

NOTE: When testing this project please register first, then login with your registration information. Login information does not have to be real, and a real email is not required.

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CS 340 Intro to Databases
Term Project

CONTENTS:

1. Project Outline
2. Database Outline
3. Database Creation Queries
4. General Use Queries
5. Project Resources
6. Languages/Libraries
7. Schema Drawing & ER Diagram

Project Outline:

This project is a planner/calendar. It will have a login page, a registration page, and a planner page. Since a planner is essentially a calendar with the ability to write down notes and events, I will be creating a calendar with auto-populating dates and the functionality to add events in for each date.

Because of the relatively simple nature of this application, I will only need two tables. The database will have a table with the event information, and a table with the user login information. The user will be used to determine which events are displayed. Users will be able to choose whether an event they are adding to the calendar is private (only viewable to that user), or public (viewable to all users).

Since the calendar auto-populates dates, users can toggle to different months. The name of the day and the dates are displayed automatically for each month. When the user clicks the add event button, a drop down form will allow users to enter information.

The '**UserLogin**' table will record user account information. It will have the following entities:

- ID
- Name
- Password
- Email

The '**Planner**' table will record information relating to the event and the date. It will have the following entities:

- ID
- Adder (the user who is adding the event)
- Name
- Title (of the event)
- Hour
- Minutes
- Am/pm (AM/PM)
- Message (body of the event)
- EventDate
- DateAdded

Database Outline:

Relationships:

- Usernames: Each username is associated with one password and one email. Usernames are unique and cannot be used twice.
- Many usernames can be associated with one email (many to one).
- Each user can create multiple different events (one to many relationship).
- Each event can be private or public (one to one relationship).
- Each event is associated with an event date (one to one relationship).
- Many users can view many different events (many to many relationship).
- The planner is used by many users (one to many).
- Users only use one planner (many to one).

Constraints:

A user may create many logins, but each login username is unique and cannot be used more than once. The user can use the same email for many logins.

Once logged in, the user can create events. These events can be private or public. An event is either public by default or can be made private. Private events can only be seen and deleted by the user. Public events can be seen by all users, but only deleted by the user who created the event. The date the event was added to the table is only viewable by the user who created the event as well.

Table Creation Queries:

```
CREATE TABLE UserLogin(  
  ID INT( 11 ) AUTO_INCREMENT PRIMARY KEY ,  
  name VARCHAR( 30 ) NOT NULL ,  
  password VARCHAR( 30 ) NOT NULL ,  
  email VARCHAR( 50 ) NOT NULL  
) ENGINE = INNODB
```

```
CREATE TABLE planner(  
  ID INT( 11 ) NOT NULL ,  
  name VARCHAR( 30 ) NOT NULL ,  
  Adder VARCHAR( 30 ) NOT NULL ,  
  Title VARCHAR( 255 ) NOT NULL ,  
  Hour INT( 2 ) NOT NULL ,  
  Minutes INT( 2 ) NOT NULL ,  
  Amprm VARCHAR( 2 ) NOT NULL ,  
  Message VARCHAR( 255 ) NOT NULL ,  
  EventDate VARCHAR( 10 ) NOT NULL ,  
  DateAdded DATE NOT NULL ,  
  FOREIGN KEY ( ID ) REFERENCES UserLogin( ID )  
) ENGINE = INNODB
```

General Use Queries:

A. Planner queries:

Insertion queries:

- 1) `$mysql->prepare("INSERT INTO planner (ID,name,Adder,Title,Hour,Minutes,Ampm,Message,EventDate,DateAdded) VALUES ('".$IDval."','".$name."','".$adder."','".$title."','".$hrshrs."','".$mnsmins."','".$AmPm."','".$detail."','".$seventdate."',now())")`
- 2) `$mysql->prepare("INSERT INTO planner (ID,name,Adder,Title,Hour,Minutes,Ampm,Message,EventDate,DateAdded) VALUES ('".$IDval."','".$pubname."','".$adder."','".$title."','".$hrshrs."','".$mnsmins."','".$AmPm."','".$detail."','".$seventdate."',now())")`
- 3) `$mysql->query("SELECT ID FROM UserLogin WHERE name='".$name.'" ")`

Deletion queries:

- 1) `if (!$stmt = $mysql->prepare("DELETE FROM planner WHERE ID=?")) { echo "Prepare failed: (" . $mysql->errno . ") " . $mysql->error; }`

Queries to set table display conditions:

- 1) `$grabPlanner = $mysql->query("SELECT ID, name, Adder, Title, Hour, Minutes, Ampm, Message, DateAdded, EventDate FROM planner");`
- 2) `$Edate = "SELECT EventDate FROM planner WHERE EventDate='".$seventdate.'";`
- 3) `$pubStuff = "SELECT name FROM planner WHERE name='".$pubname.'";`
- 4) `$userStuff = "SELECT name FROM planner WHERE name='".$user.'";`

B. Registration Form Queries:

These queries are check for whether the user already exists:

- 1) `$namecheck=$mysql->query("SELECT * FROM UserLogin WHERE name='".$name.'");
$nameElement=mysqli_fetch_row($namecheck);`
- 2) `$emailCheck=$mysql->query("SELECT * FROM UserLogin WHERE email='".$email.'");
$emailElement=mysqli_fetch_row($emailCheck);`

Account Info Insertion Queries:

- 1) `mysql->prepare("INSERT INTO UserLogin (name, password, email) VALUES ('".$name."','".$password."','".$email.'")")`

Some Project Resources:

The basis for the calendar is found here: <https://www.youtube.com/playlist?list=PLE5528CC893BD650D>

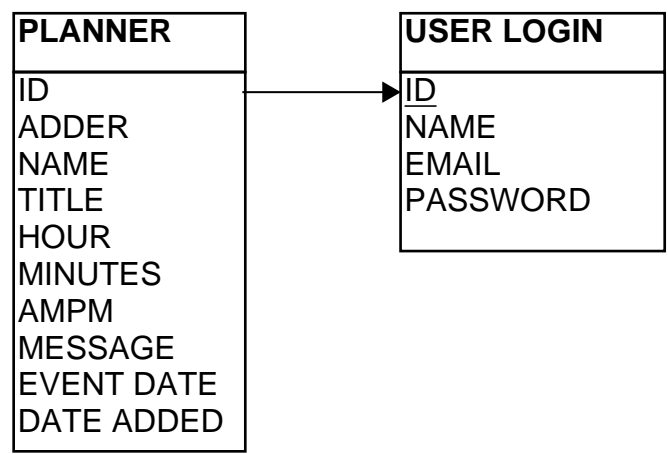
The basis for the login is found here: <http://www.9lessons.info/2014/07/ajax-php-login-page.html>

These citations are also provided in the code (some additional citations are also in the code for certain functions).

Languages & Libraries:

Php, Javascript, CSS, HTML, JQuery, and Bootstrap were used in this project.

SCHEMA DRAWING:



ER DIAGRAM: A user can use one planner, the planner can be used by many users.

