

USER GUIDE FOR

The Happy Paws Doggie Daycare Employee Recognition Portal

This solution is demo of a web application for the employees of the Happy Paws Doggie Daycare. The portal offers managers and employees an easy-to-use tool that they can use to award certificates of recognition to members of their team.

User features include:

- Profile management with secure user sessions
- Secure password storage, password reset functionality, and input validation
- Custom generation of LaTeX certificates featuring one of five award types, the recipient's name, date, as well as the name and signature of the user who authorized the award.
- Automatic email delivery of the certificate as a PDF to the recipient
- Capability to view and delete previously generated awards

Admin features include:

- Authenticated admin sessions, secure password storage, and password reset functionality.
- User account management: functionality to add, delete, and update a user
- Admin account management: functionality to add, delete, and update an admin
- Analytics & reporting feature with customized bar charts and pie graphs that allow admins to understand how users engage with the portal.
- Advanced table displays with column sorting, pagination, search, and option to export data to a CSV file for download and sharing.

Authors:

Samantha Burnside

Rickey Patel

Mark C. Moore

GETTING STARTED

Set-up for Your Local Machine

- Ensure if you have node js installed on your computer
 - You can verify by typing "node -v" in the terminal
- Once you have verified and cloned the repo into a local directory, open the terminal from that directory.
- Then type in 'npm install'
 - This will install all the dependencies from the package.json file
- Run the code by typing: "node app.js"
 - You should see a message saying server has started at localhost:3000

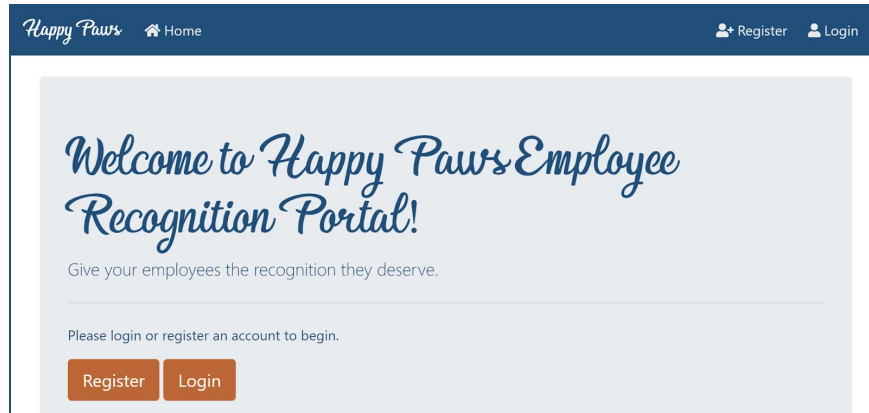
- Go into your browser and type in: 'localhost:3000' as the url to load the app

Accessing the site:

Our web application will be temporarily available using the following link:

<http://138.68.48.136:3000/>. Users are given the option to register a user account or login as a user or as an admin.

Note: Please use Google's Chrome web browser to access the site.



USER FEATURES

Register User Account:

Opting to register an account takes the user to the *Create An Account* page. The user must complete all the fields to successfully create an account. This feature includes input validation to maximize data quality and system security. Validation constraints ensure:

- First and last name inputs are limited to 30 chars
- A valid email address that is not already registered
- A minimum password length and a matching confirmation password
- Unique security questions
- Appropriate image file type

Once all fields are complete, the user then clicks the “Create Account” button and will be redirected to the *Login* page. All passwords are hashed before entered into the database.

CREATE AN ACCOUNT

First Name:

Last Name:

Email:

Job Title:

Department:

Accounting and Finance

Password:

Confirm Password:

Security Question 1:

What is your favorite food?

Answer1:

Security Question 2:

What is your favorite food?

Answer2:

Upload Signature:

Choose File No file chosen

Create Account

Already Registered? Login.

