

Web Based Appointment Management System

Design Document

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Data Structures

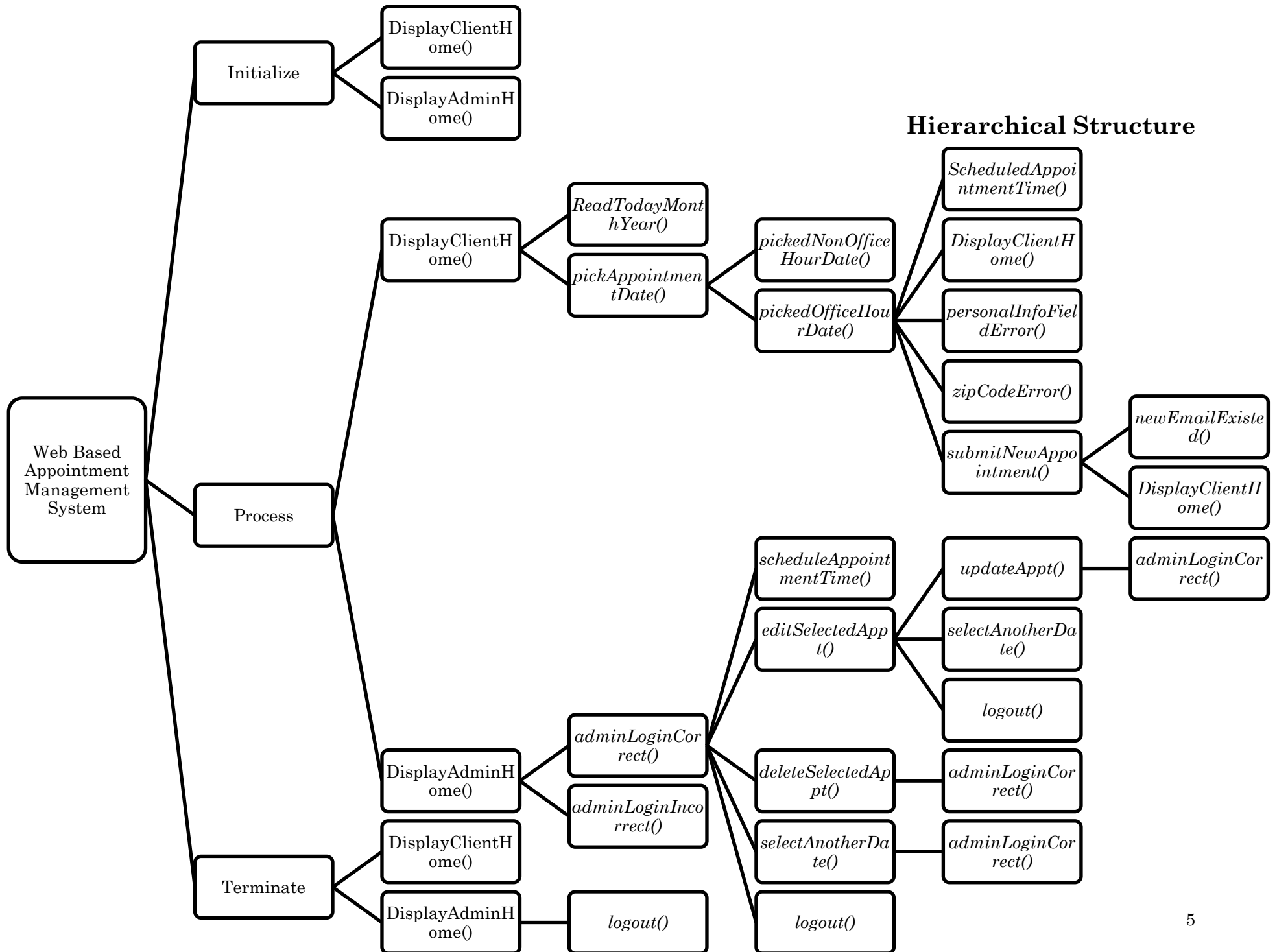
Major data structures named with descriptions.

