that is much more realistic to the current business system operating in a developing country like Nepal, where digitization is still difficult yet necessary. Thrift, thus attempts to provide a complete database solution and generate required report for those business helping in managing resources and time efficiently.

Thrift is a desktop application developed using java programming language. It is designed and coded in Netbeans and stored using MySQL. It is also a GUI based system which would help the client maintain their business records easily. This system is easy to use and adopt for beginners. It features a familiar and well thought-out, an attractive user interface, combined with strong searching, inserting and reporting capabilities. Additionally, a linking feature will be included which will create communication with the websites associated with the business, making this system more user friendly and smart.

2. PROBLEM DEFINITION

Many small and medium scale business such as educational institutions, hostel, consultant, and training center still look at office management systems as a tedious and complex software, which might be expensive or difficult to adopt. This might also be adding some few extra budget in their journal or ledger book. Hence they consider paper based record keeping or at most use a built-in storage such as spreadsheet or a simple database management system.

The problem these business organization face is mostly in terms of time, efficiency and accuracy. Paper based or built-in systems are generally time consuming. All records need to be entered making the overall efficiency of the organization to downfall. Also the probability of redundancy and missing of a record will arise. Moreover, security will always be in risk. Paper documents are often maintained with very low security control, thus there can be risks for leaking critical information to unauthorized personnel. Furthermore, finding and retrieving a document using a paper-based system is slow. In situations where information contained in a document is required immediately to response to a customer’s request, the delay may cause customer dissatisfaction.

In addition, re-filing paper documents wastes time and may result in misplacement of the files. Similarly, upper management personnel also need to use their head hard to generate report and understand the same.

Thus the need of an efficient and time saving software arises, for which the development of Thrift is necessary.

3. OBJECTIVE

The main goal of this system is to help client run the organization in smooth and efficient manner. However it also aims to serve for the following objectives:

a. Keep personal details of customer
b. Keep complete billing record
c. Extract information when required
d. Avoid redundancy
e. Ease of keeping records
f. Generate report at the end of month
g. Get connected to useful web pages
h. Get access to the database from cloud
i. Provide all in one service for a medium scale organization

4. RESEARCH METHODOLOGY

4.1. Literature Review

Many of the individuals and groups have worked and also been working on this office management system project. So this project is obviously not the first one. It would have been impossible to proceed without the study of previously developed similar type of projects and system. The design and layout might differ, though the objective remains the same. The projects developed in other countries have focused on the need according to their environment while the projects developed in Nepal have tried to justify the problem in our circumstances.

Thus study and analysis of few of such project, mentioned below, was a surplus input to our project.

a) Bitrix24

Bitrix24 is a cross-platform collaborative and unified communications software launched in April 2012 by Bitrix, Inc. Initially focused on small businesses, this system allows adjusting workflows and business logic inside cloud-based portals and building custom solutions and integrations [1]. Bitrix24 provides tools for task management, document sharing, and time tracking integrated into just this type of social interface for maximum efficiency of communications and work[2][3] .

b) OneSoft Connect

OneSoft Connect has been ranked 14th best Business Management App by Get App's Ranking Q3 2015[5]. It manages and shares business information keeping knowledge in within the company. It also keeps track of team and employees connecting people, processes, assets or clients. OneSoft also maintains job description and manages all customers, contract, contact and opportunities. It keeps all business connections and simplifies day-to-day processes, manages projects or programs, goals, achievements or document and keeps everything in collaborative environment.[5]

c) HRMSuite

The system is based on SaaS architecture that makes the software fully accessible from the web and from the cloud. With this technology the application functions are delivered through the internet in HARATI's own hosted web server. It works on subscription basis and companies do not even need to have expensive software and hardware for installation and hosting. All you have to do is register your company to use this easy and hassle free software. The software is beneficial for small and medium sized business to large companies that helps to manage the people and increase productivity. It helps to simplify and organize the complex HR related issues in a company.

