

SOFTWARE REQUIREMENT SPECIFICATION

Project Topic:

Lokhor Chunye

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1. Introduction

In this document it mentioned overview requirements of the *Lokhor Chunye* application. Functional requirements describe what the system should do whereas Non-Functional requirements describe how the system works. The purpose of the document is presented and scope of the project is specified with the particular focus on what the resultant software will do. The document also include software and hardware requirements of the developer and a user.

a. Purpose:

- The aim of Lokhor Chunye application is to develop Bhutanese Mewa (horoscope) an effective and efficient.
- The purpose is to discover our traits according to the Mewa (horoscope) and find out how to purify our negative karma to improve our life.

b. Scope:

According to the Buddhist teaching, we all have a unique blend of karma that determines where we are born, the circumstances of our birth and the quality of our life. Most of the Bhutanese people they must be knowing Bhutanese Zodiac Sign but they not knowing their birth sign and Mewa (horoscope). Therefore, to make aware of those things my “Lokhor Chunye” application will be developing for all the Bhutanese people.

2. Requirements

a. Functional Requirements

It will be an Android based application which will include the following features:

- **Registration:** when the new user uses the app for the first time and if he/she want to to know Mewa and birth sign, he/she should register to the system. Registration will generally consist of details of users such as name, email and password.
- **Logging in:** once the user have registered, they can use the app by logging in with the email ID and password.

- **Search:** There is a Mewa for each year, and the nine Mewa numbers for years revolve backward in strict rotation. If user are not sure with Birth Mewa then they can search by entering their birth year.
- **View:** User can view their bad and good day by Birth Sign, view nine magic mewa square with their karmic relations from past life to future lives.
- **Help:** If users are confuse using this application then they can seek help from help menu to use.

b. Non-functional requirements

- **Usability:** Lokhor Chunye app will be easy for users to use. It will provide user-friendly interface as everyone can use it.
- **Reliability:** The app will use 24 * 7 hours depending on the interest of the users.
- **Supportability:** Lokhor Chunye app should support on any android devices.

c. Software Requirements

- Android Studio version 4.1.2
- JDK (Java Development Kit Version 8 and above)
- SDK (Software Development Kit)
- SQLite Version 3.35.3
- Mock Plus Version 3.6.2.2
- Operating System: Window and Ubuntu

Android:

Android is a mobile operating system developed by Google. It is based on a modified version of the Linux kernel and other open source software, designed primarily for touchscreen mobile devices such as smartphones and tablets. Examples include the Sony Xperia, the Samsung Galaxy, and the Google Nexus One. Developers can create programs for Android using the free Android software developer kit (SDK). Android programs are written in Java and run through a Java virtual machine JVM that is optimized for mobile devices.

SQLite:

SQLite is a relational database management system (RDBMS). SQLite is an in-process library that implements a self-contained, server less, zero-configuration, transactional SQL database engine. The code for SQLite is in the public domain and is thus free for use for any purpose, commercial or private. SQLite is the most widely deployed database in the world with more applications than we can count, including several high-profile projects.

3. Hardware requirements

Developer:

- 4 GB and above RAM
- 2.00 GHz *4 Processors
- Android Phone (as an emulator)

