SALUTE
WEB-BASED MEDICAL MANAGEMENT
MILESTONE 0

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Introduction

Bla bla bla...

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What tools and technology we used..

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2.2 System Requirements

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Chapter 3

Design

3.1 High Level View

3.1.1 Database Design

PostgreSQL Salute uses PostgreSQL 8.4 as its database management software.

Entity Relationship Diagram (ERD) try to place the ER here

Entities Attributes Entities are represented in the ER diagram as rectangles. Each entity represents a table in the database that holds all of the information or attributes that represents that entity. In the ER diagram, each attribute is represented with a oval.

Messages Holds all of the information regarding messages sent from patient to hcp or vice versa. It has two total 1:N relationships with the Accounts entity.

Attribrutes: SERIAL message$_id - IDtouniquelyidentifythemessagefromothermessages.S$

TEXT subject- Subject of the message being sent. TEXT datatype allows unlimited number of characters. Cannot be NULL.

TEXT content- Where the sender can writte what they would like to send to the receiver. TEXT datatype allows unlimited number of characters. Cannot be NULL.

TIMESTAMP date$_time$ $-$ $Dateandtimeofwhenthemessageissent.TIMESTAMPdatatypef$
$MM : DDHH : MM : SS.CannotbeNULL.$

BOOLEAN sender$_kept$ $-$ $Todetermineifthesenderwouldliketodeletethemessagefromtheiro$

BOOLEAN receiver$_kept$ $-$ $Todetermineifthereceiverwouldliketodeletethemessagefromthei$

Accounts Holds all of the primary information every patient and hcp account needs to log into Salute. The entities Patient$_Accountand HCP_Accountbothinheritfrom A$ $1relationshipwiththePermissionandMedical_Recordsentities.$

Attributes:

SERIAL account$_id$ $-$ $IDtouniquelyidentifytheaccountfromotheraccounts.SERIALdatatypeau$

VARCHAR(40) email- Email of the account holder. It is used to log into Salute along with the user password. VARCHAR(40) datatype allows for a maximum of 40 characters. Cannot be NULL.

VARCHAR(15) password- Password of the account holder. It is used to log into Salute along with the user email address. VARCHAR(15) datatype allows for a maximum of 15 characters. Cannot be NULL.

BOOLEAN active- To determine wheather the account is active or not. BOOLEAN datatype value is either TRUE or FALSE. By default it is TRUE. Changing the stauts to FALSE means the account gets deactivated.

Patient$_Account$ Holds all of the personal information for every patient. It inherits from the Accounts entity with an IS A relationship. It has a partial N:1 relationship with the Medical$_Recordsentityandthep_dconnectionrelationship.$

Attributes:

SERIAL account$_id$ $-$ $IDtouniquelyidentifytheaccountfromotheraccounts.SERIALdatatypeau$

VARCHAR(30) first$_name$ $-$ $Firstnameofthepatient.VARCHAR(30)datatypeallowsforama$

VARCHAR(30) last$_name$ − *Lastnameofthepatient.VARCHAR*(30)*datatypeallowsforamax*

VARCHAR(30) middle$_name$ − *Middlenameofthepatient.VARCHAR*(30)*datatypeallowsfo*

NUMERIC(9,0) ssn- Social Security Number of the patient. NUMERIC(9,0) datatype allows exactly 9 numeric characters. Cannot be NULL.

DATE dob- Date of Birth of the patient. DATE datatype is of the format YY:MM:DD. Cannot be NULL.

CHAR(6) sex- Sex of the patient. CHAR(6) datatyep allows for a maximum of 6 characters. It has to be either "male" or "female". Cannot be NULL.

VARCHAR(11) tel$_number$ − *Primarytelephonenumberofthepatient.VARCHAR*(11)*dataty*

VARCHAR(11) fax$_number$ − *Faxnumberofthepatient.VARCHAR*(11)*datatypeallowsamax*

TEXT address- Primary address of the patient. TEXT datatype allows unlimited number of characters.

HCP$_{A}$*ccount* Holds all of the personal information for every hcp. It inherits from the Accounts entity with an IS A relationship. It has a partial N:1 relationship with the Appointments entity and the d$_{dc}$*onnectionrelationship*.

Attributes:
SERIAL account$_id$ − *IDtouniquelyidentifytheaccountfromotheraccounts.SERIALdatatypeau*

VARCHAR(30) first$_name$ − *Firstnameofthehcp.VARCHAR*(30)*datatypeallowsforamaxin*

VARCHAR(30) last$_name$ − *Lastnameofthehcp.VARCHAR*(30)*datatypeallowsforamaxim*

VARCHAR(30) middle$_name$ − *Middlenameofthehcp.VARCHAR*(30)*datatypeallowsforam*

NUMERIC(9,0) ssn- Social Security Number of the hcp. NUMERIC(9,0) datatype allows exactly 9 numeric characters. Cannot be NULL.