4.2. Framework Of The Model

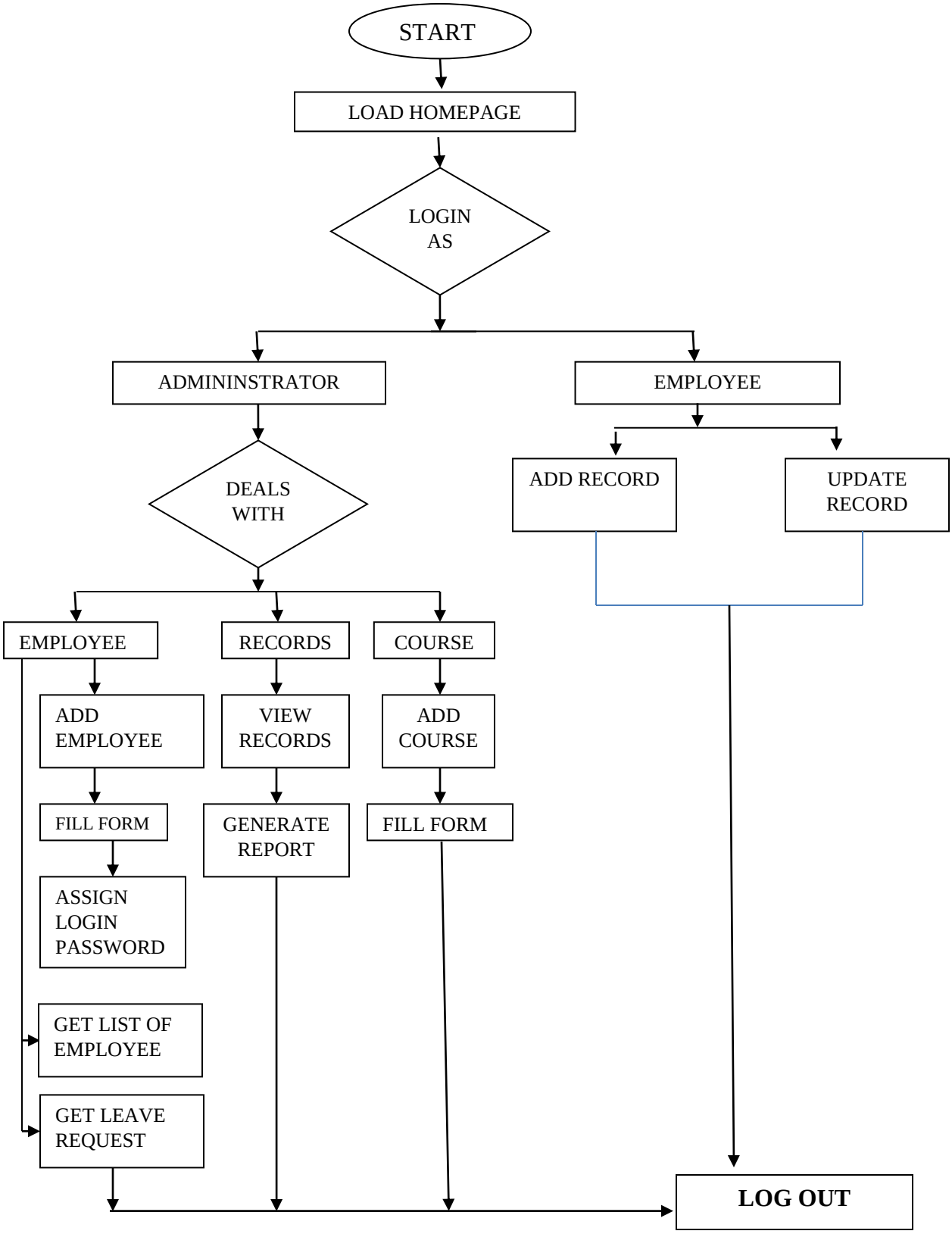


Figure 1. Architecture overview of Thrift

5. DATA COLLECTION

The training data and test data are developed to perform the experimental task. Separating data into training and testing sets is an important part of evaluating data mining models. Typically, when separating a data set into a training set and testing set, most of the data is used for training, and a smaller portion of the data is used for testing. In a dataset a training set is implemented to build up a model, while a test set is to validate the model built.

Training data

The training data will be the collection of raw data of an organization which is operating a medium scale business with a least of 500 clients / students. The record will be kept according to the system by any employee and the system will be trained to accept those data and turn them into information.

Test data

Different possible types of record possessing ambiguity, null value, and incorrect data type will be tested in the system to test the validity and efficiency of the system.

6. TESTING AND VERIFICATION

Software testing is an investigation conducted to provide stakeholders with information about the quality of the product or service under test [6] . Software testing can also provide an objective, independent view of the software to allow the business to appreciate and understand the risks of software implementation. Test techniques include the process of executing a program or application with the intent of finding software bugs.

This system will be tested under two processes as below. This test will resemble the accuracy, efficiency and the overall functionality of this system.

Alpha testing

Alpha testing is simulated or actual operational testing by potential users/customers or an independent test team at the developers' site. Alpha testing is often employed for off-the-shelf software as a form of internal acceptance testing, before the software goes to beta testing.[39]

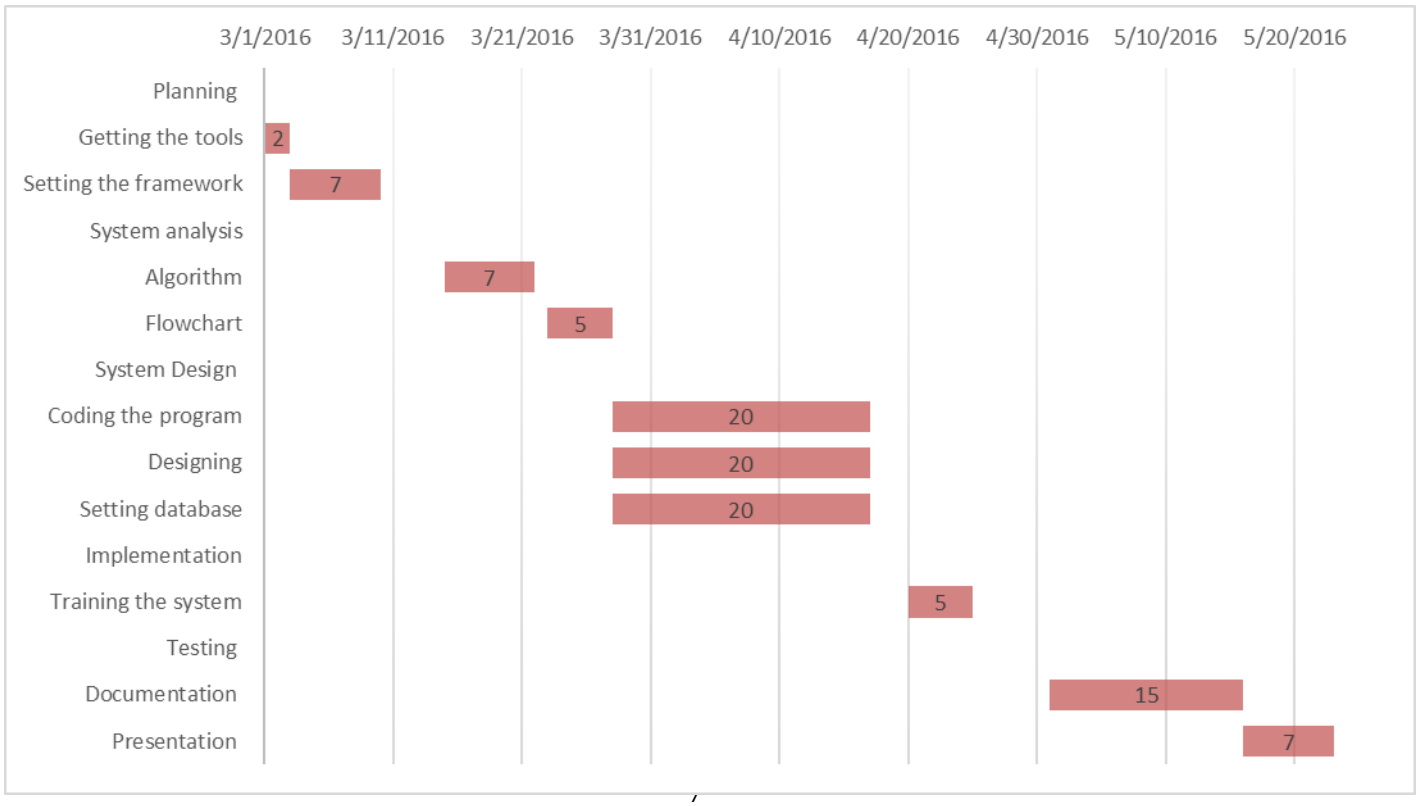
Beta testing

Beta testing comes after alpha testing and can be considered a form of external user acceptance testing. Versions of the software, known as beta versions, are released to a limited audience outside of the programming team known as beta testers. The software is released to groups of people so that further testing can ensure the product has few faults or bugs. Beta versions can be made available to the open public to increase the feedback field to a maximal number of future users and to deliver value earlier, for an extended or even infinite period of time.

7. EXPECTED OUTPUT

The expectation of this system is to provide an easy interface for an employee and administrator of an organization. By the end of this project, an interface with two possible login is created. Administrator will be handling employee, looking after records and adding courses or programs in the organization. Likewise, employee will be adding records and reporting to the administrator.

8. GANTT CHART



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