

# *SalonBook*

*make appointments wherever, whenever*

Salons still use paper and pencil systems to manage schedules

Customers need to find time in their busy days to find a salon and book an appointment over the phone

# *Overview of the Problem*

- Paper and pencil systems
  - Prone to human error
  - Poor at handling long-term customer management like recurrent appointments and personalized service
- Being a regular salon customer is inconvenient
  - You have to find time during **business hours** to make an appointment
  - Its easy to forget to make an appointment if you can't make it as soon as you think of it
  - Lack of a one-stop-shop portal for salon appointments means customers have to gather information from separate sources
    - » Salons in your area and contact information
    - » User ratings of salons
    - » On demand appointment book

# *Previous Work*

*web-based scheduling applications*

- OpenTable.com
  - Online restaurant reservation application for restaurant patrons
  - Desktop restaurant management software for restaurants that syncs with OpenTable.com
- Using Google Calendars as a back-end
  - Many web applications have used the Google Calendars API to pull information from a Google Calendar to their front end
  - Displaying school library hours (constantly in flux) is one example of this implementation
    - » <http://journal.code4lib.org/articles/46>

# *The Goal*

Build a web-based application that allows

- Salons
  - Online management of stylists, services, and schedules
  - Quickly and easily gauge customer satisfaction with each of their stylists and services
  - View appointments made by customers, as well as make/edit appointments for customers who still call in appointments over the phone
- Customers
  - On demand appointment booking, changing, and canceling
  - Easy access to peer reviews of salon services and stylists before making an appointment
  - Location and contact information for nearby salons
  - Incentives for using SalonBook to make appointments