CREATE AN ACCOUNT

Password must be between 6-30 characters long

×

Email is already registered

×

First Name:

Bob

Last Name:

Smith

Email:

test@gmail.com

Job Title:

Veterinarian

Department:

Veterinary Care

Password:

••

Confirm Password:

••

Security Question 1:

What is your mother's maiden name?

Answer1:

Jones

Security Question 2:

What is your favorite food?

Answer2:

Steak

Upload Signature:

Choose File testSignature.png

Login User:

A regular user can sign in with their email address and password. Leave the “Sign in as Admin” box unchecked. Input validation is also included in the *Login* feature. After successfully signing in, the user will be directed to the *User Main Menu*.

SIGN IN

Username or Email

Password

☐ Sign in as Admin

Sign In

Forgot password?

New User? Create an account.

SIGN IN

Incorrect email or password.

×

Username or Email

test@gmail.com

Password

••••••

☐ Sign in as Admin

Sign In

Forgot password?

New User? Create an account.

A user may have an account that was already created by an admin. When logging in the first time, the user must enter their email address and the temporary password. Temporary user passwords are a composite of “hpaws” + “Last Name”. Temporary passwords are case sensitive. The user will be directed to the *Complete Your Registration* page. The user must enter the remaining information, including a new password before being directed to the *User Main Menu*.

A default incomplete user account has already been created with the credentials:

Email: jones@gmail.com

Password: hpawsJones

You must complete your registration before you can proceed. X

Happy Paws Employee Portal

Complete Your Registration

First Name:

Last Name:

Email:

Job Title:

Department:

Password:

Confirm Password:

Security Question 1:

Answer1:

Security Question 2:

Answer2:

Upload Signature: No file chosen

Users and Admins also have the option to select the “Forgot Password?” link. To reset a password, the user will be prompted to enter their email and then answer the two security questions they selected when he or she registered. The system will validate that the user’s answers match, prompt the user to enter a new password, and then confirm the new password. The user will be then directed back to the *Login* page where they can sign in with their new password. Input validation is performed for every step of this process.

FORGOT PASSWORD?

Enter your Username or Email to find your account

☐ I am an admin

[Back to Login](#)

RESET PASSWORD

Answer the following security question to reset your password:

What is your mother's maiden name?

What was the name of your first pet?

[Back to Login](#)

RESET PASSWORD	SIGN IN
<div>New Password: <input type="password"/></div> <div>Confirm Password: <input type="password"/></div> <div>Reset Password</div> <div>Back to Login</div>	<div>Your password has been successfully reset. Sign in to continue. ×</div> <div>Username or Email <input type="text" value="testing@gmail.com"/></div> <div>Password <input type="password" value="....."/></div> <div><input type="checkbox"/> Sign in as Admin</div> <div>Sign In</div> <div>Forgot password? New User? Create an account.</div>

User Main Menu:

A successful sign-in will direct the user to the *User Main Menu*. The user can make a selection of three features:

- My Profile
- Create a New Award
- View Previous Awards

Happy Paws Home

Happy Paws Employee Portal

Welcome, Claire!

My Profile

Create A New Award

View Previous Awards

My Profile:

The *My Profile* page allows the user to view current profile information, including the date the account was created. The user can also choose to:

- Edit their profile
- Change password
- Go back to main menu

Happy Paws Employee Portal

My Profile

First Name:	Claire
Last Name:	Smith
Email:	smith@test.com
Account Created On:	Tue May 07 2019 19:46:48 GMT+0000 (UTC)
Department:	Human Resources
Title:	HR Rep
Signature:	<i>Test Signature</i>

[Edit Profile](#)

[Change Password](#)

[Back to Main Menu](#)

To edit a user profile, select the “Edit Profile” button. Users can edit the fields for first and last name, job title, and department. Commit changes to the database by clicking the “Update Profile” button. The user will be directed back to the *My Profile* page where they can view their updated profile information.

Users can also edit their password by selecting “Change Password” button on the *My Profile* page. The user will be prompted to enter their old password, new password, as well as confirmation of their new password.

Input validation is performed on the name and password fields to maximize data quality and system security. Passwords are hashed before entry into the database.

