Entities:

1. Users
2. Events
3. Notifications
4. Attendees

USERS	
First_Name	varchar(70)
Last_Name	varchar(80)
Id [primary key]	int serial
Phone_number	int
Home_address	varchar(60)
Email_address	varchar(90)
Time_registered	timestamp

EVENTS		
Name	varchar(100)	
Date_&_Time	datetime	
Id	int serial	[primary key]
Location	varchar(70)	
Duration	int	
Status	varchar(10)	

NOTIFICATIONS		
Id	int serial	[primary key]
Content	varchar(1000)	
Time	timestamp	

ATTENDEES		
Id	int serial	[primary key]
Arrival_time	timestamp	
Seat_number	int serial	

So as can be seen above are the various entities and their fields. Now i will explain how each entity is related and what is the relation as well as defend my choice for primary keys, foreign keys and datatypes.

<u>Relationship Stating</u>

1. Users ----- Events = many to many relationship (one to many relationship on each side) { A user may register for many events and an event might get a lot of users registering for it.
2. Users ----- Notifications (general notification) = many to many relationship { User gets many notifications and a notification about a particular program gets sent to many users}

2.a Users ----- Notifications (specific notification :includes users details) = one to many relationship { User gets many notifications and a notification is meant for a user}

3. Events ----- Attendees = one to many {An event gets attended to by many attendees but attendee refers to that particular event, so an attendee attends
4. Events ----- Notification = one to many {an events can have many notifications, and a notification is for a particular event}
5. Users ----- Attendees = one to one (assuming the event is strictly by those who registered).

NB: a. For now, we will go with 2.a instead of 2.

b. Attributes boldened and underlined indicate Primary Key and fields just underlined indicate foreign key.

Why The Datatypes

1. Varchar is the datatype I gave to all the columns that will need data that in the form of a word or using letters. I placed a character limit on it.
2. Int is the datatype meant for data that is only made up of numbers. Its syntax doesn't need character limits. The serial there just shows that it will be increasing with a plus 1 after every row to make each row have that unique identifier in the entity table.
3. Timestamp is the datatype given to all data that include time.
4. Datetime is the datatype for data that talks about date and time.

Definitions

1. Primary keys are the unique identifier in every table and do not repeat.
2. Foreign keys are primary keys for another table found on another table meant to represent or serve as a link to their table.

TABLES

EVENT					
ID	NAME	DATE_&_TIME	LOCATION	DURATION	STATUS

USER						
ID	FIRST_NAME	LAST_NAME	PHONE_N^{O}	EMAIL ADDRESS	HOME ADDRESS	TIME REGISTERED

NOTIFICATION				
ID	CONTENT	TIME	EVENT.ID	USER.ID

ATTENDEE				
ID	ARRIVAL TIME	SEAT NUMBER	USER.ID	EVENT.ID

USER & EVENTS TABLE		
ID (SERIAL)	USER.ID	EVENT.ID
1		
2		
3		
4		
5		
6		

DATABASE SCHEMA.