The pages for this website are

* [login](#_Login)
* [forgot password](#_Forgot_Password)
* [reset password](#_Reset_Password)
* [sign up](#_Sign_Up)
* [settings](#_Settings)
* [schedules](#_Schedules)
* [employees](#_Employees)
* [coverage](#_Coverage)
* [roles](#_Roles)

# Authentication

Users can access four of these pages without authentication: Login, Forgot Password, Reset Password, and Sign Up.

## Login

The login page has header text of “Welcome Back!”

### Form

Under the header is a form with two fields: username and password.

The password field will need an input mask.

The form’s submit button is labeled “Login”.

### Submit Behavior

On submission, the form hashes the password and compares the username and hashed password to the user database.

If the username and hashed password match a record in the database, the button will direct the user to the Schedules page. Otherwise, an error message is shown.

### Links

Directly under the Password field is a hyperlink which says, “Forgot your password?” and references the Forgot Password page.

Under the form’s submit button is text that reads, “Need an account? Sign Up”.

The words “Sign Up” are a hyperlink to the Sign Up page.

## Forgot Password

The Forgot Password page has header text of “Forgot your password?”

### Form

Under the header is a form with one field labeled “USERNAME (this is your email)”.

The form’s submit button is labeled “Send Recovery Email”.

### Submit Behavior

On submission, the app sends an email to the specified email address.  
The email will have a link for the user to click.  
Finally, the user is directed back to the home page (login).

## Reset Password

The Reset Password page has header text of “Reset your password”

### Form

Under the header is a form with two passwords fields.

The top field is labeled “Password” and the second field is labeled “Confirm Password”.

The form’s submit button is labeled “Confirm”.

### Submit Behavior

On submission, the app updates the user’s record with the new hashed password.  
The user is directed back to the login page.

## Sign Up

The login page has header text of “Welcome to Floor Coverage!”

### Form

Under the header is a form with four fields.  
Their labels are

* Email (this will be your username)
* Password
* Confirm Password
* Company Name

The email field should have client-side validation to ensure it is an email address.

The password fields will need to be masked.

The form’s submit button is labeled “Create Account”.

### Submit Behavior

On submission, the form compares the username against all existing usernames in the database.  
If it is unique, it hashes the password and creates a new record. Otherwise, an error message is shown.

The value in Company Name will be saved to the settings database.

### Links

Under the form’s submit button is text that reads, “Already have an account? Login”.

The word “Login” is a hyperlink to the Login page.

# Application

After authentication, users can access the remaining pages: settings, schedules, employees, coverage, and roles.

All of these pages have a menu along the top with links to each of the five pages.

The link to Settings is a cogwheel in the top-right corner by the company’s name.

The links to the other four pages are buttons with text.

## Settings

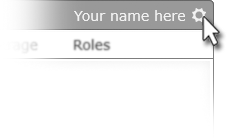
### First View

**NOTE:** If the previous page was Sign Up, a custom welcome message will be shown. The rest of the page will be darkened so that the focus is the message.

#### Message

The message says, “Since it's your first time here, let's briefly run through how to use this app.

Right now, you're on the Settings page. This page allows you to personalize some aspects of how the application works. You can return later by clicking the cogwheel in the upper right-hand corner of any screen.



Once you've customized your settings, you'll want to enter your data. Across the top of the screen, you'll see links to Schedules, Employees, Coverage, and Roles.



On the very first visit, we recommend visiting these pages in reverse order; that is: Roles, Coverage, Employees, and then Schedules.

### Normal Page

After clicking outside the message popup (and on subsequent visits), the Settings page will allow the user to modify all options in the Settings database.

At the time of this writing, those options are:

|  |  |  |  |
| --- | --- | --- | --- |
| Input Label | Input Type | Database column | Database Type |
| Company Name | text | name | string |
| Start of Week | dropdown | week\_start | integer |
| Time Format | radio | time\_format | integer |
| Weeks to Generate | number | schedule\_weeks | integer |
| Avg Shift Length | number | avg\_shift\_length | integer |
| Maximum Daily Hours | number | max\_daily | integer |
| Maximum Weekly Hours | number | max\_weekly | integer |

## Schedules

The mockup for this page currently shows three buttons with an icon next to each.

The buttons are called Generate New Schedule, View or Modify Current Schedule, and View Past Schedules.

I do not yet have mockups for how the user will interface with this part of the application.

## Employees

The initial view of the Employees page is an empty table with a few rows showing.

### Table

The table columns shown are Last Name, First Name, and Roles.

Once the table is populated with at least one record, the user can click a row to reveal a panel with further details on that employee. Ideally, the user will be able to click directly in the table to add data.

### Buttons

Below the table are four buttons: Add Employee, Import from File, View Inactive, Clear Database.

|  |  |
| --- | --- |
| Add Employee | As a fallback for directly entering data into the table (or for accessibility), this button will allow the user to submit info through a form. A second submit button will say “Save and Add Another” to streamline the process. |
| Import from File | At a minimum this must accept .txt and .csv files. This **does not** overwrite old data. |
| View Inactive | Toggles between populating the table with active and inactive employees |
| Clear Database | Empties the database |

### Details Panel

The details panel will allow the user to update the employee’s weekly availability, roles, and active/inactive status.

#### Availability

The initial view of the employee’s availability is seven empty fields labeled Sun – Sat.

Clicking on any field will allow the user to add a time range using a time picker for the start and end times.

As an example, clicking 10:00 AM as the start and 2:00 PM as the end would update the field to say 10:00 AM – 2:00 PM (if time format is 12-hour). However, it will save to the database in 24-hour format.

After one range is entered, a link labeled “additional hours” will appear below the range to allow the user to add multiple ranges in a single day.

Continuing the previous example, if the user clicks “additional hours”, the same Start/End popup will appear and the user might choose a time range of 6:00 PM – 10:00 PM. In this case, the field would read 10:00 AM – 2:00 PM, 6:00 PM – 10:00 PM with each range on a separate line. This would save to the database as 10:00-14:00, 18:00-22:00.  
  
Clicking a time entry will allow you to modify or delete it.

Considerations: We’ll want basic data sanitization to consolidate time overlaps and prevent negative ranges.

#### Roles

Roles which are already assigned to the employee will appear in a list which can be dragged and dropped to indicate priority.

Beside each role will be an x or trashcan to delete the role.

Under the list will be a button to add roles to that employee.

#### Notes

A text area exists so that managers can keep notes such as approved days off (which is a stretch goal), complaints, accolades, ect.

#### Status

Button toggles employee between active and inactive status.

## Coverage

### Page Behavior

If no roles exist, this will display a message that roles need to be established and redirect to the roles page.

If there are no coverage rules, this will display the interface to modify coverage rules.

Otherwise, this page will display the current coverage rules.

### Data Representation

The data will appear within a scroll box so that it can still be displayed on a small viewport.  
The presentation will largely follow the modification interface (see below) except that there will be headings above the schedule describing which day(s) the rules apply to and the rules for all days will be side-by-side, divided by a vertical line.

### Modify Interface

Seven buttons along the top are represent each day of the week.

A user can click the buttons to set the same coverage rules for multiple days.

This page displays horizontal lines representing each hour of the day from 0:00 to 23:59.

#### Behavior

Using the horizontal lines as a guide, the user can click and drag from the start to end time of their shift to display a popup window. (Another button reproduces this functionality for users who can't or don't want to use click-n-drag.)

If the user used drag-and-drop to trigger the popup, the Start and End times will be pre-filled based on the time frame the user dragged. Regardless of how the user displayed the popup, the times can be edited from this window.

The popup allows (but does not require) the user to name the shift.

The popup includes a list of all roles.

Next to each role, a field allows the user to indicate how many people are required in that role for the shift.

A confirm button at the bottom of the popup confirms the shift and adds it to the coverage view as a rectangle overlay on the horizontal lines.

Dragging the top or bottom edge of the rectangle overlay changes the Start or End time respectively.

Dragging from the middle of the rectangle keeps the same duration but modifies both the Start and End times according to the new position.

#### Buttons

Three buttons appear at the bottom.

|  |  |
| --- | --- |
| Reset Shifts | Clears the shifts on the current screen. |
| Add Shift to Schedule | Reproduces the click-n-drag functionality with a form. |
| Confirm Shifts | Prompts a confirmation before saving the shifts to the selected day(s). |

#### Confirmation Prompt

Once the user has finished defining the coverage rules for the selected day(s), the button “Confirm Shifts” will trigger a popup requesting confirmation before the changes are overwritten.

The popup panel will say “Is this correct?” and display the rules as well as the day(s) to which the rules will be applied.

The buttons along the bottom of the confirmation prompt are:

|  |  |
| --- | --- |
| Modify these Shifts | Returns to the previous screen. |
| Reset these Shifts | Clears all data and returns to the previous screen. |
| Save and Add New | Saves the shifts to the selected day(s) and returns to the Modification interface. |
| Save and Finish | Saves the shifts to the selected day(s) and returns to the default Coverage page. |

## Roles

The Roles page has header text of “Click and Drag to order roles by importance”.

### Default View

Before any data has been entered, the default view is mostly blank.

A vertical line divides the screen roughly in half.

On the left, fields exist to manually enter data.

*(Wish list: It would be ideal if copy-pasting text with line breaks resulted in the app recognizing each line as a separate line item.)*

Below, buttons labeled “Import from File” and “Clear all Roles” allow for other methods of data management. As with other import buttons, this should not overwrite existing data.

### Behavior

After roles have been added to the list, they will appear as list items which can be rearranged by drag-n-drop. Higher priority roles will be established earlier in the algorithm than less important roles.

Next to each list item is a pencil icon to rename the role and an X icon to delete it.

Clicking a role in the list causes information to appear on the right half of the screen.  
A header will indicate which role has been clicked and a list of all employees will be shown with checkboxes next to each name. Each employee who is associated with that role will have the box checked. Unchecking the box will remove that role from the employee. Checking the box will add the role to the employee **at the lowest priority**. A warning should appear mentioning that the role is the lowest priority and providing a link to that employee’s detail panel to rearrange the roles if desired.