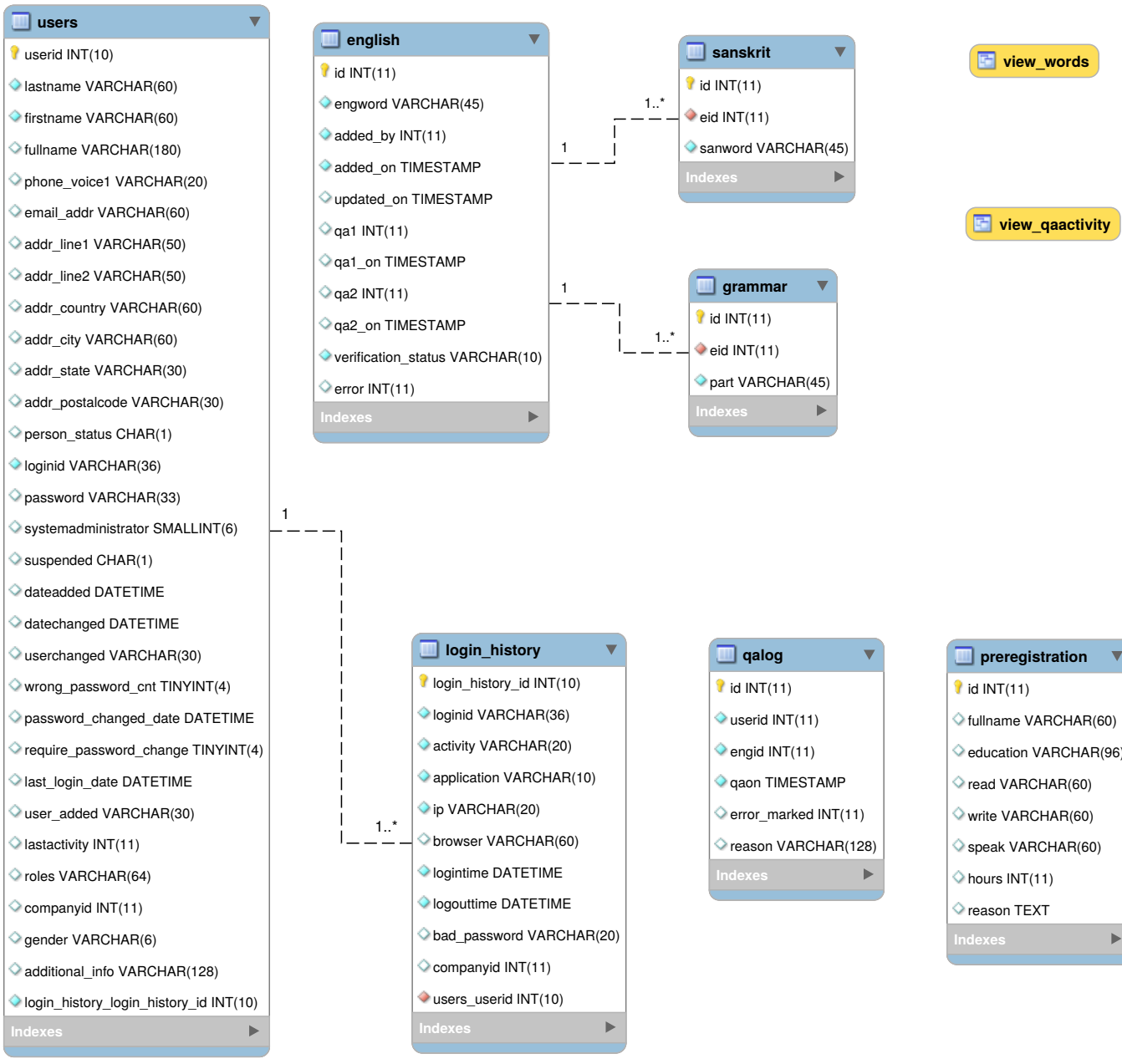
Database Design Report

PROJECT AMARAKOSHA

Contents

- Database Tables at a glance
- Explanation of functionality of each Table.


users
userid INT(10)
lastname VARCHAR(60)
firstname VARCHAR(60)
fullname VARCHAR(180)
phone_voice1 VARCHAR(20)
email_addr VARCHAR(60)
addr_line1 VARCHAR(50)
addr_line2 VARCHAR(50)
addr_country VARCHAR(60)
addr_city VARCHAR(60)
addr_state VARCHAR(30)
addr_postalcode VARCHAR(30)
person_status CHAR(1)
loginid VARCHAR(36)
password VARCHAR(33)
systemadministrator SMALLINT(6)
suspended CHAR(1)
dateadded DATETIME
datechanged DATETIME
userchanged VARCHAR(30)
wrong_password_cnt TINYINT(4)
password_changed_date DATETIME
require_password_change TINYINT(4)
last_login_date DATETIME
user_added VARCHAR(30)
lastactivity INT(11)
roles VARCHAR(64)
companyid INT(11)
gender VARCHAR(6)
additional_info VARCHAR(128)
login_history_login_history_id INT(10)
Indexes
english
id INT(11)
engword VARCHAR(45)
added_by INT(11)
added_on TIMESTAMP
updated_on TIMESTAMP
qa1 INT(11)
qa1_on TIMESTAMP
qa2 INT(11)
qa2_on TIMESTAMP
verification_status VARCHAR(10)
error INT(11)
Indexes
sanskrit
id INT(11)
eid INT(11)
sanword VARCHAR(45)
Indexes
grammar
id INT(11)
eid INT(11)
part VARCHAR(45)
Indexes
view_words
view_qaactivity
login_history
login_history_id INT(10)
loginid VARCHAR(36)
activity VARCHAR(20)
application VARCHAR(10)
ip VARCHAR(20)
browser VARCHAR(60)
logintime DATETIME
logouttime DATETIME
bad_password VARCHAR(20)
companyid INT(11)
users_userid INT(10)
Indexes
qalog
id INT(11)
userid INT(11)
engid INT(11)
qaon TIMESTAMP
error_marked INT(11)
reason VARCHAR(128)
Indexes
preregistration
id INT(11)
fullname VARCHAR(60)
education VARCHAR(96)
read VARCHAR(60)
write VARCHAR(60)
speak VARCHAR(60)
hours INT(11)
reason TEXT
Indexes
1
1..*
1
1..*
1
1..*

- ## Preregistration.

Initially we had quite a few volunteers for this project. This table was used to collect and store their individual information. The volunteer's education, the number of hours they will be able to dedicate to this project and the languages they were comfortable in were some of the data that was collected.

Fields:

id # auto increment primary key

fullname

education

read # language that volunteer can read

write # language that volunteer can write

speak # language that volunteer can speak

hours # No of hours per week that volunteer will work

reason # reasons for joining

- ## Users

This table stores the information about the volunteers once they are part of this project. A loginid, password had been assigned to them and a specific role also was created for each individual. This table captures these info plus few other info that can be used in the future.

Fields:

Userid	# autoincrement primary key
lastname	
firstname	
phone	
email_address	
address_line1	
address_line2	
country	
city	
state	
postal_code	
person_status	# Active, Inactive etc
loginid	# used to login
password	
sysadmin	# to mark a sysadmin user
suspended	# to suspend a user from using our system
dateadded	# when the user was added
datechanged	# when users info was changed
userchanged	# who chagned
wrong_password_cnt	# how many attempts of wrong password entries
password_change_date	# when was the password last changed
require_passwd_change	# should we enforce user to change password
last_login_date	# into the system
user_added	# who added this user

roles # Whether QA or a dataentry person

gender

additional_info # miscellaneous info about the user

- ## Login_history

This table stores the information regarding at what times the user logged into the system and for what duration

Fields :

login_history_id # autoincrement primary key

loginid # from users table

activity # will be used when we have multiple projects going on

application # will be used when we have multiple projects going on

ip # ip address of the current login

browser

logintime

logouttime

bad_password # what bad password did user enter

companyid # not used now, will be used when we have multiple projects going on

- ## English

This table stores the english word that is going to be entered from the book. Plus this holds information on who entered the word, which 2 qa persons did the qa for this word and at what times and the result of the qa verification

Fields :

id	# autoincrement primary key
engword	# The english word
added_by	# who added this word
added_on	# At what time
updated_on	# whether an update was done for the word, if so at what time
qa1	# user id of 1st qa person to verify this
qa1_on	# Timestamp when qa1 did the verification
qa2	# user id of 2nd qa person to verify this
qa2_on	# Timestamp when qa2 did the verification
verfication_status	# is the word Unverified, Partially Verified or Fully Verified
error	# Has either of qa marked this word as error ?

- ## Sanskrit

This table stores the sanskrit word for an english word from the book. Each english word can have multiple sanskrit words associated with it. The word is stored in the sanskrit font itself.

Fields :

id	# autoincrement primary key
sanword	# Sanskrit word
eid	# Id of English word for which the sanskrit word is entered for

- ## Grammar

This table stores the grammar part for an english word from the book. Each english word can have multiple grammar entries associated with it.

Fields :

id : autoincrement primary key

part # Grammar part

eid # Id of English word for which the grammar part is entered for

- ## QALog :

This table maintains a record of all the QA Activity in the system. Information like what words were assigned for this QA, at what time, what was their result. Did they mark it as an error, if so, what was the error .

Fields :

id # autoincrement primary key

userid # Userid of the QA person who did this task

engid # The english word on which this work was done

qaon # At what time

error_marked # Was the word marked as error

reason # If error, notes which will help the data entry person to rectify this.

In addition to the tables, we have couple of views also. The tables are all normalized, so its not straight forward to get some useful data with a simple query. So these views were built so that frequent queries can be simplified like select * from view_words will get all the english word, sanskrit words for the english word and grammar etc in a single simple query.

- ## view_words :

select * from view_words will collate information from tables english, sanskrit , grammar and user to give a snapshot of all the words so far in the system and which user entered / verified etc. This was used to generate the msaccess export of the words data.

- ## view_qaactivity :

select * from view_qaactivity will collate information from users, english,qalog table to give a comprehensive info about all the qa activity that each person has done so far. like how many words were assigned to them, how many did they mark as error with what reason etc.