

Scheduler

Overview

Scheduler is a program written to help automate the process of scheduling volunteers for church activities. It is written to be accessible via browser so that it may be easily used from an office, from home or even from cell phones. The code is written to allow you to:

- Define a list of volunteer positions that need to be filled and when the volunteer should arrive.
- Define a list of volunteers. Volunteers may specify:
 - Days when they are unavailable.
 - Days when they would prefer to serve (say for instance, their daughter would be visiting and they would like to provide communion together).
 - Positions that they would like to volunteer for.
 - How they wish to be contacted (email, text, or both).
- Generate schedules for a given date range.
- View schedules for a given date range.
- Send requests to volunteers (via email or text message) to ask them to update their information before a new schedule is generated.
- Send a personalized list of service dates to volunteers (via email or text).
- Send reminders (via email or text) to volunteers who are scheduled to serve within the next week.

Quickstart

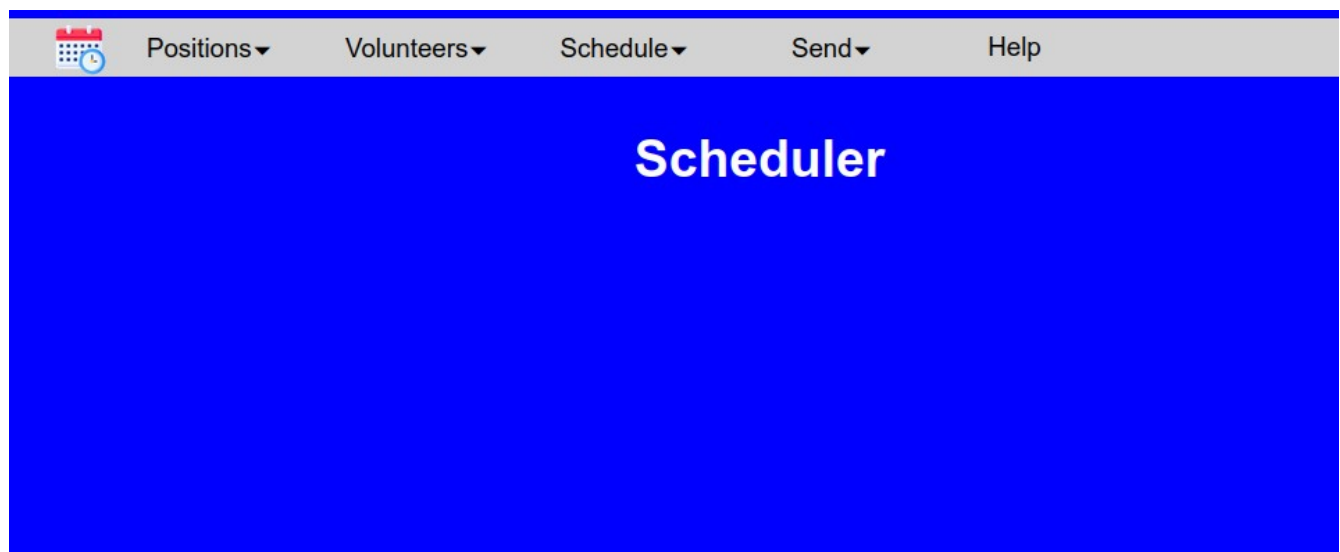
Here is a quick summary of the steps in getting started, with more detail following:

1. From the main menu, select **Positions** and define an entry for each position that is needed. Note that for each position you can indicate how many people are needed to fill that role on a given date.
2. From the main menu, select **Volunteers** and from that page, make an entry for each person who wishes to volunteer. For each person you can enter their name, email, phone number, how they prefer to be contacted, position(s) that they wish to volunteer for (selected from the previously defined list) and optionally any dates for which they are not available, or dates when they would prefer to be chosen to volunteer.

3. If you wish to allow individuals to update their information before generating a schedule, select **Send** from the menu bar, and select **Send Info Update Requests** from the drop-down menu. This will send email and or text messages to each volunteer asking them to update their information and providing them a browser link that they can use to make the updates.
4. When ready to generate a schedule, select **Schedule** from the menu bar and select the **Generate Schedule** item from the drop-down menu. This will direct you to a page where you may specify the dates to generate the schedule for. A schedule will be generated and you will be directed to the “View Schedule” page. If all positions were filled, the program will send personal schedules to each person in the schedule, with the dates when they are requested to serve and the positions that they will fill.
5. If the schedule has some positions which were not filled, you will need to fill them manually and once the schedule is complete, you can select the **Send** and **Send Schedules** items on the menu bar to send schedules to each volunteer.
6. To send reminders to volunteers each week, simply click **Send** and then **Send Weekly Reminders** from the drop-down menu. Each person who is scheduled to volunteer that week will receive a reminder via text or email.

And now in a little more detail...

To begin using Scheduler for the first time, start by connecting to the web page, which should look something like this:



In the top left corner is the Scheduler icon. Clicking on this icon will return you to the home page. As your first time using the system, you should begin by clicking on the **Positions** menu item, and select the **Add Positions** entry. This will direct you to a screen that looks like this:

 Positions▼ Volunteers▼ Schedule▼ Send▼ Help

Add Volunteer Positions

Position:

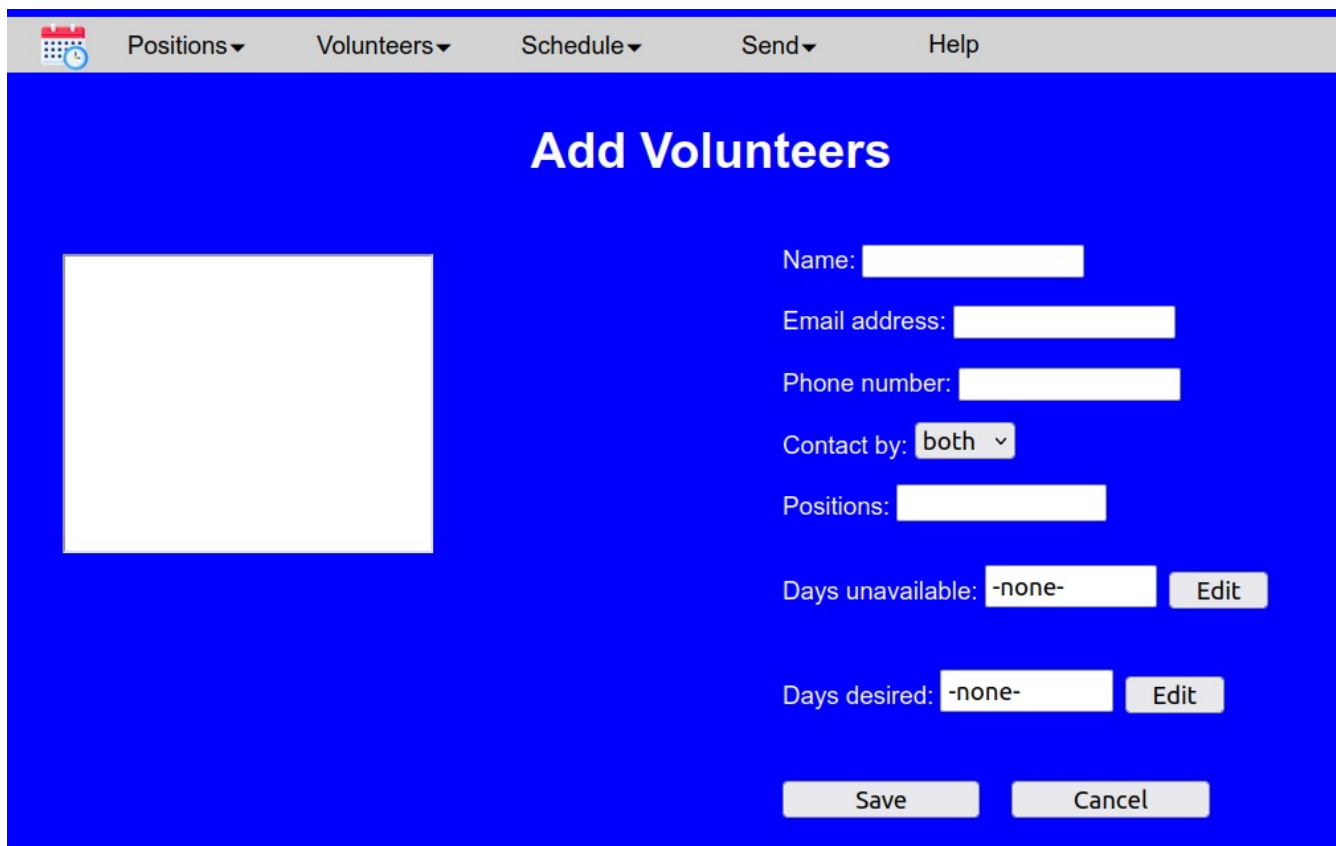
Day Needed: Sunday ▼

Time when service needed: 10 : 45 AM

Number of volunteers needed: 1

The box on the left will show the names of volunteer positions, but initially, it is empty. From this screen you will define the positions that need to be scheduled. Continue adding and saving entries into the table until all of the positions that need to be scheduled have been defined.

Next you will want to enter all of the volunteers. To do so, click on **Volunteers** in the menu bar at the top of the screen and select the **Add Volunteers** entry from the drop-down menu. It will direct you to a screen that looks like this:



Add Volunteers

Name:

Email address:

Phone number:

Contact by:

Positions:

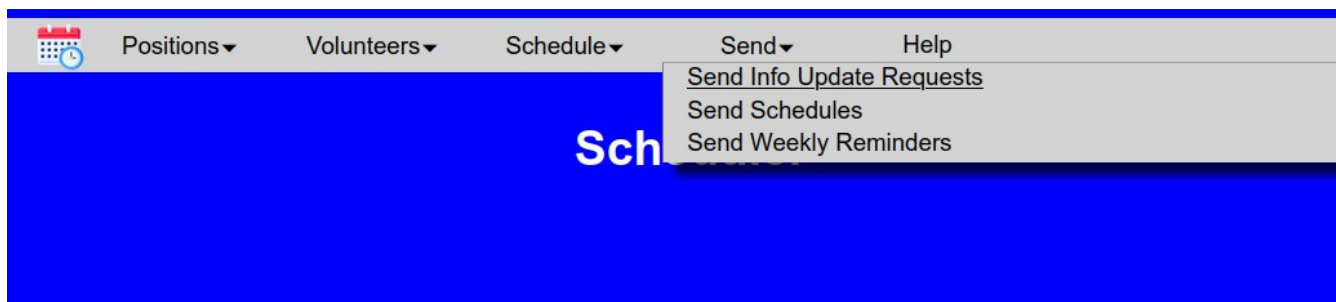
Days unavailable:

Days desired:

From here you can enter the information for each volunteer. If possible provide both email address and the phone number to receive texts and select whether the Scheduler program should contact this person by text, by email, or both. The “Positions” entry will include the position titles that you provided while building the positions table. Make sure that you select at least one of the positions for the person to volunteer for. Multiple selections from the list are possible by holding down the control key while you make a selection.

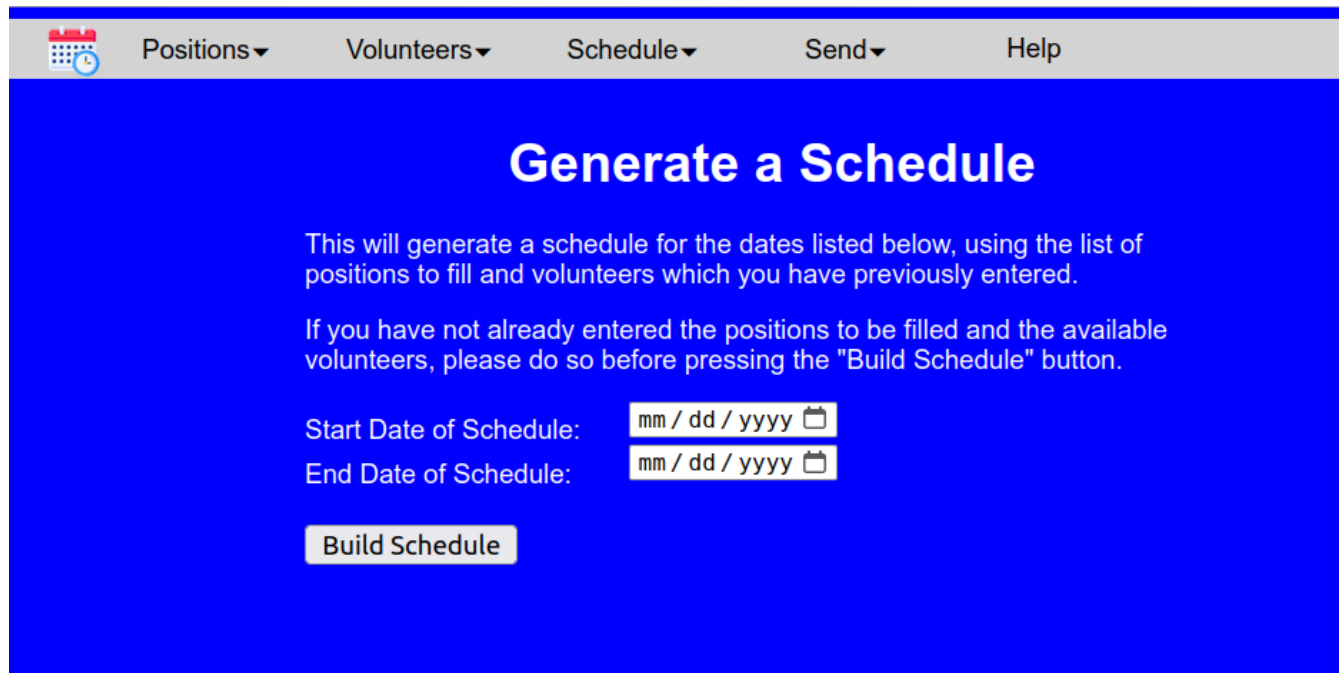
When you have entered the information for a volunteer, click the save button. The program will save the information and clear the fields so that you may enter another volunteer. Continue adding volunteers until all volunteer names have been entered.

At this point, you may wish to give your volunteers the opportunity to review the information and possibly update it. You may send out requests to all of the volunteers in your list asking them to to update their information by clicking on the **Send** item on the menu bar and selecting **Send Info Update Requests** from the drop-down menu.



Each person from the volunteer list will receive an email or text asking if they need to update their information, along with a link which will let them update their information.

Once all of the volunteer information has been verified, you are ready to generate a schedule. To do so, select **Schedule** from the menu bar and select **Generate Schedule** from the drop-down menu. You will be directed to a screen like this, that asks you to enter the first and last dates to include in the new schedule.

The screenshot shows a web application interface with a blue header bar containing navigation links: 'Positions', 'Volunteers', 'Schedule', 'Send', and 'Help'. Below the header is a large blue rectangular area with the title 'Generate a Schedule' in white text. The text inside the blue area explains that the schedule will be generated for the dates listed below, using the list of positions and volunteers previously entered. It also includes a note that if the user has not already entered positions and volunteers, they should do so before pressing the 'Build Schedule' button. There are two input fields for dates, each with a placeholder 'mm / dd / yyyy' and a calendar icon. The first field is labeled 'Start Date of Schedule:' and the second is labeled 'End Date of Schedule:'. Below these fields is a yellow button labeled 'Build Schedule'.

From this screen, enter the starting and ending dates. You may enter numbers into the mm / dd / yyyy fields or click the calendar icon to be provided with a calendar for selecting the dates. Note that the dates are inclusive, so if, for example, you select 01/05/2025 and 01/26/2025 as the starting and ending dates, both of those dates will be scheduled (if those are weekdays that you have positions to fill). When you have finished, press the **Build Schedule** button.

Scheduler will then calculate the dates when positions need to be filled and try to find a volunteer to serve in each position for each of those dates. When it has finished, it will show you the schedule that it generated. The screen will look something like this:

[Positions](#)[Volunteers▼](#)[Schedule▼](#)[Send▼](#)[Help](#)

View Schedule

Here is the current schedule for **2025-01-05** through **2025-01-26**

Scheduling complete, volunteers are being notified.

2025-01-05

communion

FriendlyFred

greeter

NewGuy

scripture reader

Garry Taylor

techBooth

Tech Savy

2025-01-12

communion

Smiley

greeter

FriendlyFred

scripture reader

EasyReader

techBooth

Tech Savy

2025-01-19

If Scheduler was able to fill all of the slots, it will display the message saying “Scheduling complete, volunteers are being notified,” and all of the people in the schedule will receive a message telling them the dates that they are scheduled to serve and the positions that they will be filling.

If the Scheduler was not able to fill all of the slots, the screen will look like this:

View Schedule

Here is the current schedule for **2025-01-05** through **2025-01-26**

Please note that not all positions may have been filled.

2025-01-05

- communion**
Smiley
- greeter**
NewGuy
- nursery**
—unfilled—
- scripture reader**
EasyReader
- techBooth**
Bubba

2025-01-12

- communion**
Some One
- greeter**
NewGuy
- nursery**
—unfilled—
- scripture reader**
Garry Taylor

with the message indicating that all slots were not filled. Note that if this occurs, Scheduler will not automatically send out schedule notices to the volunteers, since some changes may first need to be made to the schedule. If this occurs, you may need to manually edit the schedule. To do so, click on the name (or “—unfilled—”) and an edit box will pop up showing you the names of all volunteers who offered to work in this position.

Positions Volunteers Schedule Send Help

Edit Volunteer Slot

Choose someone for the **communion** position on 2025-01-05:

Volunteer: Bubba

Save Cancel

2025-01-05

communion
Smiley

greeter
NewGuy

Pick one of the names from the drop-down list of volunteers and press the **Save** button to save the change to the schedule.

When you have completed the changes to the schedule, you may then want to send the personal schedules to each of the volunteers. To do so, select **Send** from the menu bar and click the **Send Schedules** entry.

Positions Volunteers Schedule Send Help

- Send Info Update Requests
- Send Schedules
- Send Weekly Reminders

Here is the current schedule for 2025-01-05 through 2025-01-26

You will be redirected to this screen, where you can enter the start and end dates of the schedule that you wish to send out.

Positions Volunteers Schedule Send Help

Send Schedule to Volunteers

This will send copies of the schedule for the dates that you enter below to the appropriate volunteers.

Start Date of Schedule: mm / dd / yyyy

End Date of Schedule: mm / dd / yyyy

Send Schedule

Select the starting and ending dates and then press the Send Schedule button to send out the personal schedules to each volunteer who was scheduled.

Each week, you may wish to send out reminders to the volunteers who are scheduled to work that week. To do so, click the **Send** entry on menu bar and then select **Send Weekly Reminders**.



This will cause Scheduler to send out a reminder to each person scheduled to work that week, reminding them of the position that they will be filling and when they are needed. Note that Scheduler keeps track of who it has sent reminders to, so if you accidentally do this more than once in a week, it will not send out duplicate reminders.

Tasks

Positions

Positions are the roles that need to be filled by volunteers. Scheduler allows you to define a position by name, specifying the time and day of the week that the position needs to be filled. It also allows you to specify the number of volunteers needed to fill the role. So, for instance, you may need only one person to fill the role of “Scripture Reader”, but you may need four volunteers to assist with communion.