Associative Arrays

I store the Web Based Appointment Management System (WBAMS) information in different associative arrays. The arrays will be written to PHP Associative-Array Data Format using the `var_export()` function. The data will be read back to PHP Associative Array Data Format by using the data back again using `eval()`.

```
$date = array (
    '07012012' => array (
        '0809' => array (
            'Name' => 'Stephen Moon',
            'Address' => '1155 Union Circle',
            'City/State' => 'Denton, TX',
            'ZipCode' => 76201,
            'Phone' => 9405652000,
            'Email' => 'stephen.moon@my.unt.edu',
            'PurposeOfVisit' => 'Sore throat.',
            'NewPatient' => 'Yes',
        ),
    ),
);

$admins = array (
    'kc0001' => array (
        'UserName' => 'Ka Son Chan',
        'Password' => 'kckc01',
        'Title' => 'Doctor',
    ),
);
```



Temporary Variables

\$monthOfToday

\$yearOfToday

\$dayOfToday

\$tempScheduledDate

\$tempTime

\$newTime

\$tempDate

\$newDate

\$tempName

\$newName

\$tempAddress

\$newAddress

\$tempCityState

\$newCityState

\$tempZipCode

\$newZipCode

\$tempPhone

\$newPhone

\$tempEmail

\$newEmail

\$tempPurposeOfVisit

\$newPurposeOfVisit

\$tempNewPatient

\$newPatient

\$tempLoginID

\$tempPassword

Pseudocode

3.1. Client Interface

3.1.1. When the client first accesses the application website, the client can schedule an appointment by selecting on the calendar interface.

The application calls **Function DisplayClientHome()**

```
Function DisplayClientHome()
{
    Display "Dr. Fred's Appointment Calendar"
    Display "Select New Appointment Date"
    Call Function ReadTodayMonthYear()
    Display the month and year of today calendar to the Client Interface
    Homepage calendar.
}
```

```
Function ReadTodayMonthYear()
{
    Read the month and year of today from system.
    Store the month and year into $monthOfToday and $yearOfToday
    respectively.
}
```

3.1.2. Picking the appointment date

3.1.2.1. The client chooses the appointment date by click on the calendar day.

```
Function pickAppointmentDate()
{
    Check if the user pick only from Monday to Friday.
    If picked Saturday or Sunday
        Call Function pickedNonOfficeHourDate()
    If picked Monday or Tuesday or Wednesday or Thursday or Friday
        Call Function pickedOfficeHourDate()
}
```

```
Function pickedNonOfficeHourDate()
{
    Display "Sorry! Doctor Fred doesn't take appointment on Saturdays or
    Sundays."
}
```

3.1.3. Selecting the appointment time

3.1.3.1. Once the client has selected the appointment date, the web will prompt to a new screen for select the time, entering personal information, and submitting new Assignment.

```

Function pickedOfficeHourDate()
{
    Display "Dr. Fred's Appointment Calendar"
    Display "Select New Appointment Time for "
    Display the picked date "Tuesday, August 10, 2012"
    Call Function ScheduledAppointmentTime()
    If time slot existed
        Display a cross existed time to the calendar
    If time slot doesn't existed
        Display radio button next to the free time
    // Wait for client to select time slot from the radio buttons...
    If click on the radio button
        Store the time slot into $tempTime
    // If the client select Select Different Appointment Day button
    If Select Different Appointment Date
        Call Function DisplayClientHome()
    // Wait for client to input all personal information
    // Wait for client to click on the Submit new Appointment button
    Check fields Name, Address, City, Phone, Email and Purpose of visit
    should only contains characters ('A' - 'Z', 'a' - 'z', ',', '/', '-', '_',
    ', ', '.', '@') or numbers (0-9)
    If any field violate requirement or empty
        Call Function personalInfoFieldError()
    If ZipCode violate requirement or empty
        Call Function zipCodeError()
    Leave the corrected input information in the field
    Call Function submitNewAppointment()
}

Function scheduleAppointmentTime()
{
    Search for the picked date and store all the time into $ScheduledDate
}

Function personalInfoFieldError()
{
    Display "Name, Address, City, Phone, Email and Purpose of visit should
    only contain characters ('A' - 'Z', 'a' - 'z', ',', '/', '-', '_', ', ',
    '.', '@') or numbers (0-9)."
}

Function zipCodeError()
{
    Display "Zip code should only contain numbers (0-9)."
}

Function SubmitNewAppointment()
{
    Create a new $date array for storing all the new appointment date, time
    and personal information
    Display "Thank you for making appointment, "
    Display $newName
    Display "Your appointment date and time is: "
    Display $newDate and $newTime
}