Happy Paws Employee Portal

Edit Your Profile

First Name:	<input type="text" value="Claire"/>
Last Name:	<input type="text" value="Jones"/>
Email:	<input type="text" value="smith@test.com"/>
Job Title:	<input type="text" value="HR Director"/>
Department:	<input type="text" value="Operations"/>

[Update Profile](#)

[Back to Main Menu](#)

Happy Paws Employee Portal

Change Password

Old Password:	<input type="password"/>
New Password:	<input type="password"/>
Confirm New Password:	<input type="password"/>

[Change Password](#)

[Back to Your Profile](#)

Create An Award:

The user can generate an employee recognition award by selecting “Create An Award” from the *User Main Menu*. On the *Create An Award* page, the user is prompted to choose an award type from the dropdown menu. Options for award type are:

- Enter the recipient's name and email address and click "Create and Email Certificate".

Happy Paws Employee Portal

Create An Award

Select Award:

Employee of the Month

Recipient First Name:

Sam

Recipient Last Name:

Burnside

Recipient Email:

burnsids@oregonstate.edu




Create and Email Certificate

Back to Main Menu

Award has been successfully created and sent to the email provided!

Happy Paws Employee Portal

View Awards I've Created

Award Type	Date Created	Recipient Name	Recipient Email	Delete
Dog Washer of the Month	May-07-2019	Alberto Gomez	gomez@test.com	
Janitor of the Month	May-07-2019	Tara Burk	burk@gmail.com	
Boss of the Month	May-07-2019	Rickey Patel	patel@gmail.com	
Employee of the Month	May-07-2019	Yongsong Shi	shi@test.com	
Employee of the Month	May-07-2019	Travis Gray	gray@gmail.com	
Dog Walker of the Month	May-07-2019	Jenny Katz	katz@test.com	
Employee of the Month	May-31-2019	Sam Burnside	burnsids@oregonstate.edu	

Back to Main Menu

The image shows a screenshot of an email interface. The email body contains the following text: "Congratulations! You have been awarded by Claire Smith!" followed by an "Inbox x" button. Below this is the sender information: "happypawsizar@gmail.com" and "to me". The email content starts with "Dear Sam Burnside," followed by "Congratulations! You have been recognized by the Happy Paws Management Team! Please see attached for your award certificate." and "Sincerely,". The sender is identified as "The Happy Paws Management Team". An attachment is shown as a thumbnail of a certificate titled "Certificate of Award" for "Employee of the Month" awarded to "Sam Burnside" on "May-31-2019" by "Claire Smith HR Rep". At the bottom of the email interface are "Reply" and "Forward" buttons. To the right of the email content is a large, detailed view of the certificate. The certificate has a decorative blue border and a paw print at the top. The text on the certificate reads: "Certificate of Award", "In honor of your enthusiasm, dedication, and commitment to excellence", "we hereby award the", "Certificate of", "Employee of the Month", "To: Sam Burnside", "Awarded on: May-31-2019", "Claire Smith", and "HR Rep".

By selecting the “View Previous Awards” button on the *User Main Menu*, a user can view a record of every award they have ever issued. Users can delete a record of an award by selecting the delete button in the appropriate row. Deletion of an award record will result in an immediate change in the table along with a success message.

Happy Paws Employee Portal

View Awards I've Created

Award Type	Date Created	Recipient Name	Recipient Email	Delete
Dog Washer of the Month	May-07-2019	Alberto Gomez	gomez@test.com	
Janitor of the Month	May-07-2019	Tara Burk	burk@gmail.com	
Boss of the Month	May-07-2019	Rickey Patel	patel@gmail.com	
Employee of the Month	May-07-2019	Yongsong Shi	shi@test.com	
Employee of the Month	May-07-2019	Travis Gray	gray@gmail.com	
Employee of the Month	May-31-2019	Sam Burnside	burnsids@oregonstate.edu	
Dog Walker of the Month	May-31-2019	Jenny Katz	Katz@test.com	

[Back to Main Menu](#)

You Have Successfully Deleted The Award!