DATE dob- Date of Birth of the hcp. DATE datatype is of the format YY:MM:DD. Cannot be NULL.

CHAR(6) sex- Sex of the hcp. CHAR(6) datatyep allows for a maximum of 6 characters. It has to be either "male" or "female". Cannot be NULL.

VARCHAR(11) tel$_number - Primary office telephone number of the hcp. VARCHAR(11) dat$

VARCHAR(11) fax$_number - Primary fax number of the hcp. VARCHAR(11) datatype allows$

TEXT specialization- What the hcp specializes in. TEXT datatype allows unlimited number of characters.

VARCHAR(30) org$_name - Name of the organization for which the hcp works for. VARCHAR$

TEXT address- Primary address of the hcp place of business. TEXT datatype allows unlimited number of characters.

Appointments Holds all of the information for every appointment a patient makes with a hcp. It has a total 1:N relationship with the HCP$_Account and Patient_Accou$

Attributes:
SERIAL appointment$_id - ID to uniquely identify the appointment from other appointments. SER$

SERIAL patient$_id - Unique account ID of the patient that requests the appointment. This is the f$

SERIAL hcp$_id - Unique account ID of the hcp that receives the appointment request. This is the f$

TEXT descryption- Description of the appointment that the patient requests to the hcp. TEXT datatype allows unlimited number of characters. Cannot be NULL.

TIMESTAMP date$_time$ $-Timeanddayoftheappointmentthepatientrequestestothehcp.TIM$
$MM : DDHH : MM : SS.CannotbeNULL.$

BOOLEAN approved- Status of the appointment that the patient requests to the hcp. BOOLEAN datatype value is either TRUE or FALSE. By default it is FALSE. HCP can accept the appointment and change the status to TRUE.

Medical$_Record$ Holds all of the information for every medical record a patient has on Salute. ???

SERIAL medical$_rec_id$ $-IDtouniquelyidentifythemedicalrecordfromothermedicalrecords.S$

SERIAL patient$_id$ $-UniqueaccountIDofthepatientthatownsthemedicalrecord.Thisisthefo$

SERIAL account$_id$ $-UniqueaccountIDoftheuser(patient/hcp)thatuploadsthemedicalrecor$

TEXT issue- What the medical record deals with. TEXT datatype allows unlimited number of characters. Cannot be NULL.

TEXT suplementary$_info$ $-Anysuplementaryinfomationthatanybody(patient/hcp)wouldw$

TEXT file$_path$ $-Pathwherethefilecanbefoundanddownloadedfromtheserver.TEXTdataty$

Payment Holds all of the information for every bill that a patient receives and a hcp issues. ???

SERIAL bill$_id$ $SERIAL-IDtouniquelyidentifythebillfromotherbills.SERIALdatatypeau$

SERIAL patient$_id$ $-$ $Uniqueaccount IDofthepatientthatreceivedthebill.Thisistheforeignke$

SERIAL hcp$_id$ $-$ $UniqueaccountIDofthehcpthatissuedthebill.Thisistheforeignkeytothe HC$

DECIMAL(9,2) amount- The amount due to the hcp. DECIMAL datatype allows charge to be up to 9 digits long, with 2 digits of percision. Cannot be NULL.

TEXT descryption- Descryption of what the bill is being issued for. TEXT datatype allows unlimited number of characters. Cannot be NULL.

DATE due$_date$ $-$ $Datebywhichthebillmustbepaidby.DATEdatetypeofthe formYY$: $MM : DD.CannotbeNULL.$

BOOLEAN cleared- States wheather the bill was paid or not. BOOLEAN datatype value is either TRUE or FALSE. By default it is FALSE. If patient pays the bill, its status is changed to TRUE.

Permission Holds information regarding which medical records a hcp that is connected with a patient can view. ???

SERIAL permission$_id$ $-$ $IDtouniquelyidentifythepermissionfromotherpermissions.SERI$

medical$_rec_id$ $-$ $UniqueIDofthemedicalrecordthatahcpcanview.Thisistheforeignkeytothe M$

SERIAL account$_id$ $-$ $UniqueIDofthehcpthatcanviewthemedicalrecord.Thisisaforeignkeyt$

DATE date$_created$ $-$ $Dateinwhichthepatientallowedthehcptoviewthemedicalrecord.DATEd$
$MM : DD.CannotbeNULL.$

3.1.2 MVC Design

Intro... bla bla bla

Models

Controllers

Views

3.1.3 Interface Design

3.1.4 Server Design

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3.3.2 Database Tests

Chapter 4

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4.0.4 Screen-shots

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Credits