```

```

        If new Email existed
            Call Function newEmailExisted()
        Call Function DisplayClientHome()
    }

    Function newEmailExisted()
    {
        Display "A confirmation email has been sent to your email."
        Send an email to the $newEmail
    }

```

3.2 Administrator Interface

3.2.1. When the administrator accesses the application website, a login page will appear.

The application calls **Function DisplayAdminHome()**

```

Function DisplayAdminHome()
{
    Display "Login ID: "
    Display field for Admin to input Login ID
    Display "Password: "
    Display password field for Admin to input password
    Display Login button
    // Wait for the admin user to click on the Login button or Enter //
    button on keyboard
    Store Login ID as $tempLoginID and password as $tempPassword
    Check the $tempLoginID and password match and existed in the $admins
    If Login ID existed and password correct
        Call Function adminLoginCorrect()
    If Login ID does not existed or password is incorrect
        Call Function adminLoginIncorrect()
}

```

3.3.1. Weekly Appointment Schedule

3.3.1.1. After logging in successfully the web will prompt to the Administrator Appointment Schedule for week page.

```

Function adminLoginCorrect()
{
    Read date of today and store in $yearOfToday, $monthOfToday, $dayOfToday
    respectively
    Display the week of the $yearOfToday, $monthOfToday and $dayOfToday
    Call Function scheduleAppointmentTime()
    If time slot existed
        Display the array Name with radio button
    If time slot doesn't existed
        Display only radio button
    Display Edit Selected Appt button
    Display Delete Selected Appt button
    Display Select another Date button
    Display Logout button
}

```

```

While admin not click on Logout button
{
    If admin click on the Edit Selected Appt button
        Store the selected radio button date and time $tempDate
        and $tempTime
        Check and store all the information into the $temp
        categories
        Call Function editSelectedAppt()
    If admin click on the Delete Selected Appt button
        Call Function deleteSelectedAppt()
    If admin click on the Select another Date button
        Call Function selectAnotherDate()
}
Call Function logout()
}

Function adminLoginIncorrect()
{
    Display "Your Login ID does not exist or password is incorrect."
}

Function editSelectedAppt()
{
    Display "Dr. Fred's Appointment Calendar"
    Display Update Appointment for $tempDate $tempTime

    Display "Name:"
    Display $tempName
    Display "Address:"
    Display $tempAddress
    Display "City/State:"
    Display $tempCityState
    Display "ZipCode:"
    Display $tempZipCode
    Display "Phone:"
    Display $tempPhone
    Display "Email:"
    Display blank
    If $tempEmail existed
        Display $tempEmail
    Display "Purpose of Visit?"
    Display $tempPurposeOfVisit
    If $tempNewPatient = Yes
        Display Check box button with check
    If $tempNewPatient = No
        Display Check box button without check
    Display "Comments"
    // Let admin to input comments
    Display multiple-field for comments

    Display Update Appointment button
    If admin click Update Appointment button
        Call Function updateAppt()
    Display Select another date button

```



```

        If admin click Select another date button
            Call Function selectAnotherDate()
    Display Logout button
        If admin click Logout button
            Call Function logout()
}

Function deleteSelectedAppt()
{
    Delete the selected appointment from the array
    // The previous selected appointment will appear with a radio button
    only with no client name beside it
    Call Function adminLoginCorrect()
}

Function selectAnotherDate()
{
    // Wait for the admin to click on new radio button
    If admin click on the new radio button in the calendar
    Copy all the information of the client to $temp cat orgies and create
    new array for the new appointment time
    Store all the information back to the new array appointment time
    Delete the old array
    Call Function adminLoginCorrect()
}

Function logout()
{
    Display "You have logged out the system."
}

Function updateAppt()
{
    Store back the $temp categories into the array
    Call adminLoginCorrect()
}

```