Happy Paws Employee Portal

View Awards I've Created

Award Type	Date Created	Recipient Name	Recipient Email	Delete
Dog Washer of the Month	May-07-2019	Alberto Gomez	gomez@test.com	
Janitor of the Month	May-07-2019	Tara Burk	burk@gmail.com	
Boss of the Month	May-07-2019	Rickey Patel	patel@gmail.com	
Employee of the Month	May-07-2019	Yongsong Shi	shi@test.com	
Employee of the Month	May-07-2019	Travis Gray	gray@gmail.com	
Employee of the Month	May-31-2019	Sam Burnside	burnsids@oregonstate.edu	

[Back to Main Menu](#)

ADMIN FEATURES

Login Admin:

An admin can sign in with their username and password. The admin must check the box “Sign in as Admin”. Input validation is also included in the *Login* feature. After successfully signing in, the admin will be directed to the *Admin Main Menu*. A default Admin account has already been created with the credentials:

Username: HappyPawsTeamIzar

Password: TeamIzar2019

SIGN IN

Username or Email

HappyPawsTeamIzar

Password

☒ Sign in as Admin

Sign In

[Forgot password?](#)
[New User? Create an account.](#)

An admin may have an account that was already created by another admin. When logging in the first time, the admin must enter their username and the temporary password. Temporary admin passwords are a composite of “hpaws” + “username”. Temporary passwords are case sensitive. The user will be directed to the *Complete Your Registration* page. The admin must enter the remaining information, including a new password before being directed to the *Admin Main Menu*. A default incomplete admin account has already been created with the credentials:

Username: admin4

Password: hpawsadmin4

A screenshot of the 'Happy Paws Employee Portal' registration page. At the top, a yellow banner reads 'You must complete your registration before you can proceed.' with a close button. Below the banner, the portal's name 'Happy Paws Employee Portal' is displayed in a blue script font. Underneath, the heading 'Complete Your Registration' is shown. The form includes fields for Username (pre-filled with 'admin4'), Job Title, Department (a dropdown menu currently showing 'Accounting and Finance'), Password, Confirm Password, Security Question 1 (a dropdown menu showing 'What is your favorite food?'), Answer 1, Security Question 2 (another dropdown menu showing 'What is your favorite food?'), and Answer 2. A 'Submit' button is located at the bottom left of the form.

Admin Main Menu:

A successful sign-in will direct the admin to the *Admin Main Menu*. The admin can make a selection of three features:

- My Profile
- Create a New Award
- View Previous Awards



Manage User Accounts:

By selecting the “Manage User Accounts” button on the *Admin Main Menu*, an admin can view a record of every user in the system. This feature includes:

- Adding a User
- Deleting a User
- Editing a User’s record
- Sorting the records by user id, first and last names, account creation date, title, or department.
- A search bar
- Table pagination
- Exporting the data to a CSV file

Manage User Accounts							
Show 10 entries			Search: <input type="text"/>		Add User		
User Id	First Name	Last Name	Email	Account Created On	Title	Department	Edit Delete
4	Rickey	Patel	rickey90@gmail.com	May-07-2019	Assistant to the Manager	Information Systems	Edit Delete
6	Samantha	Burnside	burnsids@oregonstate.edu	May-07-2019	Veterinarian	Veterinary Care	Edit Delete
7	Claire	Smith	smith@test.com	May-07-2019	HR Rep	Human Resources	Edit Delete
8	Sarah	Micheals	test2@gmail.com	May-07-2019	Accountant	Accounting and Finance	Edit Delete
10	Janet	Miller	miller@test.com	May-10-2019	Dog Handler	Daycare Attendants	Edit Delete
11	Mark	Moore	mark.c.moore@hotmail.com	May-10-2019	Head Window Washer	Accounting and Finance	Edit Delete
12	Barney	Rubble	barneyrubble@gmail.com	May-10-2019	Rock Breaker	Operations	Edit Delete
13	June	Cleaver	juncleaver@yahoo.com	May-10-2019	Owner	Operations	Edit Delete
14	Bart	Simpson	bartsimpson@hotmail.com	May-10-2019	SkaterDude	Legal	Edit Delete
20	Sally	Smith	test@gmail.com	May-30-2019	Web Master	Operations	Edit Delete