# *Tools and Technologies*



**<HTML>**



# *More Tools Used*

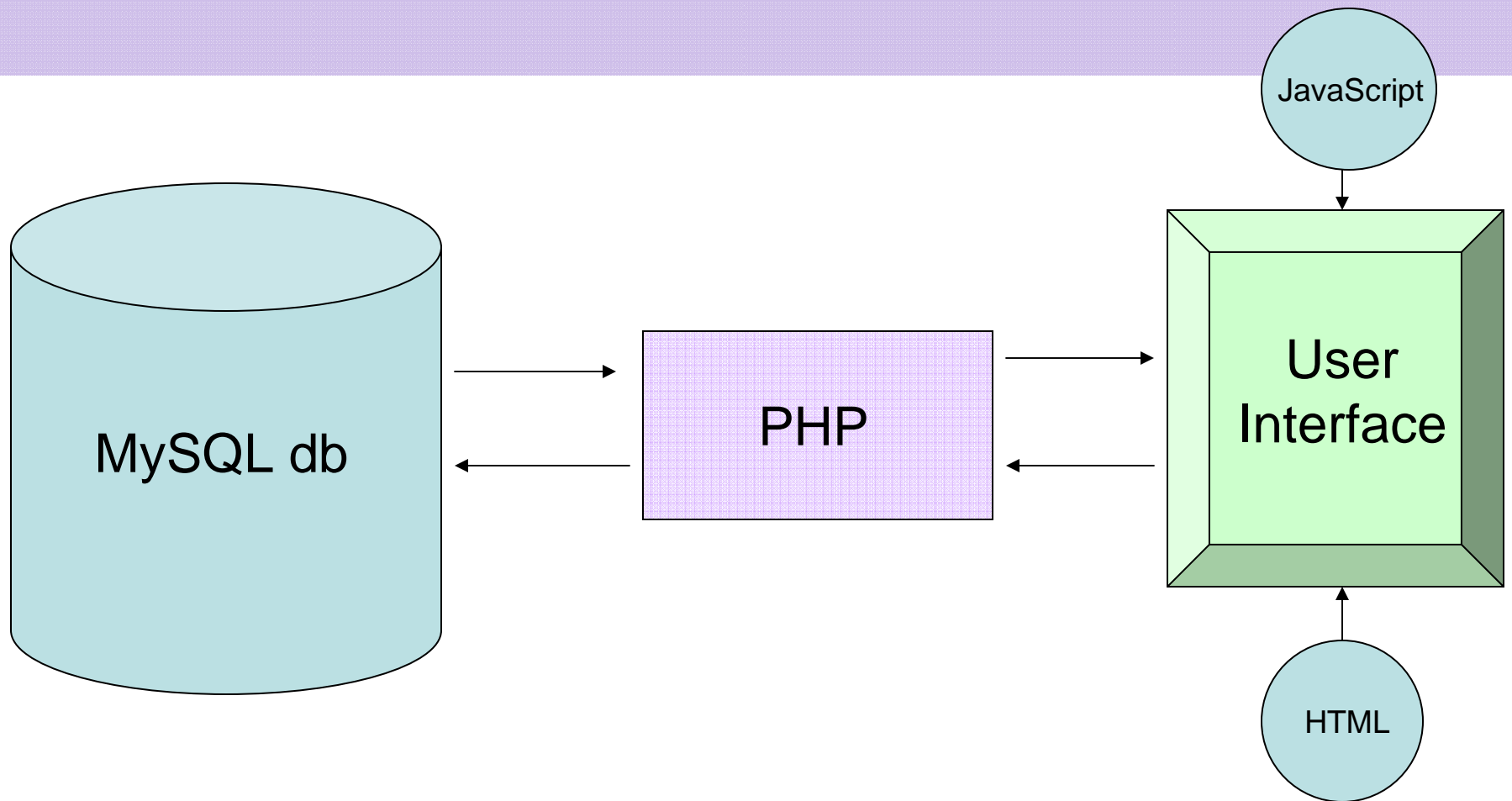
- **WebCalendar**

- » Open source PHP web-based calendar application
- » Utilizes MySQL as a back-end database

- **JavaScript**

- » Date picker widget
- » Integrated it into my application with minor modifications

# *Architecture*



# *Algorithms*

- Many-to-one relationship Database Tables
  - Advantages
    - » Salon-Stylist-Service Tables
    - » Increases robustness of the data represented
    - » Decreases redundancy and inefficiency in the databas
    - » Can represent scenarios where the same stylists work at multiple salons AND offer different services at each salon
    - » When a salon removes a stylist, they are merely deleting their related entries in the S-S-S table, but the stylist remains in the 'Stylists' table



# *Many-to-one relationships*

## – Disadvantages

- » Makes data retrieval much more challenging
- » Cannot simply lookup Salons and pull stylist or service information directly from those table entries
  
- » **Delete in Batches, Insert in Batches**
  - When a salon loads the Edit\_Stylist\_Services page, use the logged in salon's id (session variable) as well as the chosen stylist id to query the database, and then display that information back on the front end by populating the appropriate check boxes in the form
  - When the form is submitted, use that same information in the Salon-Stylist-Services table to delete all entries WHERE salon id = %s and stylist id = %s.
  - Then *for each* check box, if checked, INSERT into the S-S-S table with the salon id, stylist id, and service id that is checked

# *Users Viewing Salon Promos*

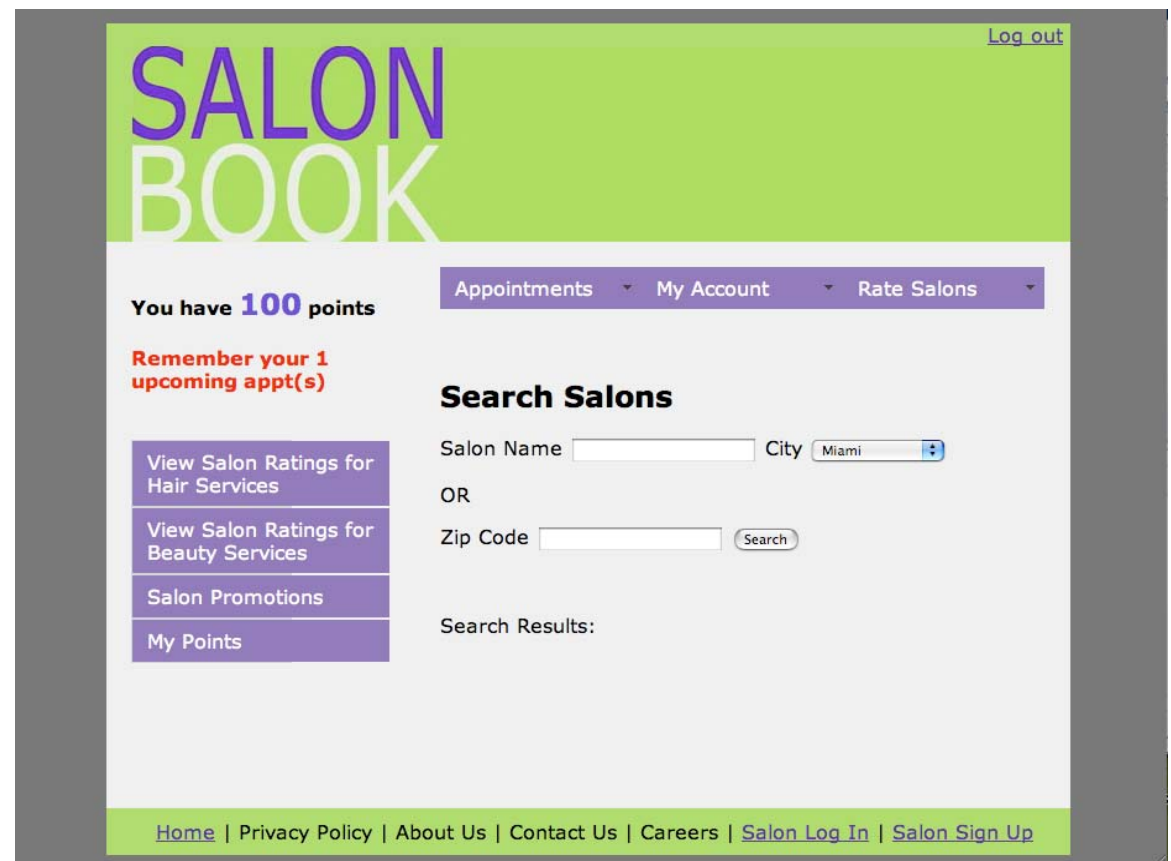
- Complex data to retrieve and display
  - Users can specify the Name, City, and Zip Code of salons they want to filter promotions by
  - Use this information to query the database for an array of salons meeting these criteria
  - User also specifies Services to filter by
    - » Query promotions based on **salon id** and services form variables
    - » While(result array is not empty), place each promotion into another container array that exists outside the loop
    - » Loop through this entire process for each Salon in the result array from the name/city/zip filter