Adding Positions

To add positions to the list, select on the **Positions** menu item, and select the **Add Positions** entry. This will direct you to a screen that looks like this:

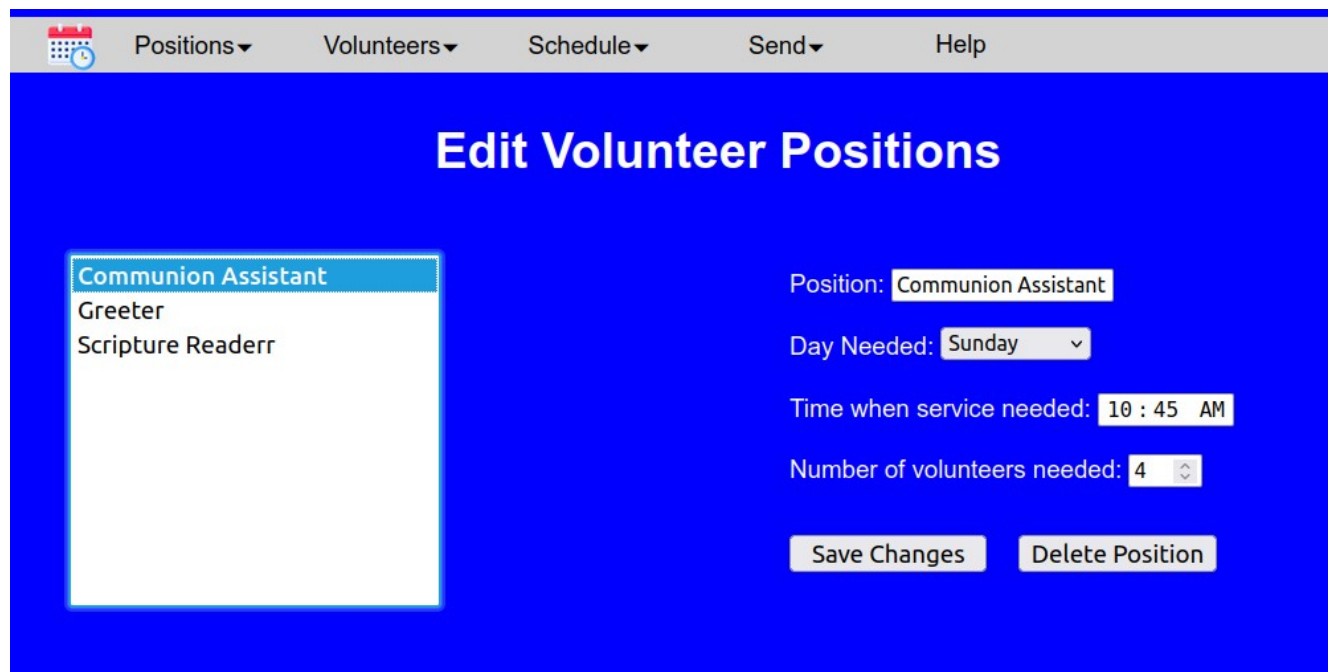


The screenshot shows a web application interface with a blue header bar containing a calendar icon and five menu items: "Positions", "Volunteers", "Schedule", "Send", and "Help". The main content area has a blue background and is titled "Add Volunteer Positions" in large white text. On the left side of this area is a large, empty white rectangular box. On the right side, there are four input fields: a text field labeled "Position:", a dropdown menu labeled "Day Needed:" with "Sunday" selected, a time selection field labeled "Time when service needed:" showing "10 : 45 AM", and a spinner field labeled "Number of volunteers needed:" with the value "1". Below these fields is a grey button labeled "Save Position".

The box on the left will contain the names of any positions which were previously defined. To add a new position, simply fill out the fields on the right. In the “Position:” field, enter the name that you wish to use for this position, for example “Greeter”. When all fields are entered, press the **Save Position** button. A popup box will confirm that you wish to add the value. Once the value is added, the position will be added to the list on the right and the fields will be reset so that you may enter a new position value, if you wish.

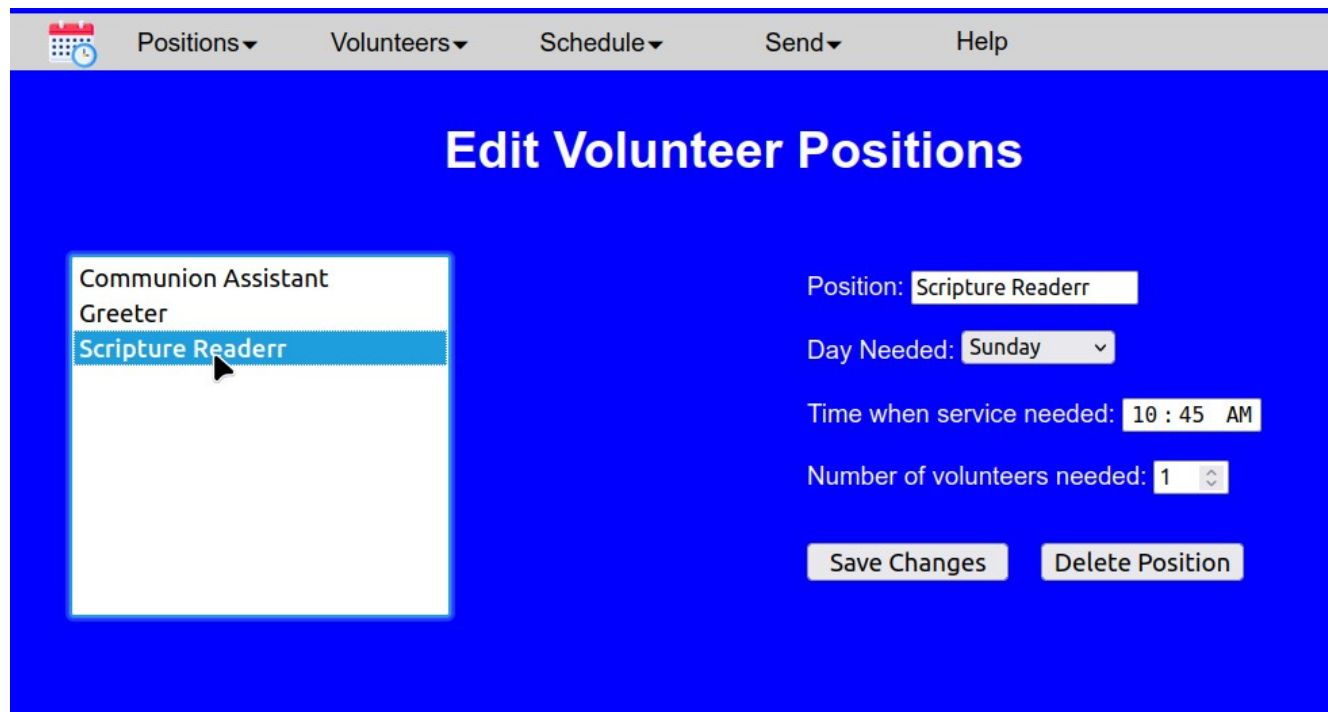
Editing Positions

You can edit the list of positions to change the values of existing entries, or to remove entries from the list. To edit positions, select **Positions** from the menu bar and then select the **Edit Positions** entry. You will be directed to a screen similar to this:




The screenshot shows the 'Edit Volunteer Positions' interface. At the top is a navigation bar with icons and labels for 'Positions', 'Volunteers', 'Schedule', 'Send', and 'Help'. The main title 'Edit Volunteer Positions' is centered. On the left, a list box contains 'Communion Assistant' (highlighted), 'Greeter', and 'Scripture Readerr'. On the right, form fields show: 'Position: Communion Assistant', 'Day Needed: Sunday', 'Time when service needed: 10 : 45 AM', and 'Number of volunteers needed: 4'. At the bottom right are 'Save Changes' and 'Delete Position' buttons.

As you can see in this example, there was a typo in the name of the “Scripture Reader” position. To correct it, click on the entry in the box on the left.



This screenshot shows the same 'Edit Volunteer Positions' interface after a selection change. In the list box on the left, 'Scripture Readerr' is now highlighted. The form fields on the right have been updated to reflect this selection: 'Position: Scripture Readerr', 'Day Needed: Sunday', 'Time when service needed: 10 : 45 AM', and 'Number of volunteers needed: 1'. The 'Save Changes' and 'Delete Position' buttons remain at the bottom right.

As you can see, the fields on the right are updated to show the values for this position. Correct the title in the “Position:” field, and then press the **Save Changes** button. You will be prompted to confirm the save, and if you press the “Save Changes” button, the list will be updated to reflect the change.

 Positions▼ Volunteers▼ Schedule▼ Send▼ Help

Edit Volunteer Positions

Communion Assistant
Greeter
Scripture Reader

Position:

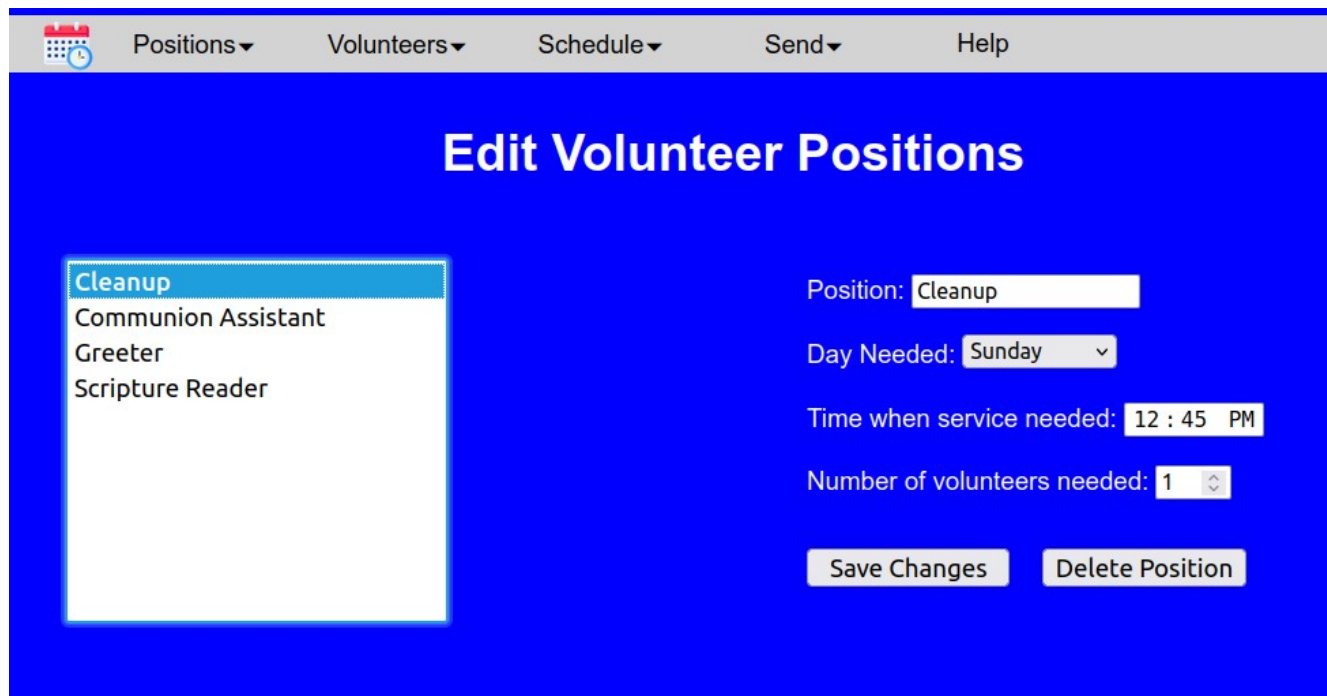
Day Needed:

Time when service needed:

Number of volunteers needed:

Deleting Positions

If you need to remove a position from the schedule, select **Positions** from the menu bar and then select the **Edit Positions** entry. You will be directed to a screen similar to this:



The screenshot shows the 'Edit Volunteer Positions' interface. At the top is a navigation bar with icons and labels for 'Positions', 'Volunteers', 'Schedule', 'Send', and 'Help'. The main title 'Edit Volunteer Positions' is centered. On the left, a list of positions is shown with 'Cleanup' highlighted. On the right, the details for the selected position are displayed: 'Position: Cleanup', 'Day Needed: Sunday', 'Time when service needed: 12 : 45 PM', and 'Number of volunteers needed: 1'. At the bottom right are two buttons: 'Save Changes' and 'Delete Position'.

Menu Item
Positions
Volunteers
Schedule
Send
Help

Edit Volunteer Positions

Cleanup
Communion Assistant
Greeter
Scripture Reader

Position: Cleanup

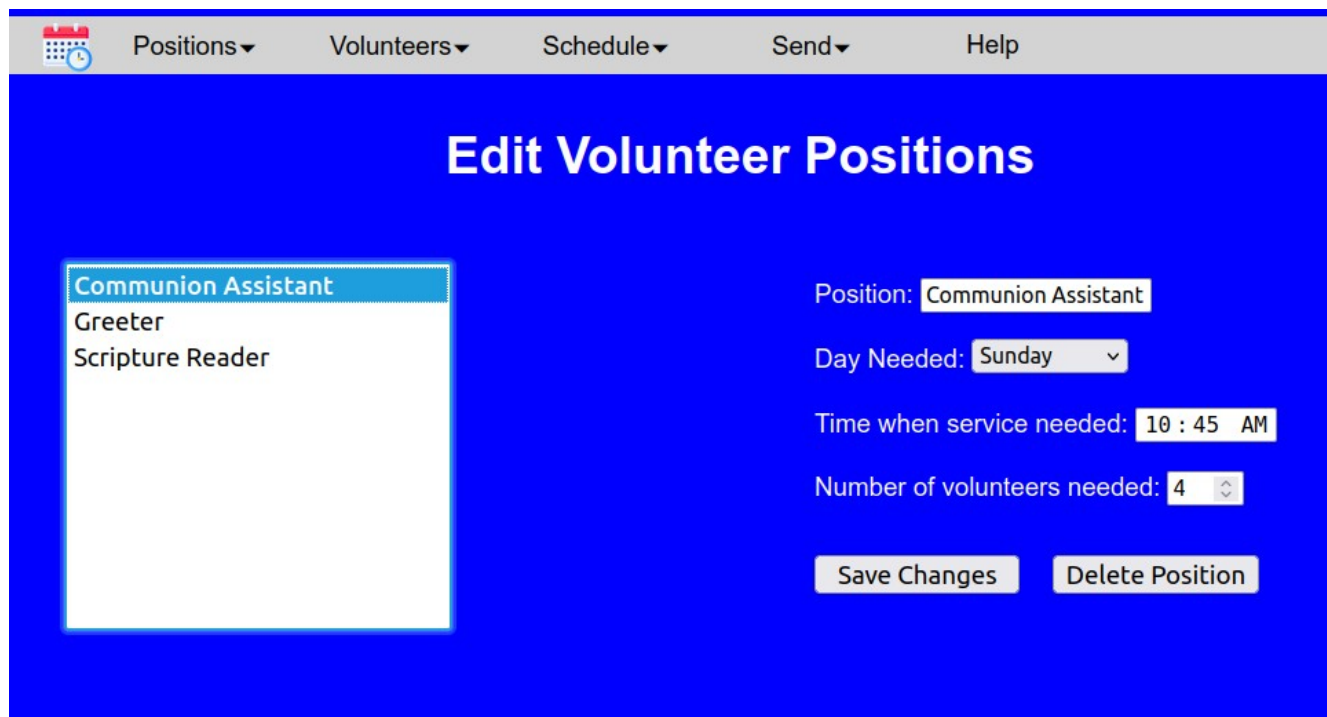
Day Needed: Sunday

Time when service needed: 12 : 45 PM

Number of volunteers needed: 1

Save Changes Delete Position

Select the entry that you wish to remove from the list on the left, and then press the **Delete Position** button. When prompted if you wish to delete this entry, select “Yes”. The position will be removed, and the list will be updated to reflect the change.



This screenshot shows the same 'Edit Volunteer Positions' interface, but now 'Communion Assistant' is selected from the list on the left. The details on the right have been updated: 'Position: Communion Assistant', 'Day Needed: Sunday', 'Time when service needed: 10 : 45 AM', and 'Number of volunteers needed: 4'. The 'Save Changes' and 'Delete Position' buttons remain at the bottom right.

Menu Item
Positions
Volunteers
Schedule
Send
Help

Edit Volunteer Positions

Communion Assistant
Greeter
Scripture Reader

Position: Communion Assistant

Day Needed: Sunday

Time when service needed: 10 : 45 AM

Number of volunteers needed: 4

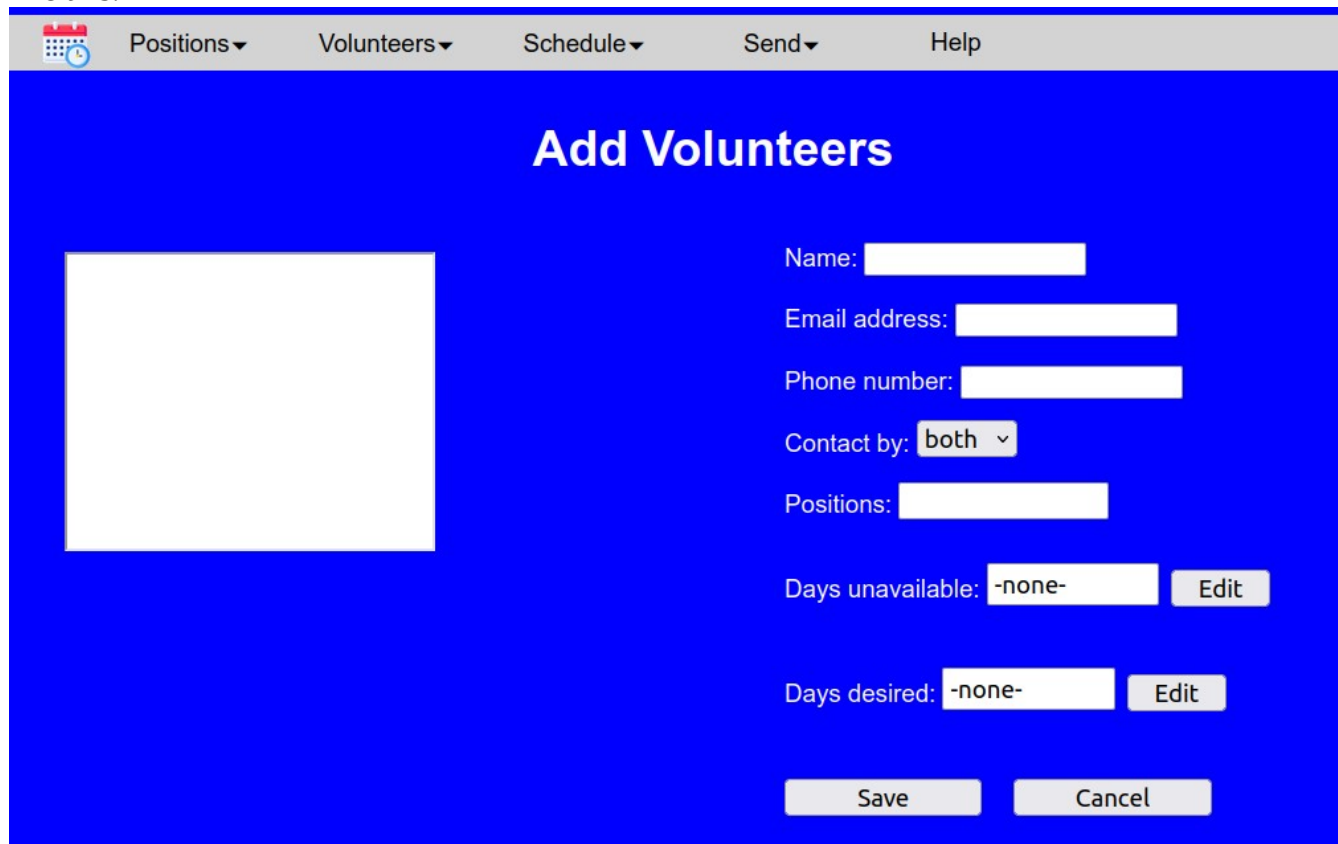
Save Changes Delete Position

Volunteers

Volunteers is a list of the people who have signed up to fill the various roles in the schedule. With Scheduler, each volunteer can specify days when they are unable to volunteer, and they may also specify days when they specifically wish to volunteer. For each volunteer, the email address and the cell phone number of the volunteer are tracked, along with how the volunteer wishes to be contacted (by email, text, or both). The Scheduler program will use those values to send copies of the schedule to volunteers, along with reminders for when they are scheduled to serve.

Adding Volunteers

To add names to the volunteer list, click on **Volunteers** in the menu bar at the top of the screen and select the **Add Volunteers** entry from the drop-down menu. It will direct you to a screen that looks like this:

The screenshot shows a web application interface with a blue header bar containing a calendar icon and menu items: 'Positions', 'Volunteers', 'Schedule', 'Send', and 'Help'. The main content area has a blue background with the title 'Add Volunteers' in white. On the left is a large white square placeholder for a photo. On the right are several form fields: 'Name:' with a text input, 'Email address:' with a text input, 'Phone number:' with a text input, 'Contact by:' with a dropdown menu showing 'both', 'Positions:' with a text input, 'Days unavailable:' with a dropdown menu showing '-none-' and an 'Edit' button, and 'Days desired:' with a dropdown menu showing '-none-' and an 'Edit' button. At the bottom right are 'Save' and 'Cancel' buttons.

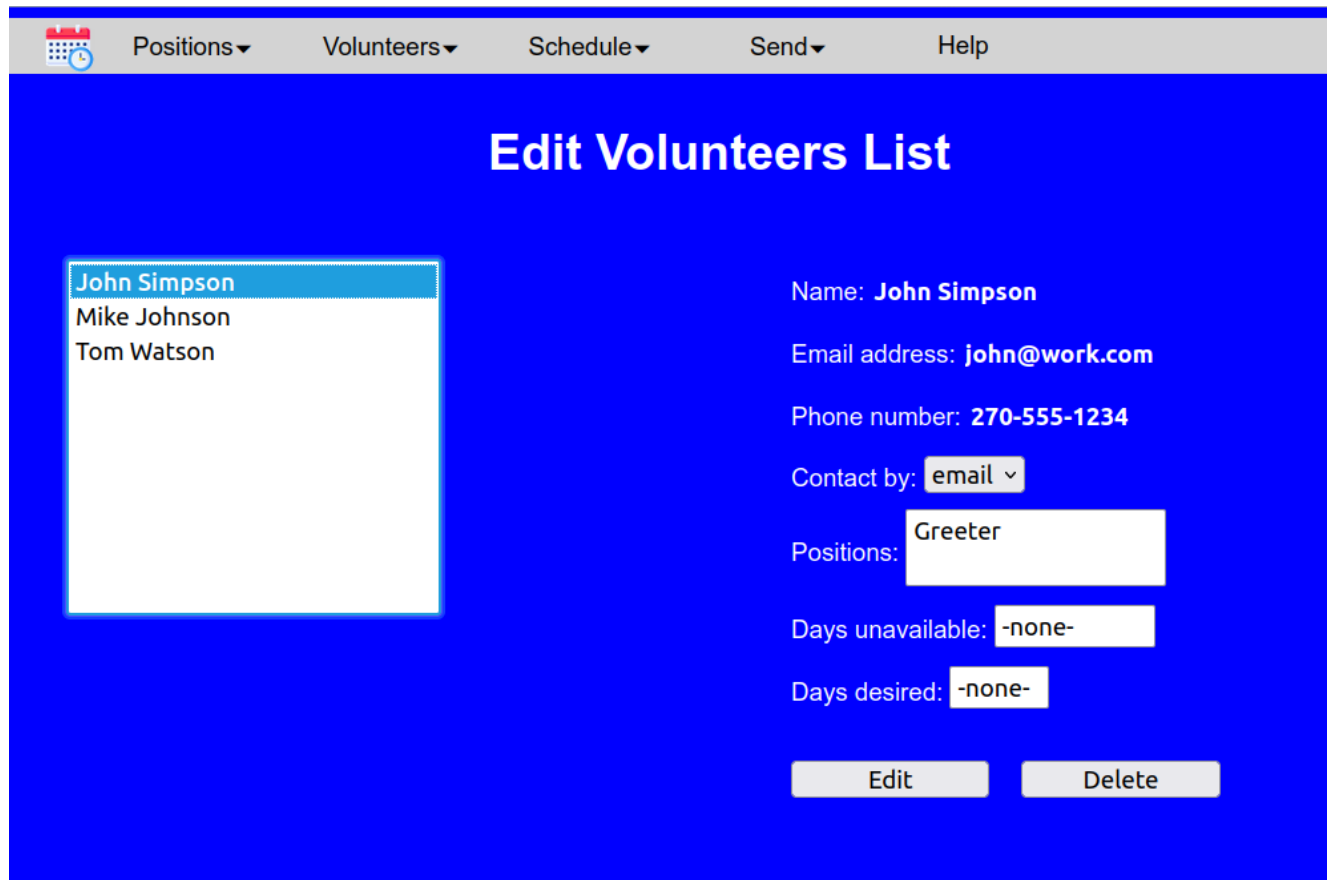
From here you can enter the information for each volunteer. If possible provide both email address and the phone number to receive texts and select whether the Scheduler program should contact this person by text, by email, or both. The “Positions” entry will include the position titles that you provided while building the positions table. Make sure that you select at least one of the positions for the person to volunteer for. Multiple selections from the list are possible by holding down the control key while you make a selection.

If the person has dates which they are unavailable to serve, or dates for which they would specifically like to serve, you may enter those in the “Days unavailable” or “Days desired” fields by pressing the **Edit** button next to that field. For more information on entering the dates, see the [Editing Dates](#) section.

When you have entered the information for a volunteer, click the save button. The program will save the information and clear the fields so that you may enter another volunteer. Continue adding volunteers until all volunteer names have been entered.


Editing the Volunteer List

To edit an entry in the volunteer list, click the **Volunteers** entry in the menu bar and select the **Edit Volunteers** item. You will be directed to a screen like this:



The screenshot shows a web application interface for editing a volunteer list. At the top is a grey navigation bar with a calendar icon and the following menu items: Positions▼, Volunteers▼, Schedule▼, Send▼, and Help. The main content area has a blue background with the title "Edit Volunteers List" in white. On the left, there is a white box with a blue border containing a list of names: "John Simpson" (highlighted with a blue background), "Mike Johnson", and "Tom Watson". To the right of this list, the details for the selected volunteer, John Simpson, are displayed. These details include: Name: John Simpson, Email address: john@work.com, Phone number: 270-555-1234, Contact by: email (with a dropdown arrow), Positions: Greeter (in a text box), Days unavailable: -none- (in a text box), and Days desired: -none- (in a text box). At the bottom right of the details section are two buttons: "Edit" and "Delete".

The box on the list will show a list of all volunteers entered into the system. To edit a volunteer, click on the name in the left hand box, and the fields will update to reflect that person's entries. For this example lets say Mike Johnson needs his entry changed so that he is only notified by email. First, click on the entry for Mike Johnson. You will see the screen updates to show his information:

 Positions▼ Volunteers▼ Schedule▼ Send▼ Help

Edit Volunteers List

John Simpson

Mike Johnson

Tom Watson

Name: **Mike Johnson**

Email address: **mike@home.com**

Phone number: **270-555-1212**

Contact by: **both** ▼

Positions:

Communion Assistant
Scripture Reader

Days unavailable: **-none-**

Days desired: **-none-**

EditDelete

You can see that the “Contact by” field for Mike is currently set to “both”. To change it, press the **Edit** button. The screen will switch to one like this:

 Positions▼ Volunteers▼ Schedule▼ Send▼ Help

Edit Information for Mike Johnson

Name:

Email address:

Phone number:

Contact by:

Positions:

Communion Assistant

Greeter

Scripture Reader

Days unavailable:

Days desired:

All of these fields are now editable. So to change the contact method, click the down arrow beside “both” and click on the “email” entry. When you are finished, press the button, and when prompted, click “Ok” to save the changes. You will then be returned to the “Edit Volunteers List”

screen.

 Positions▼ Volunteers▼ Schedule▼ Send▼ Help

Edit Information for Mike Johnson

Name:

Email address:

Phone number:

Contact by:

Positions:

Days unavailable:

Days desired:

Editing Dates

The date fields allow you to enter dates when someone is unavailable to volunteer, or someone wishes to volunteer on a specific date. Let's say from our previous example, that Mike is going to be unavailable on January 1st. To make this change, select Mike's entry as described above, and on the edit screen, click the **Edit** button next to "Days unavailable:". A popup box like this will appear:

The screenshot shows a blue background with a white-bordered popup box titled "Dates When Mike Johnson is Unavailable:". Inside the box, there is a list of dates on the left (partially obscured). To the right of the list is a text input field labeled "Add date:" followed by "mm / dd / yyyy" and a calendar icon, and an "Add" button. Below the list is a "Delete selected dates" button. At the bottom of the box are "Ok" and "Cancel" buttons. Below the popup box, on the main interface, there is a "Positions:" label with a dropdown menu showing "Communion Assistant", "Greeter", and "Scripture Reader". Below that is a "Days unavailable:" label with a dropdown menu showing "-none-" and an "Edit" button with a mouse cursor hovering over it.

The box on the left will contain any days which Mike had previously listed as unavailable. If you wish to remove any of those dates, simply select it, and press the "Delete selected Dates" button. To add January 1st to the list, click in the field next to "Add date". Depending upon your browser, you will have the option of either entering the values in the "mm / dd / yyyy" fields, or be presented with a calendar from which you can select a date.

This screenshot is similar to the previous one, but with a calendar overlay. The calendar is for "January 2025" and shows the days of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat). The date "1" is highlighted with a mouse cursor. The "Add date:" field is now filled with "1 / 1 / 2025". The "Add" button is still visible. The "Delete selected dates" button is also visible. The "Ok" button is visible. The "Positions:" dropdown menu is still showing "Communion Assistant", "Greeter", and "Scripture Reader". The "Days unavailable:" dropdown menu is still showing "-none-" and the "Edit" button is still visible with a mouse cursor hovering over it.

When the date is chosen, press “Add” and the date will be added to the list on the left.



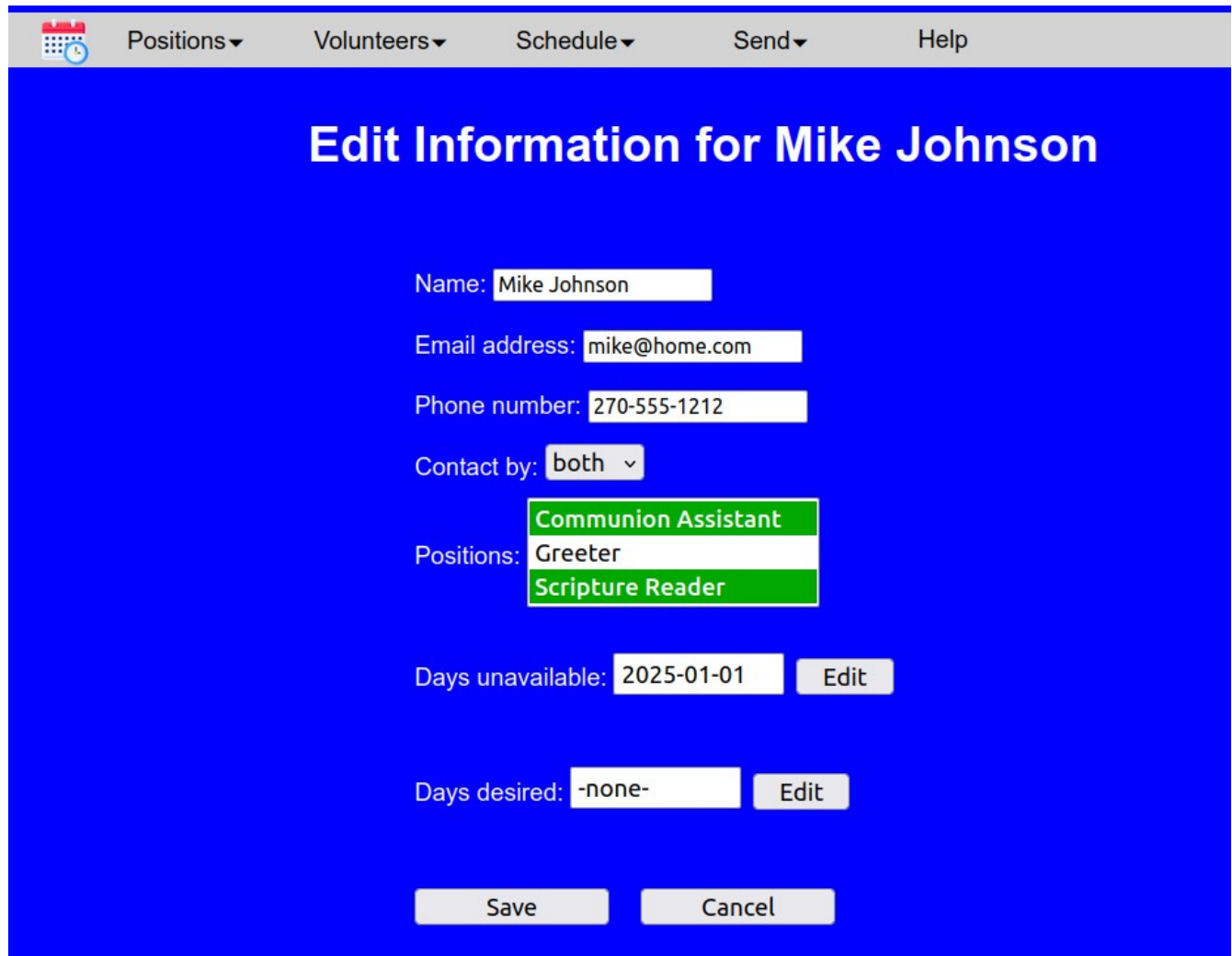
Dates When Mike Johnson is Unavailable:

2025-01-01 Add date: mm / dd / yyyy  Add

Delete selected dates

Ok Cancel

Continue editing the dates. When you are finished, press **Ok** and the changes will be copied to the date field on the edit screen.



Positions ▾ Volunteers ▾ Schedule ▾ Send ▾ Help

Edit Information for Mike Johnson

Name: Mike Johnson

Email address: mike@home.com

Phone number: 270-555-1212

Contact by: both ▾

Positions:

Communion Assistant
Greeter
Scripture Reader

Days unavailable: 2025-01-01 Edit

Days desired: -none- Edit

Save Cancel