Showing 1 to 10 of 11 entries

Previous **1** 2 Next

[Export CSV File](#)

[Back to Admin Main Menu](#)

Admins can create user accounts by selecting the “Add User” button at the top-right corner of the table. The admin will be prompted to enter a user’s name and email address. A temporary password is automatically generated, hashed, and entered into the database. Temporary user passwords are a composite of “hpaws” + “Last Name” and are case sensitive. After submitting the form, the admin will be directed back to the *Manage User Accounts* page where they will be able to view the newly created user account.

NOTE: When logging in the first time, the user must enter their email address and the temporary password. The user will be directed to the *Complete Your Registration* page. The user must enter the remaining information, including a new password before being directed to the *User Main Menu*.

Create A User Account

First Name:

Last Name:

Email:

[Submit](#)

[Manage User Accounts](#)

To edit a user account, select the “Edit” button in the appropriate column. Admins can edit the fields for first and last name, job title, and department. Commit changes to the database by clicking the “Update Account” button. The admin will be directed back to the *Manage User Accounts* page where they can view the updated account information.

Edit User Account

First Name:

Last Name:

Email:

Job Title:

Department:

[Update Account](#)

[Back to Manage User Accounts](#)

Edit User Account

First Name:

Last Name:

Email:

Job Title:

Department:

[Update Account](#)

[Back to Manage User Accounts](#)

Admins can delete a user's record by selecting the delete button in the appropriate row. Deletion of a user record will result in an immediate change the the table along with a success message.

All of the user data can be downloaded as a CSV file by selecting the "Export CSV File" button. The file can be opened in a text editor or applications such as MS Excel.

Showing 1 to 10 of 11 entries

Previous [1](#) [2](#) Next

[Export CSV File](#)

[Back to Admin Main Menu](#)

HappyPawsData (11).csv

	A	B	C	D	E	F	G
1	User Id	First Name	Last Name	Email	Account Created On:	Title	Department
2	4	Rickey	Patel	rickey90@gmail.com	May-07-2019	Assistant to the Manager	Information Systems
3	6	Samantha	Burnside	burnsids@oregonstate.edu	May-07-2019	Veterinarian	Veterinary Care
4	7	Claire	Smith	smith@test.com	May-07-2019	HR Rep	Human Resources
5	8	Sarah	Micheals	test2@gmail.com	May-07-2019	Accountant	Accounting and Finance
6	10	Janet	Miller	miller@test.com	May-10-2019	Dog Handler	Daycare Attendants
7	11	Mark	Moore	mark.c.moore@hotmail.com	May-10-2019	Head Window Washer	Accounting and Finance
8	12	Barney	Rubble	barneyrubble@gmail.com	May-10-2019	Rock Breaker	Operations
9	13	June	Cleaver	juncleaver@yahoo.com	May-10-2019	Owner	Operations
10	14	Bart	Simpson	bartsimpson@hotmail.com	May-10-2019	SkaterDude	Legal
11	20	Sally	Smith	test@gmail.com	May-30-2019	Web Master	Operations
12	21	Seth	Jones	jones@gmail.com	May-31-2019	null	null

Manage Admins:

By selecting the "Manage Admin Accounts" button on the *Admin Main Menu*, an admin can view a record of every admin in the system. This feature includes:

- Adding an Admin
- Deleting an Admin
- Editing an Admin's record
- Sorting the records by username, account creation date, title, or department.
- A search bar
- Table pagination
- Exporting the data to a CSV file

Manage Admin Accounts							
Show 10 entries		Search: <input type="text"/>		Add Admin			
Admin Id	User Name	Account Created On:	Title	Department	Edit	Delete	
2	HappyPawsTeamIzar	May-07-2019	IT Admin	Information Systems	Edit	Delete	
3	admin2	May-07-2019	IT Admin	Information Systems	Edit	Delete	
4	admin3	May-07-2019	Systems Administrator	Information Systems	Edit	Delete	
5	admin4	May-31-2019			Edit	Delete	
Showing 1 to 4 of 4 entries					Previous 1 Next		
Back to Admin Main Menu					Export CSV File		

Admins can create admin accounts by selecting the “Add Admin” button at the top-right corner of the table. The admin will be prompted to enter an admin’s username. A temporary password is automatically generated, hashed, and entered into the database. Temporary admin passwords are a composite of “hpaws” + “username” and are case sensitive. After submitting the form the admin will be directed back to the *Manage Admin Accounts* page where they will be able to view the newly created user account.

NOTE: When logging in the first time, the admin must enter their username and the temporary password. The admin will be directed to the *Complete Your Registration* page. The admin must enter the remaining information, including a new password before being directed to the *Admin Main Menu*.

Create An Admin Account

User Name:

[Submit](#)

[Manage Admin Accounts](#)

To edit an Admin Account, select the “Edit” button in the appropriate column. Admins can edit the fields for username, job title, and department. Commit changes to the database by clicking the “Update Account” button. The admin will be directed back to the *Manage Admin Accounts* page where they can view the updated account information.

Edit Admin Account

User Name:

Job Title:

Department:

[Update Account](#)

[Back to Manage Admin Accounts](#)

Edit Admin Account

User Name:

Job Title:

Department:

[Update Account](#)

[Back to Manage Admin Accounts](#)

Admins can delete an admin's record by selecting the delete button in the appropriate row. Deletion of an admin record will result in an immediate change the the table along with a success message.

Like the user data, all of the admin data can be downloaded as a CSV file by selecting the "Export CSV File" button. The file can be opened in a text editor or applications such as MS Excel.

	A	B	C	D	E
1	Admin Id	Username	Account Created On:	Title	Department
2	2	HappyPawsTeamIzar	May-07-2019	IT Admin	Information Systems
3	3	admin2	May-07-2019	IT Admin	Information Systems
4	4	admin3	May-07-2019	Systems Administrator	Information Systems
5	5	admin4	May-31-2019	null	null

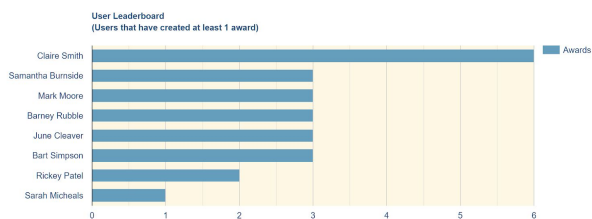
Analytics & Reporting:

The *Analytics and Reporting* feature allows admins to understand how users engage with the portal. Select buttons along the horizontal navigation bar to display customized bar charts and pie graphs. The feature includes a:

- User leaderboard bar chart
- User participation pie chart
- Department leaderboard bar chart
- Department participation pie chart
- Award type bar chart
- List of all awards created by users

Analytics & Reporting

User Leaderboard User Participation Dept Leaderboard Dept Participation Award Type View All Awards

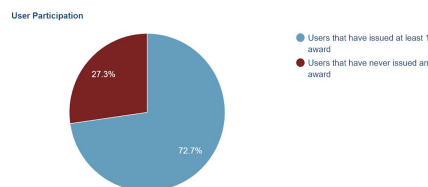


Export CSV File

Back to Admin Main Menu

Analytics & Reporting

User Leaderboard User Participation Dept Leaderboard Dept Participation Award Type View All Awards



Export CSV File

Back to Admin Main Menu

Analytics & Reporting

User Leaderboard User Participation Dept Leaderboard Dept Participation Award Type View All Awards

Show 10 entries

Search:

Award Type	Award id	Date Created	Creator	Department	Recipient
Boss of the Month	5	May-07-2019	Samantha Burnside	Veterinary Care	Thomas Ray
Boss of the Month	9	May-07-2019	Claire Smith	Human Resources	Rickey Patel
Boss of the Month	15	May-10-2019	Mark Moore	Accounting and Finance	Bart Simpson
Boss of the Month	17	May-10-2019	Mark Moore	Accounting and Finance	Rickey Patel
Dog Walker of the Month	6	May-07-2019	Samantha Burnside	Veterinary Care	Mark Moore
Dog Walker of the Month	18	May-10-2019	Barney Rubble	Operations	Mark Moore
Dog Walker of the Month	24	May-10-2019	June Cleaver	Operations	Mark Moore
Dog Walker of the Month	25	May-10-2019	Bart Simpson	Legal	Samantha Burnside
Dog Walker of the Month	32	May-30-2019	Rickey Patel	Information Systems	Tom Hanks
Dog Washer of the Month	7	May-07-2019	Claire Smith	Human Resources	Alberto Gomez

Showing 1 to 10 of 24 entries

Previous 1 2 3 Next

Export CSV File

Back to Admin Main Menu

All data can be converted into CSV files for download and sharing by selecting the “Export CSV File” at the bottom of the chart or table. The file can be opened in a text editor or applications such as MS Excel.

	A	B
1	Name	Number of Awards
2	Claire Smith	6
3	Samantha Burnside	3
4	Mark Moore	3
5	Barney Rubble	3
6	June Cleaver	3
7	Bart Simpson	3
8	Rickey Patel	2
9	Sarah Micheals	1

Software Systems, Tools, API, etc.

Software Used:

Development Tools

- Node.js for backend runtime environment
- Express.js for web framework

Languages

- HTML/CSS for front-end page structure and styling
- Javascript for front and back-end scripting
- SQL for database management