# *\$\_POST vs. \$\_GET Variables*

- **\$\_POST variables**
  - » Secure way to pass personal or sensitive information
  - » Less stable and prone to problems (i.e. will not work if the name of the \$\_POST variable has any 'spaces' in it)
- **\$\_GET variables**
  - » Passes variables from page to page via the URL
  - » I tried to use this method as much as possible because this allows users to bookmark a URL within my site and be able to go directly to that page without having to re-enter information
  - » Not reasonable for passwords or personal information because they can provide easy public access to personal parts of an account

# User Interface

- Consumer side of the interface
- Functional Use Cases:
  - Create account
  - Login
  - View/Edit Account
  - Salon Search
  - Make appointments
    - Hair
    - Beauty
    - Recurrent
  - View/Cancel Appointments
  - Rate salons after appointments
  - View Salon ratings
  - View Salon promotions
  - View 'My Points'
  - View top-rated salons by:
    - Hair Services
    - Beauty Services
    - Atmosphere
    - Customer Service



# User Interface - Salons



<< Return to Dashboard

My Calendar Events Settings Search Help    Logout: joshroth@gma

March 2008							April 2008							May 2008																																
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat																										
(09)						1	(18)					1	2	3	(19)	4	5	6	7	8	9	10	(20)	11	12	13	14	15	16	17	(21)	18	19	20	21	22	23	24	(22)	25	26	27	28	29	30	31

**April 2008**  
joshroth@gmail.com

Category:

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
WK 1 4			01	02	03	04	05
WK 1 5	06	07 10am» Joshua for Adam	08	09 1pm» Joshua for Beauty	10	11	12
WK 1 6	13	14	15 1pm» Joshua for Beauty	16 11am» James for Beauty 11:30am» Joshua for Adam	17	18	19
WK 1 7	20	21	22 1pm» Joshua for Beauty	23 11:30am» Joshua for Adam	24 11:30am» Joshua for Adam	25	26
	27	28	29	30			

- Salon side of the UI
- Use Cases Captured:
  - Create/Edit Account
  - Login
  - Add/Remove Stylists
  - Edit Stylist Services
  - Add/Remove Beauty Services
  - View/Edit Schedule
  - Print Schedule
  - Create promotions
  - View/Edit Promotions

*Demo*

- <http://localhost/SalonBook/Index.php>

# *Contributions*

- Database design
  - » Iterative design from one-to-one relationships to many-to-one in order to remove redundancies and maximize efficiency
- PHP, MySQL, HTML integration
- Integration of open sources (i.e. WebCalendar, DatePicker) into a web app to provide a richer user experience

# *Future Direction*

- Further integration of WebCalendar
  - Account creation and login into WebCal automated behind the scenes when a Salon creates an account and logs in
  - Create multiple calendars for each salon - one per stylist - using automatic naming with a well-defined prefix system
    - » Allows for better visualization of schedules and availability



## *Future Direction cont'd*

- Host prototype online
- Conduct usability surveys to improve the UI
- Learn and integrate more interactive Web 2.0 tools like jQuery, JavaScript, and OpenLaszlo

Questions?