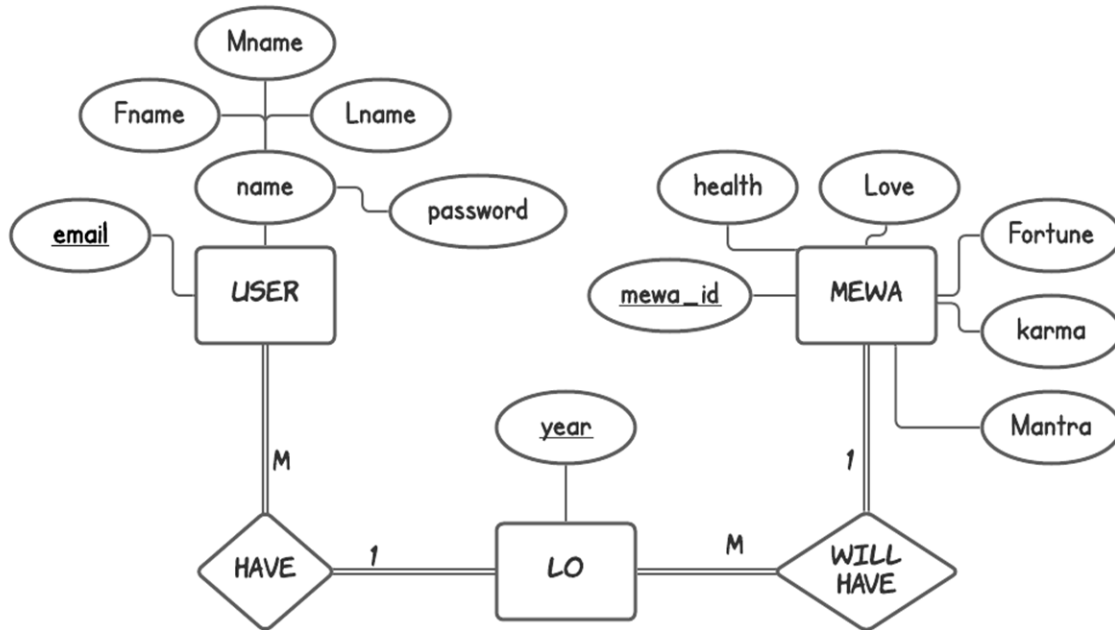
User:

- Android phone

4. System designs

a. ERD (Entity Relationship Diagram)

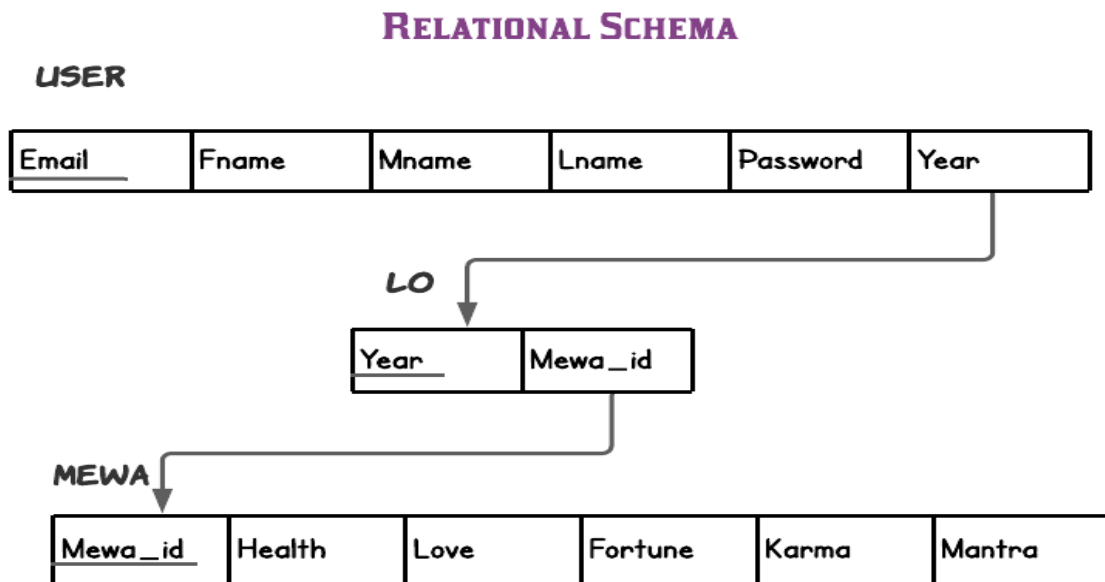
ERD (ENTITY RELATIONSHIP DIAGRAM)



STRONG ENTITY: USER, LO and MEWA

- **USER** entity has *email* as a primary key which is uniquely identified by it. Other attributes are *password* and *name* as a composite attributes. Cardinality Ratio between **User** and **Lo** is Many-to-one (M:1). Many user have one lo whereas one lo is having by many user. Lo entity can exist only if one or more user are exist. Similar if there is no lo entity is exist, there will be no more user. Thus, the Participation between User and Lo are total participation.
- **LO** entity has only one attribute *year* which is primary key of it.
- Lastly, **MEWA** entity has mewa_id, health, love, fortune, karma and mantra. Mewa is uniquely identify by mewa_id. Cardinality Ratio between **Lo** and **Mewa** is Many-to-one (M:1). There are nine mewa like Chikar, Ninah, Sumdhing, Zhijang, Ngaser, Drukar, Dunmar, Gumar where mewa will be changes yearly. So, there will be possible to have many Lo with one mewa. Therefore, the Participation between Lo and Mewa are total participation.

b. Relational Schema



RELATION NAME:

- User
- Lo
- Mewa

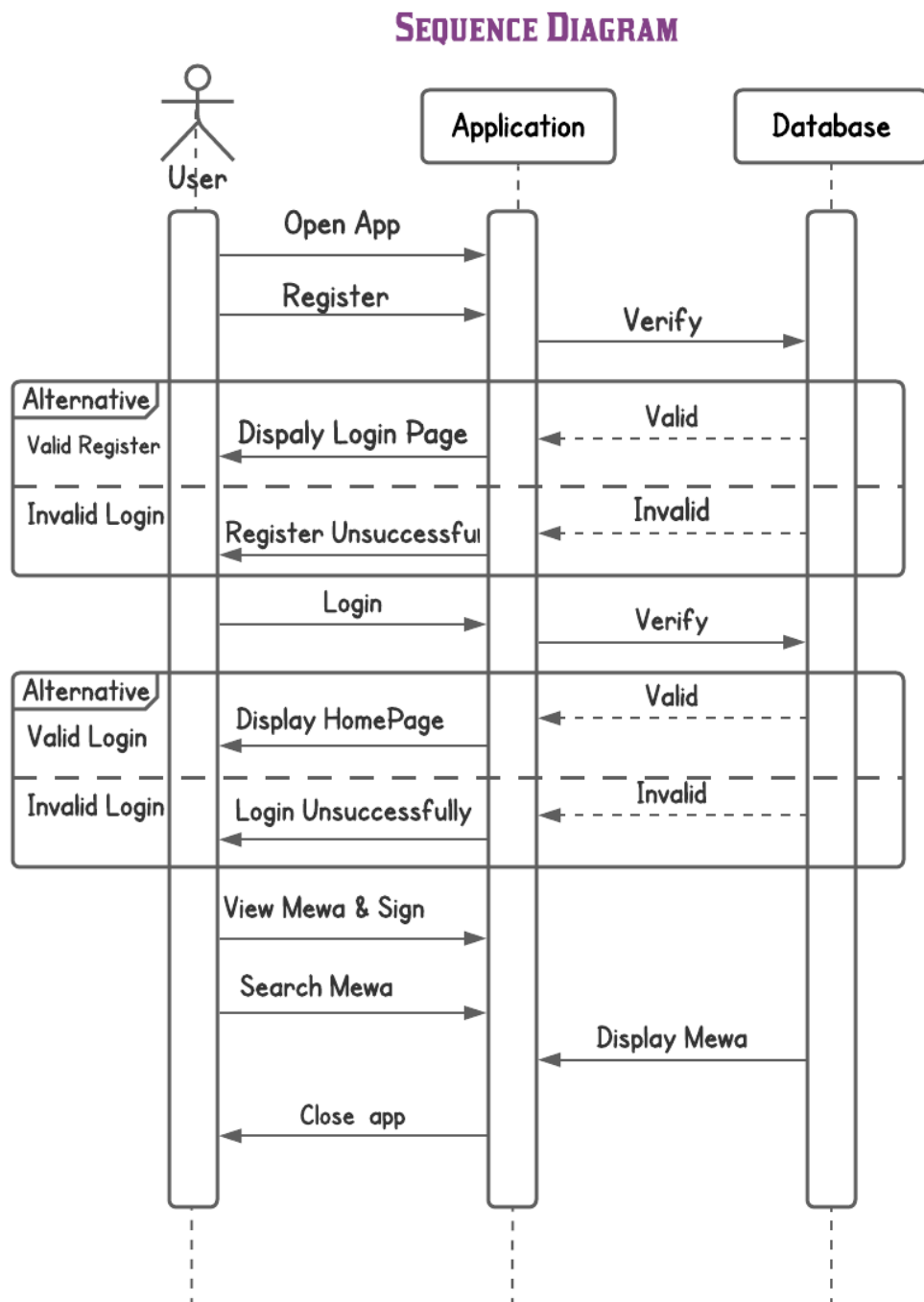
PRIMARY KEY:

- Email is the primary key of User
- Year is the primary key of Lo
- Mewa_id is the primary key of Mewa

FOREIGN KEY

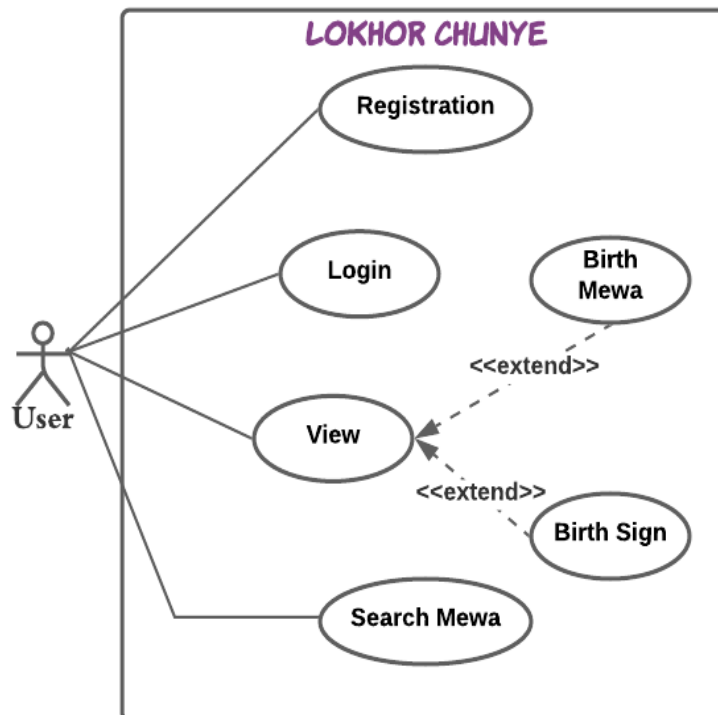
- Year in the User is a foreign key
- Mewa_id in the Lo is a foreign key

c. Sequence Diagram



- In Sequence diagram there are two object (Application & Database) and one actor (user). Firstly, user open the app and register the application entering their information and verification will be done by the database. If information is correct then user can login into the application whereas if the user entered invalid information, user have to try again with the correct information. After user successfully registered in to the application user have to login in using email and password and verification will be done by database. If entered information is incorrect then login again with correct information. However, if user login is successful then homepage will be displayed.
- After user logged in to the application they can view Birth Mewa and Birth Sign. If user are not sure with their Mewa they can search their Mewa by entering their birth year and Mewa will be display by the database. The respective year Mewa is already stored in database. Lastly, user is no more using application they can close the application.

d. Use case Diagram



- In *Lokhor Chunye* application has one primary actor is a User who using this application. User have to register and login into the application with entering require information. After they logged in to application user can able to view Birth Mewa and Birth Sign. User can also search their Mewa by entering their Birth year.

Prototype