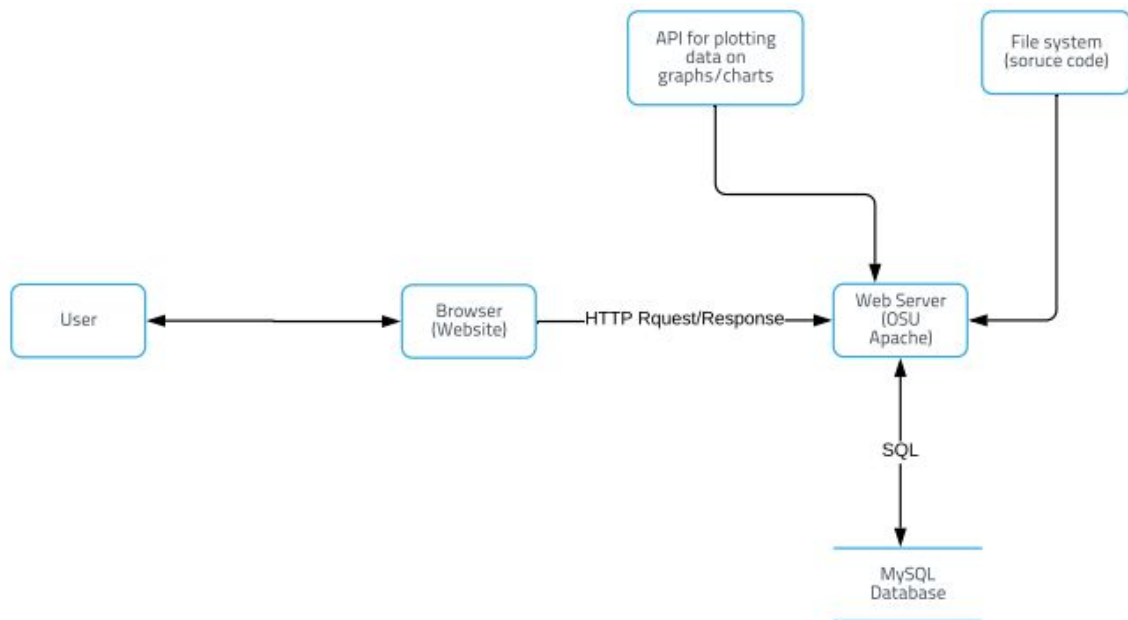
Libraries

- Bootstrap
- jQuery

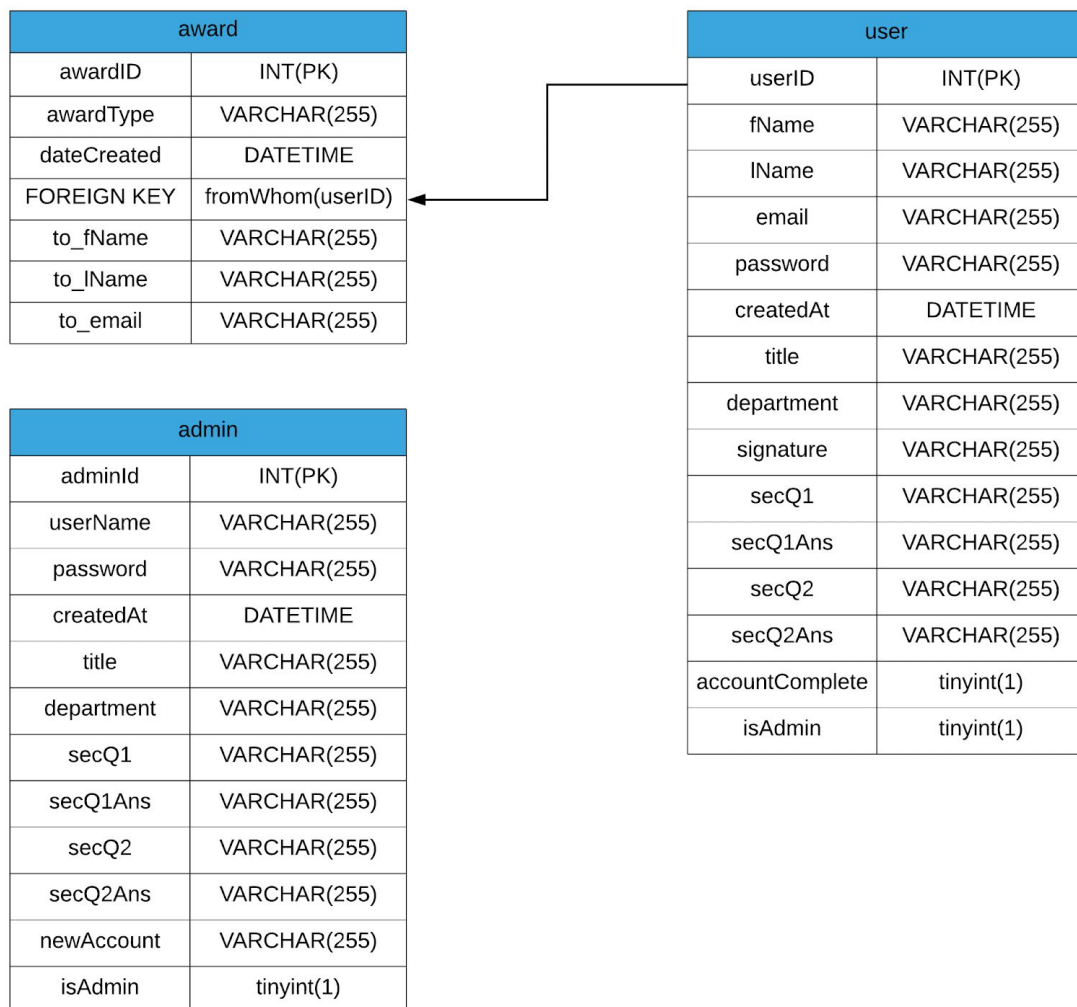
APIs

- Google chart tool for Business Intelligence reporting operations

High Level Client/Server Architecture:



Database Schema:



UML Activity Diagram:

