# **HSN Hospital Project Document**

Created by:

Christopher Maeda (N00768018)
Jashanpreet Kaur (N01289670)
Joshua Silveira (N01404730)
Sam Bebenek (N00831998)
Shikha Goyal (N01329988)

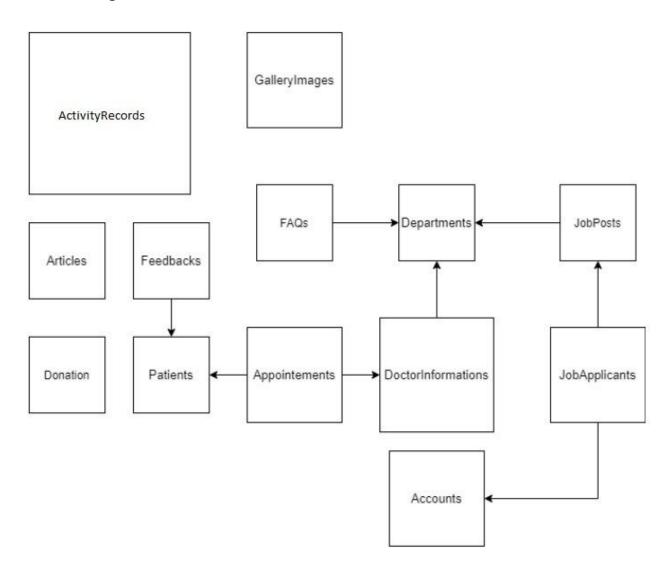
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## **ERD Diagram**



#### **Justifications**

#### Gallerylmages - Sam Bebenek:

The GalleryImages table is for the image gallery feature. It does not depend on any other features, so it contains no foreign keys. An admin will be able to login and create, update, and delete images. A public guest will only be able to view the images.

#### ActivityRecords - Sam Bebenek:

The ActivityRecords table is for the Activity Record Graph feature. It does not depend on any other features, so it contains no foreign keys. An admin will be able to login and create, update, and delete activity records and their numerical ratings. A public guest will only be able to view the graph on the home page generated using the values in this table.

#### DoctorDirectory - Jashanpreet:

This feature keeps a complete record of the doctor's information. Doctors are related to their department; it has the foreign key to the Departments. As one doctor related to a particular department and one department has many doctors. So it has one to many relationships. Moreover, A user can see only the doctor's information based on their department or full name. But an admin can create, read, update and delete doctor's information.

#### Book an Appointment - Jashanpreet:

A patient can use it to book an appointment. An appointment table has a foreign key to the patient table and doctor table. One patient has many appointments, so it reflects many to many relations. A user can book an appointment which will be confirmed via email from the admin side, also they can cancel their own upcoming appointment and they can only see their own appointments. But an admin can update, read and delete the appointment.

#### JobPosts - Christopher Maeda

This table is for the job/volunteer listing feature. The job post has a one to many relationship where one department can have many job posts. For example the emergency department can have 2 job posts where 1 is a doctor, while the other post can be a nurse. The job post has another one to many relationship where one job post can have many job applicants. For example if there is a job post for a doctor then both Chris and Sam can apply to that job. As an admin they have the ability to create, read, update, and delete a job post. On the other hand a public guest can only read the job posts.

#### Donation - Christopher Maeda

This table is for the donation feature. The donation table is a stand alone feature where it does not rely on other features. As an admin they can create, read, update, and delete donations. As a public guest they can create a donation (give donation to the hospital).

#### Feedback - Shikha Goyal

This feature is a feedback feature. It will have a foreign key to the patient table. As the logged in patient can click on the feedback icon and will be redirected to the feedback page where the patient will be asked to enter his/her email address and feedback message which they wish to submit. Where the admin can only read and delete the feedback whereas the patient can only insert the data. Having one to many relationships one patients to many feedbacks.

#### FAQ - Shikha Goyal

This feature is a frequently asked question section. It will have a foreign key to the departments table. Based on a particular department the user can see the related list of faq on the faq page. It will be a static page for the user and dynamic at the admin end where the admin can apply the CRUD concept. Having one to many relationships. One department to many FAQs

#### Articles - Joshua Silveira

This table holds all the articles for the News and Announcements Feature. This table is stand alone and doesn't rely on any other tables. An unregistered user can see a list on the website. An admin has full Create Read Update and Delete capabilities on all articles.

### Job Post Feature

Developed by Christopher Maeda

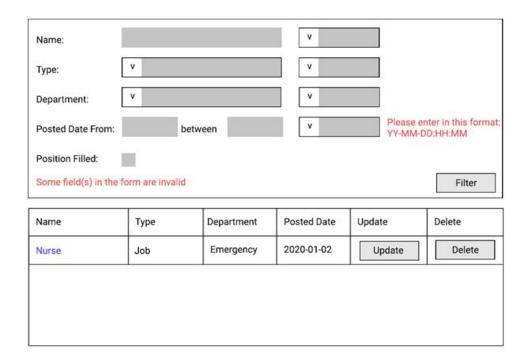
### **User Stories**

Lowa is looking for an opportunity to work for this hospital. She first sees a list of job/volunteer positions that the hospital is offering. When Lowa selects a position on the list it will redirect her to a different page with the position detailed information and application method.

Mark an admin can see the list of job/volunteer of all the positions including the position that is not available anymore. He can also fill out a different form to add a new position in the list. If a position has been filled he can then change the position in the record to not show up on the client side (to have them not apply to this job).

### Wireframes

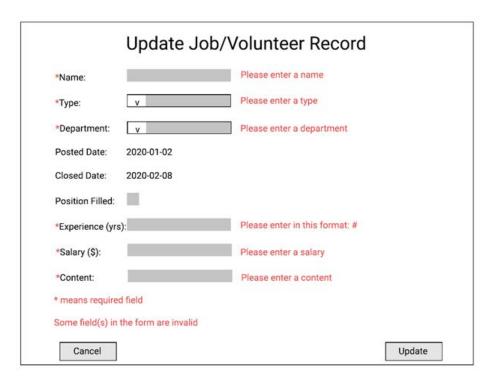
Admin Read Job/Volunteer Records / Filter the Records



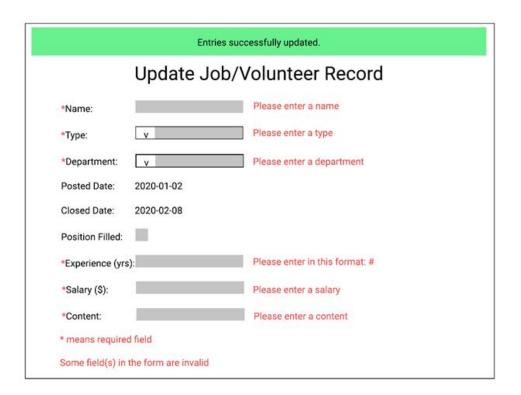
Admin Read Specific Job/Volunteer Record

Name:	Nurse	Upd	late	Dele
Туре:	Job			
Department:	Emergency			
Posted Date:	2020-01-02			
Closed Date:	2020-02-08			
Position Filled:	True			
Experience (yrs):	2			
Salary (\$):	70,000			
Content:	Job contents.			

Admin Update Job/Volunteer Record (Filling out form)



Admin Update Job/Volunteer Record Successfully



### Admin Delete Job/Volunteer Record (Attempt to delete [Modal Box Pop Up])



## Admin Delete Job/Volunteer Record Successfully



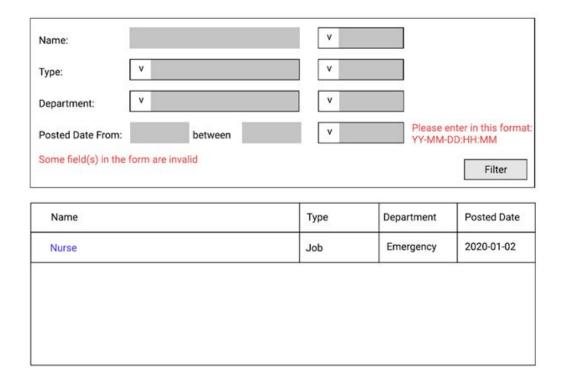
### Admin Add Job/Volunteer Record (Filling out form)



### Admin Add Job/Volunteer Record Successfully



#### User Read Job/Volunteer Records / Filter the Records



## User Read Specific Job/Volunteer Record



### **Donation Feature**

Developed by Christopher Maeda

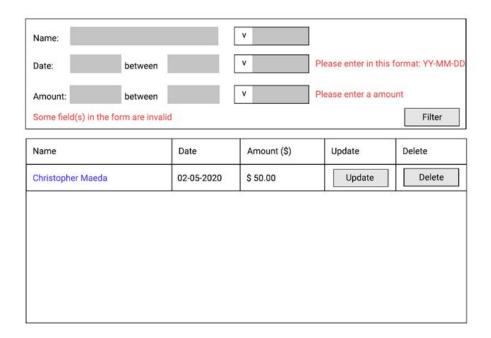
### **User Stories**

Adam as a client opens up the page to the donation and wants to make a donation of \$20. He will see a form that will kindly ask personal information about himself and amount that he will like to donate. After filling out those information he will see a billing information that will ask for his credit card information to complete this transaction. After completing the transaction, the donation page will reload itself and he will see a message that the transaction was successful.

Chris as admin can see the donation page with a list of donation records made to this hospital. Chris can read any donation records which the records will hold the personal information and the amount donated not including the credit card information. Chris can also delete a donation record which will refund the amount to the person that donated.

### Wireframes

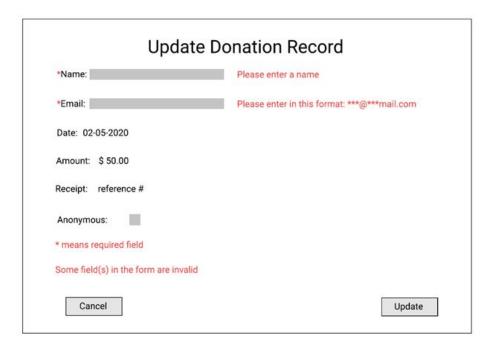
Admin Read Donation Records / Filter the Records



Admin Read Specific Donation Record

Name: Christopher Ma	eda	Update	Dele
Email: chris@gmail.co	om		
Date: 02-05-2020			
Amount: \$50.00			
Receipt: reference #			
Anonymous:			

### Admin Update Donation Record (Filling out form)



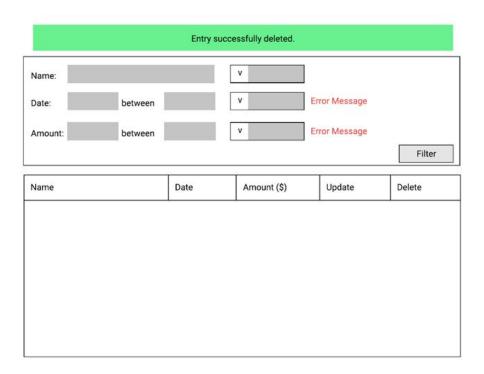
### Admin Update Donation Record Successfully



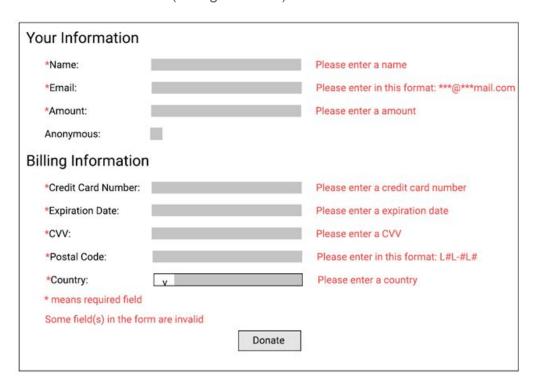
## Admin Delete Donation Record (Attempt to delete [Modal Box Pop Up])



## Admin Delete Donation Record Successfully



User donate to the site (Filling out form)



User donate successfully



## **Activity Records Graph Feature**

Developed by Sam Bebenek

### Description

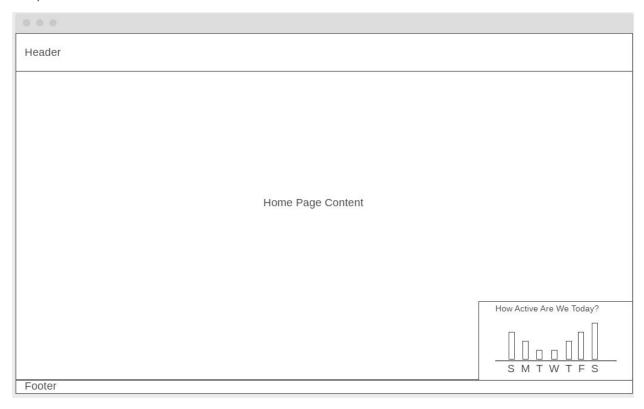
This feature displays a bar chart on the homepage of the website. Users are able to see how busy, on average, a given weekday is for the hospital. Admins are able to log how busy the hospital is on any given day from a scale of one to ten. The graph is then generated in Javascript by taking the average rating value of each weekday and using that to generate the height of each bar dynamically. The current weekday the graph is viewed on is also highlighted. The graph starts generating from an AJAX call that activates once the page is done loading, so that users visiting the website will be able to see the rest of the webpage's content without having to wait for the algorithm to pull values from the database and generate.

#### **User Stories**

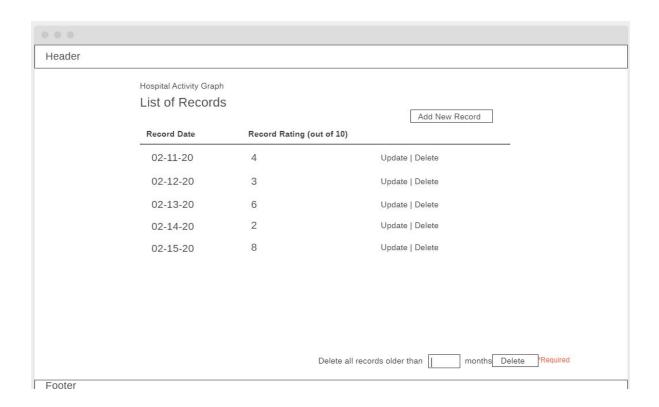
- 1. "Bobby, an anonymous user, is considering visiting the emergency room, however he wants to see how busy the hospital generally is on this day before deciding."
- 2. "Robert, an admin, wants to log how busy the hospital was today so that the graph stays up to date."
- 3. "Robert, an admin, messed up and put the wrong score in that day's entry, and wants to fix it."
- 4. "Robert, an admin, messed up again and wants to just delete the entry and start over."
- 5. "Robert, an admin, wants to delete all records older than three months."

## Wireframes

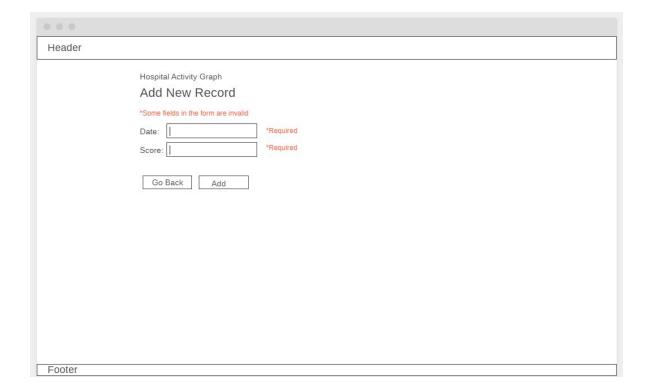
## Graph View



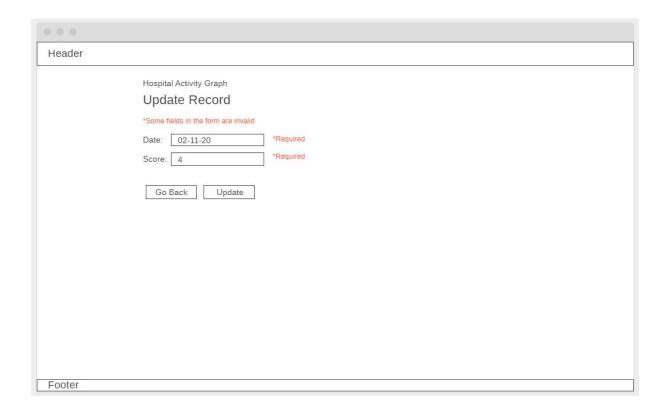
### Record List View



### Add Record View



#### **Update Record View**



## Image Gallery Feature

Developed by Sam Bebenek

### Description

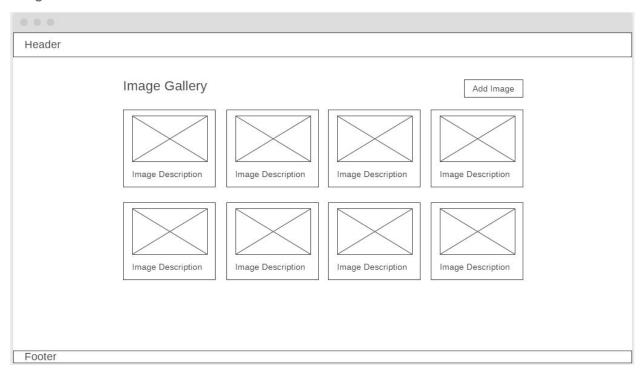
This feature is an image gallery users can visit to see images the hospital has posted. Clicking on an image will display a window that shows the image in more detail, along with a description. Admins are able to add, update, and delete images.

#### **User Stories**

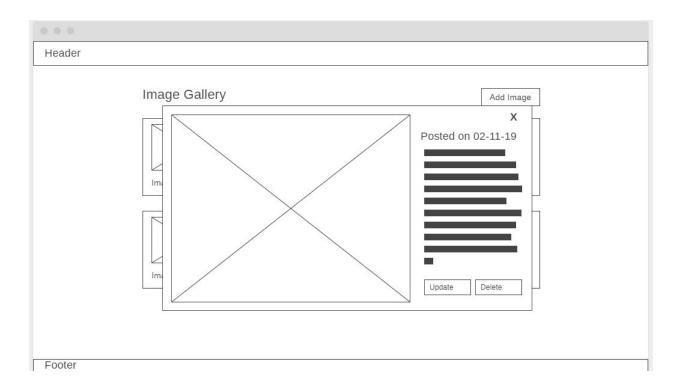
- 1. "Sarah, an anonymous user, wants to see pictures of a past event before deciding if he wants to go to a future one."
- 2. "Robert, an admin, wants to add pictures from the latest hospital event to the website"
- 3. "Robert, an admin, wants him to delete some images from a past event."
- 4. "Robert, an admin, wants to change the description on a particular image."

## Wireframes

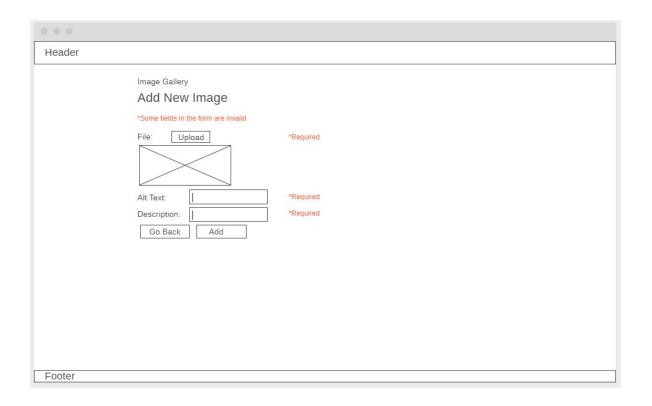
## Image List View



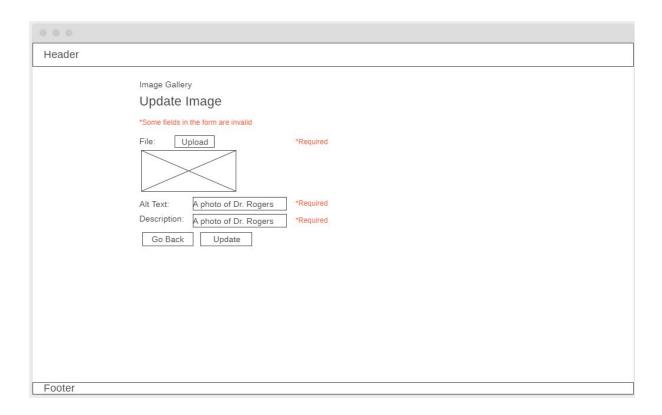
## Image Detail View



## Add Image View



## Update Image View



#### **News Article Feature**

Developed by Joshua Silveira

### Description

The news article feature displays all the articles in a list 3 per page across several pages if more than 3 articles are in the system. Furthermore if the user is an admin they can click on the article title to view an update screen where they can further edit the article. Admins may also choose to delete the article in the same view. Admins also have a button available to add more articles, this button is displayed in the article list page.

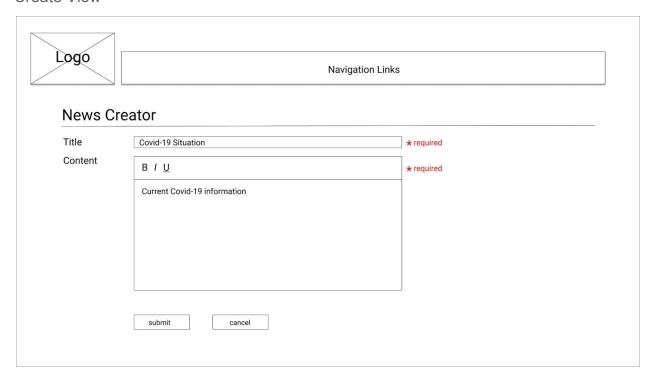
#### **User Stories**

Margeret is an anonymous user, she is concerned about the current pandemic and wishes to know if the hospital has any information on the crisis. After Margaret clicks on the News link on the main navigation bar she can view all the new articles posted.

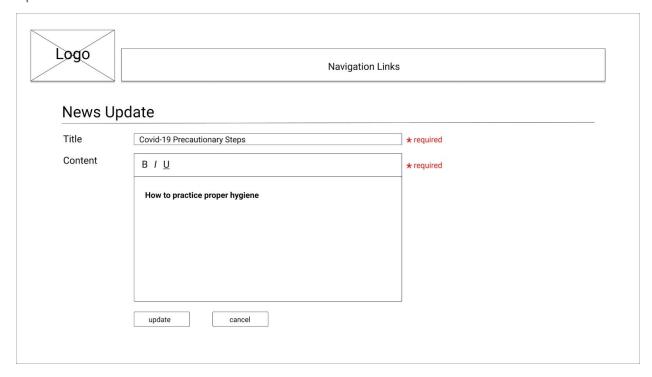
Ryan is a hospital administrator, he has just finished a conference call with the mayor and other health care providers in the area. He wishes to post an article on the website about opening the new ward to facilitate COVID-19 cases. After clicking on the list of articles Ryan can click on the add article button. Ryan can now type in his new article and also has access to a Rich Text Editor so he may format his article to deliver the information effectively. Ryan can also update older articles if so wishes. Furthermore Ryan chooses to delete some older articles with irrelevant information.

### Wireframes

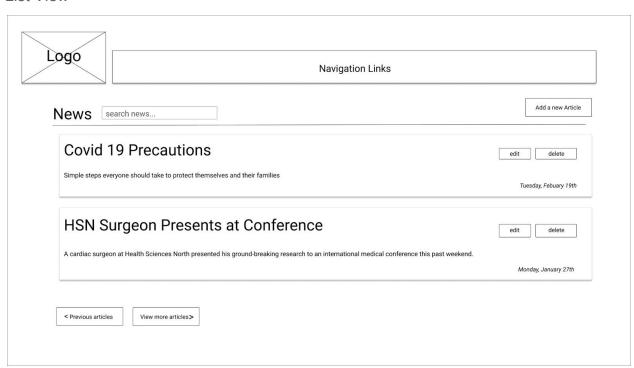
### Create View



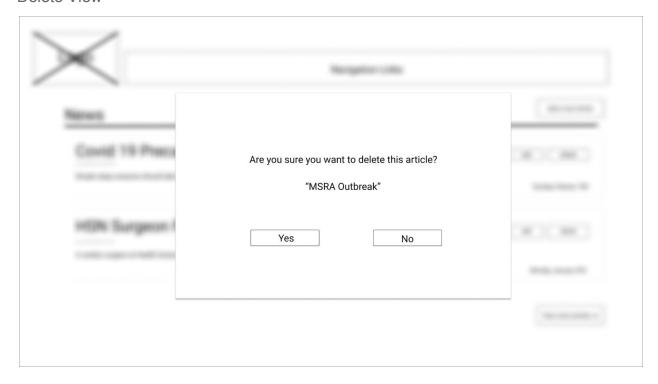
## Update View



#### List View



#### **Delete View**



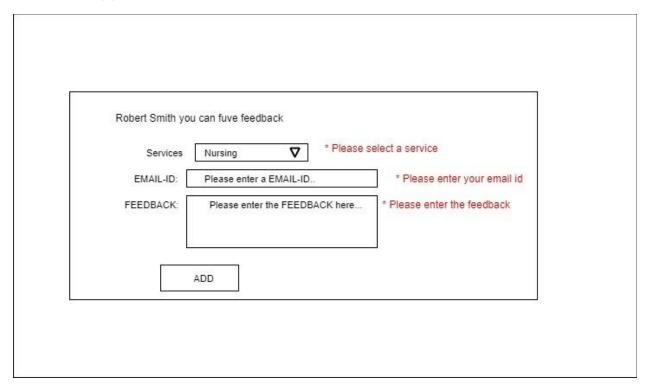
### Feedback

When the user goes to this page, they will see a text-box and a submit button. In the text box they can write any feedback they would like to give. User's statements will be saved in the database. Whereas, the admin can post the good feedback on the website by not revealing the user details.

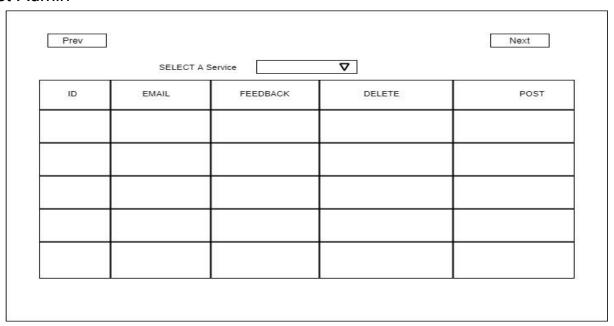
#### **User-stories:**

- An admin can read/view the details
- · An admin can post the feedback on the main page of the website
- · An admin can direct the feedback to the particular department concerning it
- An admin can delete the feedback from the database if it is of less importance or repetitive.
- · A user can fill the form by selecting a particular service

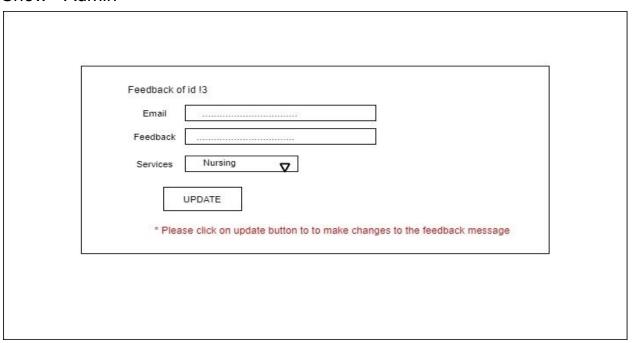
## Create - logged-in user



## List-Admin



### Show - Admin



## Update - Admin



## Frequently Asked Question

This page displays a list of frequently asked questions with their answers. These are those questions which the user generally asks. The questions are made and posted with answers by the admin based on user search or queries submitted through suggestion/feedback form.

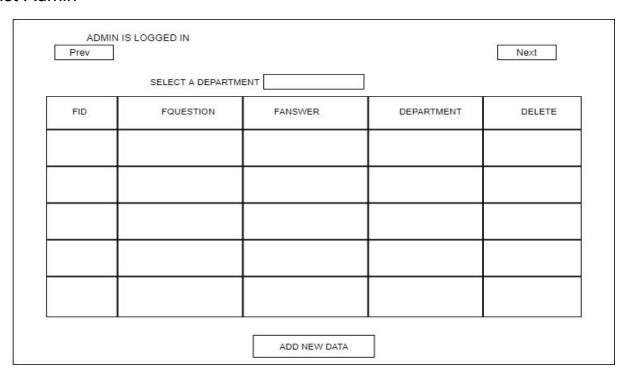
#### **User-stories:**

- · An admin can create the questions for a particular department
- · An admin can view the questions
- · An admin can update the list
- · An admin can delete the questions
- · A user can view the list of frequently asked questions which are common
- A user can view the list of frequently asked questions particular to a department

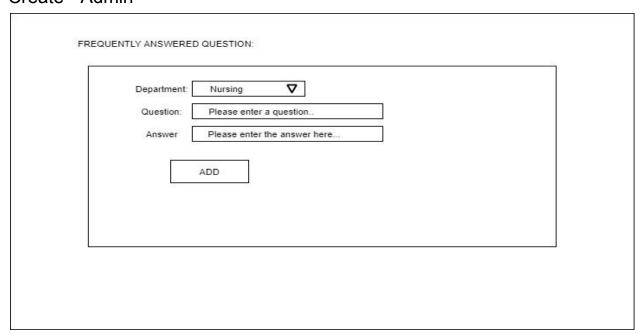
### List - User

PREV			NEXT
	Select a department [		
FID	FQUESTION	FANSWER	DEPARTMENT
		<u> </u>	
		+	
		+	

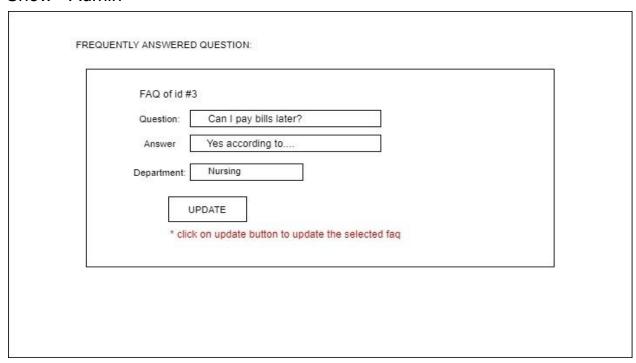
### List-Admin



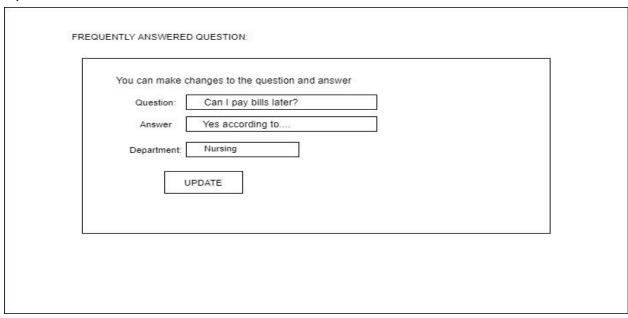
## Create - Admin



## Show - Admin



# Update - Admin



# **Doctor Directory**

It's a feature for the hospital patients or users so that they can see the doctor information who are working in the hospital. Where they can see the useful information of the doctor such as doctor' full name, doctor's department and their working days.

From an admin perspective, they can see the list of the doctor and an admin is able to see the complete information of the doctor from there they can update and delete the doctor information. And, from the list page they can add the information of the new doctor.

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#### **Database Table:**

#### **Doctors Table:**

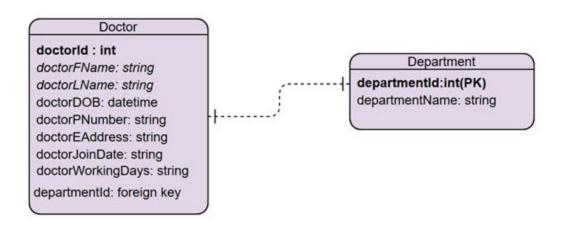
Column	Datatype	Nullable	Description
doctorId	int	primary key	auto-generated
doctorFName	string	required	
doctorLName	string	required	
doctorDOB	date	required	
doctorPNumber	string	required	

doctorEAddrres	string	required	
doctorJoinDate	date	required	
doctorWorkingDays	string		
departmentId	foreign key	required	reference (department table)

### **Department Table:**

Column	Datatype	Nullable	Description
departmentId	int	Primary key	auto-generated
departmentName	string	required	The departments name

# **ERD**



Doctor to the department has a one to one relationship. Such as one doctor only working in one department at time.

For example: "Sukh" is a doctor of HSN hospital. She has a specialty in the child department and surgery department. But she can not work in both departments at the same time. As she works in the child department for the first month and she is doing her next month in the surgery department means her department of working is changed which we can update as well. But originally, she is working in one department only.

#### Wireframe CURD

#### Admin Create

Only the admin can add the doctor information in the database:

Add Do	ctor Information:
First Name: Last Name: Date of Birth: Phone Number: Email Address: Join Date: Working Days:	
Department Name:	Department Name   *  * Required

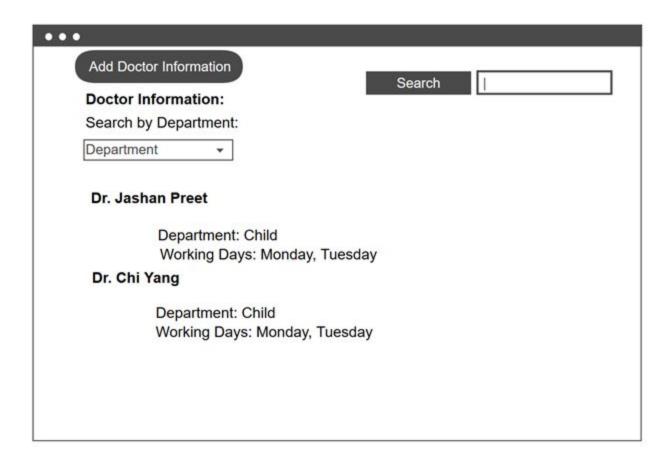
#### Read

Users can read only the useful information of the doctor. But an admin is allowed to see the full information of the doctor.

### **User Read:**

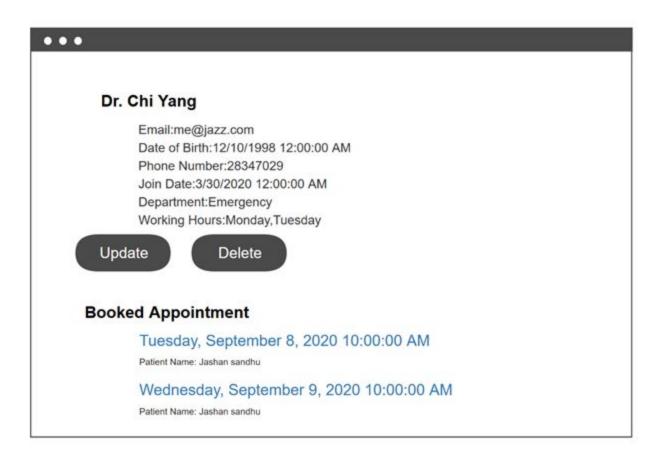
Doctor Information:		Search	
Search by Department:			
Department •			
Dr. Jashan Preet			
Department			
Working Da	/s: Monday, Τι	iesday	
Dr. Chi Yang			
Department:	Child		
	s: Monday, Tu	esday	

### Admin Read:



### **Admin Read Description:**

Admin read view for the description:



# Admin Update

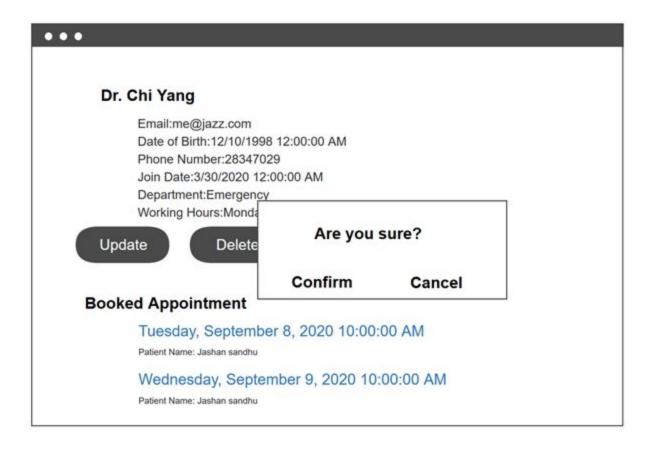
Only the admin can update the doctor information:

First Name:	Dr. Chi	*
Last Name:	Yang	<del></del>
Date-of-Birth:	13-10-1998	*
Phone Number:	xxx-xxx-xxxx	•
Email Address:	me@xxx.xx	*
Join Date:	12-10-2000	*
Working Days:	Monday	*
Department Name:	Child	*

Change the information in the fields and click on the update and it will update the information in the db and redirect to you the list page with updated information.

#### Admin Delete

From the description page click on the delete button will pop up the new window for confirmation. On confirm it will delete the data from the database and redirect to you the list page.



# **Book an Appointment**

This is the feature where a logged-in user can book their appointments with the doctor. for this, the user must have to fill the patient information first if not then the user doesn't allow to book the appointment. A user can see only their own appointments which he/she can update or delete. A user can only have one patient information in their account which they can update or delete but cannot enter more than one information of the patient. Which eliminates the duplicate entry of a patient.

From an admin perspective, an admin can see the list of appointments and patients which they can update or delete.

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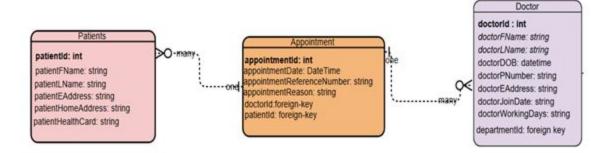
**Patients:** 

Column	Datatype	Nullable	Description
patientId	int	primary key	Auto-generated
patientFName	string	required	
patientLName	string	required	
patientEAddress	string	required	
patientPNumber	int	required	
patientHAddress	string	required	
patientHealthCard	int	required	

# **Appointments:**

Column	Datatype	Nullable	Description
appointmentId	int	primary key	auto-generated
appointmentDate	DateTime	required	
appointmentReferenceNumber	string	required	Auto generated
appointmentReason	String	required	
doctorId	Foreign key	required	Reference (Doctors)
patientId	Foreign key	required	Reference (Patients)

# **ERD**



# Wireframes CRUD

#### Add

Only the logged in user can book the appointment. For this a user needs to add the patient information first. Only that user and admin can read, update and delete patient information and appointments

A user can add, read and update patient information:

#### **Add Patient Information:**

•••				
Add Patient Informaton:				
First Name:	*			
Last Name:	*			
Email Address:	*			
Phone Number:	*			
Home Address:	*			
Health Card Number:	1			
Add	* = Required			

Patient Firstname Lastname:

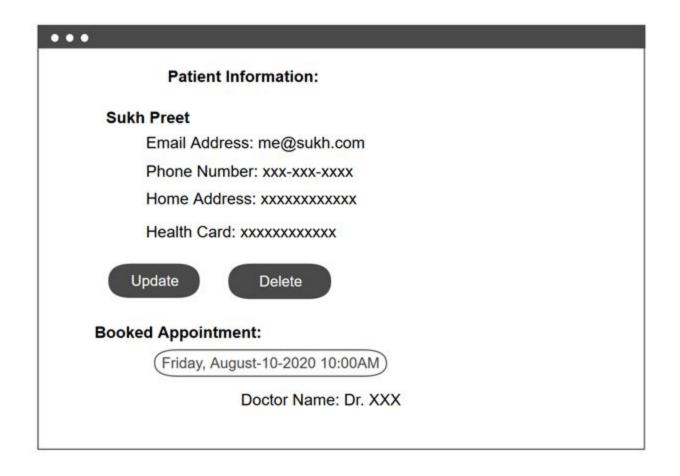
Email address: xxx@xx.xx

Joy Betere

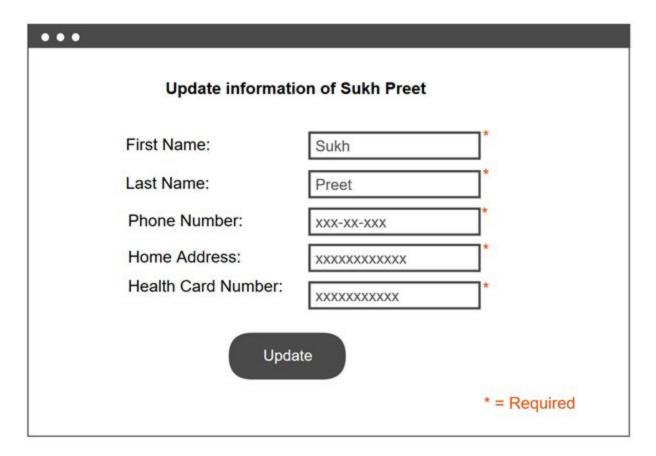
Email address: xxx@xx.xx

Joy Betere

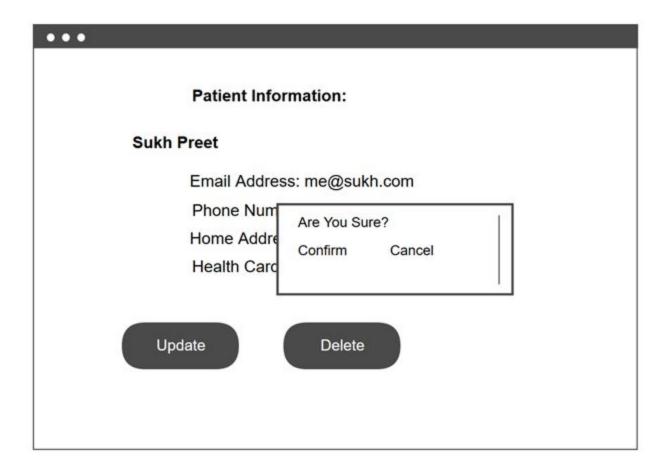
Email address: xxx@xx.xx



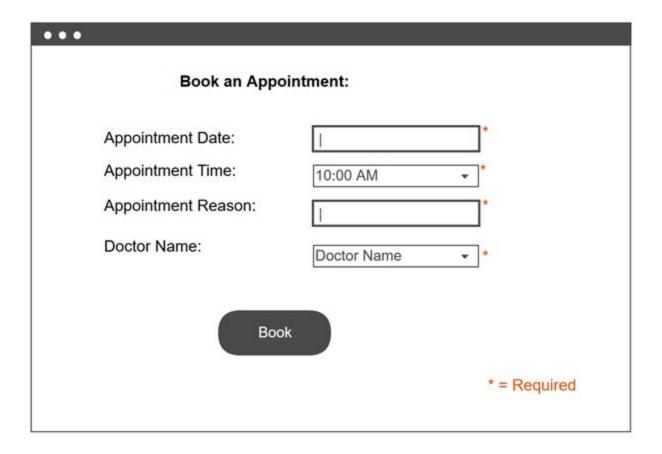
# **Update Patient Information**



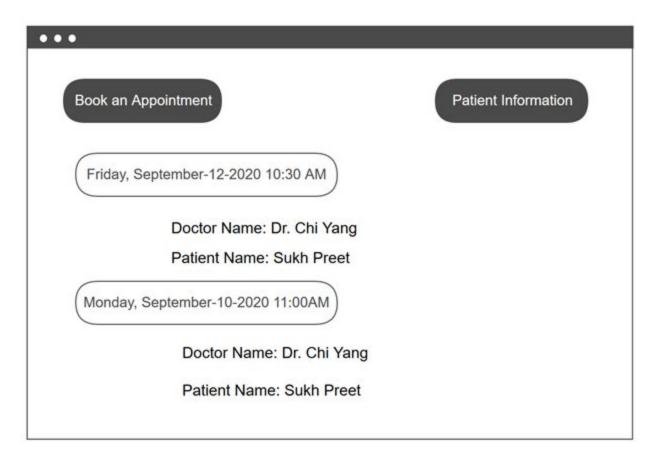
#### **Delete Patient Information**



# Create an Appointment



### Admin/User Read Appointment



#### Admin Appointment Read View

An admin can see the list of patients and appointments which is booked by users. An admin can update or delete that information too.

•••

# Book an Appointment

# Patient Information

Friday, September-12-2020 10:30 AM

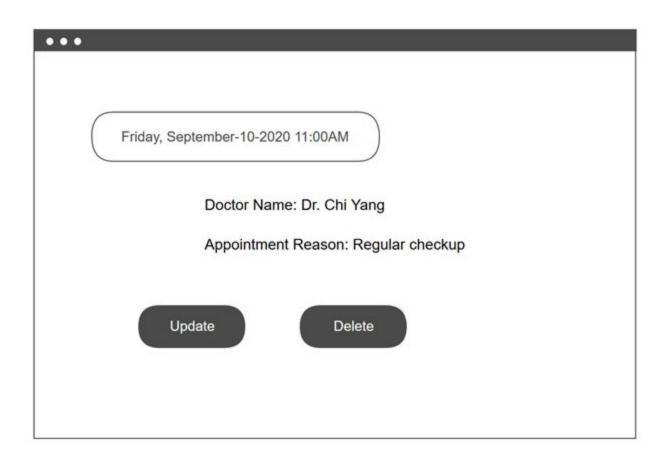
Doctor Name: Dr. Chi Yang

Patient Name: Sukh Preet

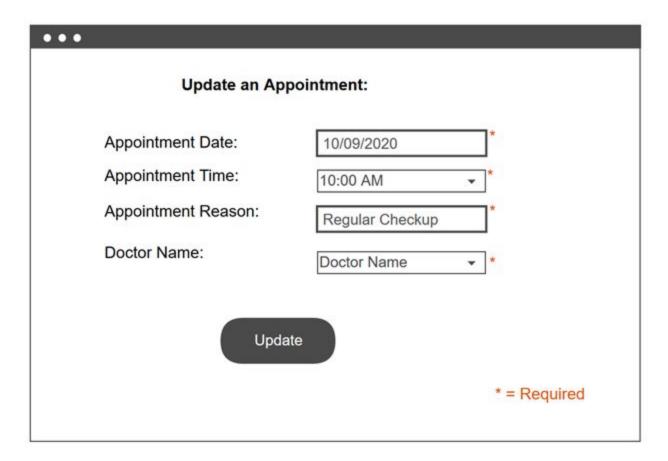
Monday, September-10-2020 11:00AM

Doctor Name: Dr. Chi Yang

Patient Name: Joy



# Admin/User Update Appointment



# Admin/User Delete Appointment:

