Instruction of the Program

Goal

Create incentives for the workers to gain priority upon current sequence by choosing certain shifts and redeeming the points gained.
The current schedule sequence is based on a fixed priority list, which is the initial_order for worker. Pay attention that the sequences are separated for senior and junior workers.

The process of the system consists of two stages.

1: In-group and type based sign-up sequence generation

- For the next week's schedule (the sign-up sequences of the senior and junior workers are separated).
- Choose workgroup - (publish in group initial order by admin) - priority score

2: The schedule sign up process

- Demand updated from customer: Right now the system is a weekly signup system but the customer would like to have a monthly signup system. Although the system could be updated to perform the functions, I recommend to implement the system

Roles

- worker
    - type: senior and junior, comes with different requirements on the workgroup limit
    - two factors decide the sequence in choosing the schedule
        - initial_order: the current fixed sequence of schedule sign-up
        - points redeemed
- admin
    - suggested id: 0000, as it is used for the notification for the admin

Packages used

```
pip install flask flask-sqlalchemy werkzeug flask-login pandas openpyxl
```
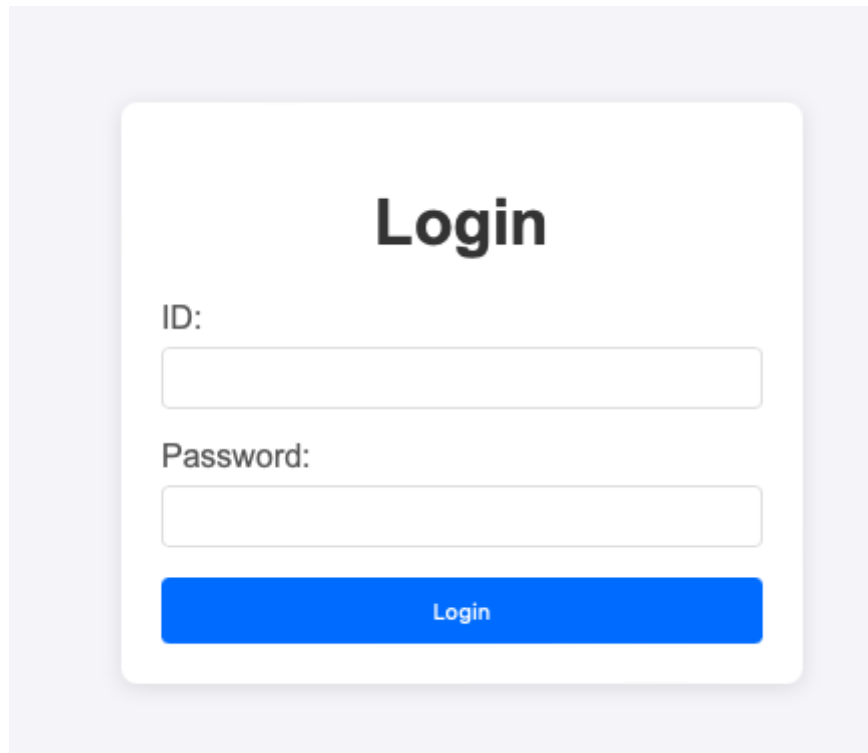
Demonstration of the process

Add admin

- run create_admin.py
  suggested id: 0000

Run the program

- run app.py and login

Data Management on Admin dashboard

- manage data: manage worker, interval, shift, workgroup, shift-interval relationship
- operation log: record for important operations
- sample file in test_file folder
- (shift and interval are similar, the shift-interval relationship connects the shift, interval and workgroup. The shift_interval_generator is designed for a week's relationship)

Admin Dashboard - admin

Manage Workers	Manage Intervals	Manage Shifts
Manage Workgroups	Manage Shift-Interval Relationships	Operation Log
View Workgroup Registrations	Confirm Final Sequences	
Export Schedule By Worker	Export Schedule By Shift	
Manually Update Worker Points		

Reset Schedule

Logout

workers

Import Workers

Upload CSV or XLSX File:

选取文件　未选择文件

Upload and Preview

File Format Requirements

The CSV or XLSX file must contain the following columns with the specified data types:

Column Name	Data Type	Description
id	Integer	Unique identifier for the worker (e.g., 101, 102)
name	String	Worker's full name (e.g., "John Doe")
type	String	Type of worker ("senior" or "junior")
initial_order	Integer	Initial order for scheduling (e.g., 1, 2, 3)
password	String	Worker's initial password (e.g., "pass123")

Note: Ensure all values are provided; missing or invalid data will result in errors during import.

Preview Worker Import

Confirm Import

ID	Name	Type	Initial Order	Password
1	Allen	senior	1	111
2	Bella	senior	2	111
3	Chris	senior	3	111
4	Dan	senior	4	111
5	Eliot	junior	1	111
6	Frank	junior	2	111
7	Greco	junior	3	111
8	Heise	junior	4	111
9	Ickes	junior	5	111
10	John	junior	6	111

Manage Workers

Back to Dashboard   Add Worker   Import Workers

ID	Name	Role	Type	Initial Order	Actions
1	Allen	worker	senior	1	Edit Delete
2	Bella	worker	senior	2	Edit Delete
3	Chris	worker	senior	3	Edit Delete
4	Dan	worker	senior	4	Edit Delete
5	Eliot	worker	junior	1	Edit Delete
6	Frank	worker	junior	2	Edit Delete
7	Greco	worker	junior	3	Edit Delete
8	Heise	worker	junior	4	Edit Delete
9	Ickes	worker	junior	5	Edit Delete
10	John	worker	junior	6	Edit Delete

Edit Worker

ID:

1

Name:

Allen

Type:

Senior

Initial Order:

1

Password:

Edit

Interval: the basic unit component for workgroups. The maximum number of senior/junior workers working at a time in work group is set here.

Manage Intervals

Back to Dashboard | Add Interval | Import Intervals

ID	Workgroup ID	Day	End Day	Start Time	End Time	Max Senior Workers	Max Junior Workers	Actions
1	1	1	1	07:00:00	11:00:00	1	2	Edit Delete
2	1	1	1	11:00:00	15:00:00	1	2	Edit Delete
3	1	1	1	15:00:00	19:00:00	1	2	Edit Delete
4	1	1	1	19:00:00	23:00:00	1	2	Edit Delete
5	1	1	2	23:00:00	07:00:00	1	2	Edit Delete
6	1	2	2	07:00:00	11:00:00	1	2	Edit Delete
7	1	2	2	11:00:00	15:00:00	1	2	Edit Delete
8	1	2	2	15:00:00	19:00:00	1	2	Edit Delete
9	1	2	2	19:00:00	23:00:00	1	2	Edit Delete
10	1	2	3	23:00:00	07:00:00	1	2	Edit Delete
11	1	3	3	07:00:00	11:00:00	1	2	Edit Delete
12	1	3	3	11:00:00	15:00:00	1	2	Edit Delete

Shift: points can be modifed as the weekends are different for each month

Manage Shifts

Back to Dashboard | Add Shift | Import Shifts

ID	Type	Day	End Day	Start Time	End Time	Points	Actions
1	A	1	1	07:00:00	19:00:00	0	Edit Delete
2	B	1	2	19:00:00	07:00:00	4	Edit Delete
3	D	1	1	07:00:00	15:00:00	0	Edit Delete
4	E	1	1	15:00:00	23:00:00	0	Edit Delete
5	N	1	2	23:00:00	07:00:00	3	Edit Delete
6	Q	1	1	11:00:00	19:00:00	0	Edit Delete
7	T	1	1	07:00:00	11:00:00	0	Edit Delete
8	z	1	1	15:00:00	19:00:00	0	Edit Delete
9	!	1	1	19:00:00	23:00:00	1	Edit Delete
10	#	1	1	11:00:00	23:00:00	0	Edit Delete
11	A	2	2	07:00:00	19:00:00	0	Edit Delete
12	B	2	3	19:00:00	07:00:00	4	Edit Delete

Work group (each month the worker is going to choose one from the four work group. The limits

on the number of people in the workgroup is limited here.)

Manage Workgroups

Back to Dashboard   Add Workgroup

ID	Name	Max Senior Workers	Max Junior Workers	Actions
1	A	1	2	Edit Delete
2	B	0	3	Edit Delete
3	C	2	0	Edit Delete
4	D	1	1	Edit Delete

Shift interval relationship, which connects the interval (as basic units for shift) with shift for each workgroup.

Shift-Interval Relationships

Successfully imported 504 new relationships.

Import Relationships from File

Back to Admin Dashboard

Shift ID	Shift Type	Shift Time	Workgroup	Interval ID	Interval Details	Actions
1	A	Day 1, 07:00 AM - 07:00 PM	A	1	Workgroup A, Day 1, 07:00 AM - 11:00 AM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	A	2	Workgroup A, Day 1, 11:00 AM - 03:00 PM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	A	3	Workgroup A, Day 1, 03:00 PM - 07:00 PM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	B	36	Workgroup B, Day 1, 07:00 AM - 11:00 AM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	B	37	Workgroup B, Day 1, 11:00 AM - 03:00 PM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	B	38	Workgroup B, Day 1, 03:00 PM - 07:00 PM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	C	71	Workgroup C, Day 1, 07:00 AM - 11:00 AM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	C	72	Workgroup C, Day 1, 11:00 AM - 03:00 PM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	C	73	Workgroup C, Day 1, 03:00 PM - 07:00 PM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	D	106	Workgroup D, Day 1, 07:00 AM - 11:00 AM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	D	107	Workgroup D, Day 1, 11:00 AM - 03:00 PM	Delete
1	A	Day 1, 07:00 AM - 07:00 PM	D	108	Workgroup D, Day 1, 03:00 PM - 07:00 PM	Delete
2	B	Day 1, 07:00 PM - 07:00 AM	A	4	Workgroup A, Day 1, 07:00 PM - 11:00 PM	Delete

Initial schedule sign-up process

overall process

workgroup choice

- worker: dashboard - workgroup selection
  - choose workgroup, only available choice allowed.

Worker Dashboard - Allen

Workgroup Selection	Priority Score System (Unavailable)
Schedule System (Unavailable)	Your Schedule

Choose Your Workgroup

Select Workgroup: A (0 / 1 senior workers) [Choose Workgroup]

Back to Dashboard

Choose Your Workgroup

Select Workgroup
- A (1 / 1 senior workers)
- B (0 / 0 senior workers)
- ✓ C (0 / 2 senior workers)   [Choose Workgroup]
- D (0 / 1 senior workers)

Back to Dashboard

Choose Your Workgroup

Select Workgroup
- ✓ A (0 / 2 junior workers)
- B (0 / 3 junior workers)   [Choose Workgroup]
- C (0 / 0 junior workers)
- D (0 / 1 junior workers)

Back to Dashboard

- admin: on dashboard - workgroup registration
  - notify all unregistered workers if there is anyone who is supposed to have a workgroup but is not.
  - publish in-group initial order, compulsory for the next step

redeem points for priority

Requirement:

admin publish in-group order initial orders in workgroup registration.

Workgroup Registrations

Workgroup	Senior Workers	Max Senior	Junior Workers	Max Junior
A	1	1	2	2
B	0	0	3	3
C	2	2	0	0
D	1	1	1	1

Workers Without a Workgroup

All workers have registered for a workgroup.

Publish In-Group Initial Orders

Back to Admin Dashboard

worker:

- receive notification
- view in-group sequence
- redeem points to adjust the sequence

Worker Dashboard - Allen

View Notifications ●

Workgroup Selection	Priority Score System
Schedule System (Unavailable)	Your Schedule

Logout

Your Notifications

- Your in-group initial order has been published. You can now trade points for priority. - 2025-04-02 18:21:35.826080

  Mark as Read

Back to Dashboard

worker A

Priority Score System

Selected Workgroup

c

Points Management

Available Points: **0**

Traded Points: **0**

Points to Trade: [   ] [Trade Points]

Points to Withdraw: [   ] [Withdraw Points]

Sequence Information

In Group Initial Order: **1 / 2** (1 out of 2 senior workers)

Sequence: **1 / 2**

Status: **pending**

Back to Dashboard

- Real time sequence adjustment with point redeem
  worker B as an example

Priority Score System

Selected Workgroup

c

Points Management

Available Points: **5**

Traded Points: **0**

Points to Trade: [   ] [Trade Points]

Points to Withdraw: [   ] [Withdraw Points]

Sequence Information

In Group Initial Order: **2 / 2** (2 out of 2 senior workers)

Sequence: **2 / 2**

Status: **pending**

[Back to Dashboard](#)

Priority Score System

Selected Workgroup

C

Points Management

Available Points: **3**

Traded Points: **2**

Points to Trade: [ ] [Trade Points]

Points to Withdraw: [ ] [Withdraw Points]

Sequence Information

In Group Initial Order: **2 / 2** (2 out of 2 senior workers)

Sequence: **1 / 2**

Status: **pending**

[Back to Dashboard](#)

- Other's sequence (worker A) will also be adjusted.

Priority Score System

Selected Workgroup

C

Points Management

Available Points: **0**

Traded Points: **0**

Points to Trade: [   ] ⬍ [Trade Points]

Points to Withdraw: [   ] ⬍ [Withdraw Points]

Sequence Information

In Group Initial Order: **1 / 2** (1 out of 2 senior workers)

Sequence: **2 / 2**

Status: **pending**

Back to Dashboard

admin confirm final sequence

schedule sequence is fixed, sequence file is exported and workers can choose the schedule

Admin Dashboard - admin

View Notifications

Manage Workers	Manage Intervals	Manage Shifts
Manage Workgroups	Manage Shift-Interval Relationships	Operation Log

| View Workgroup Registrations | [Confirm Final Sequences] | |

| Export Schedule By Worker | Export Schedule By Shift | |

| Manually Update Worker Points | | |

[Reset Schedule]

Logout

worker chooses the shift

Choose Your Shifts

Back to Dashboard

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
☐ A: 07:00 - 19:00 (Points: 0)	☑ A: 07:00 - 19:00 (Points: 0)	☑ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 1)	☐ A: 07:00 - 19:00 (Points: 1)
☑ B: 19:00 - 07:00 (Points: 4)	☐ B: 19:00 - 07:00 (Points: 4)	☐ B: 19:00 - 07:00 (Points: 4)	☑ B: 19:00 - 07:00 (Points: 4)	☐ B: 19:00 - 07:00 (Points: 4)	☐ B: 19:00 - 07:00 (Points: 6)	☐ B: 19:00 - 07:00 (Points: 6)
☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 1)	☐ D: 07:00 - 15:00 (Points: 1)
☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 1)	☐ E: 15:00 - 23:00 (Points: 1)
☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 4)	☐ N: 23:00 - 07:00 (Points: 4)
☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 1)	☐ Q: 11:00 - 19:00 (Points: 1)
☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 1)	☐ T: 07:00 - 11:00 (Points: 1)
☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 1)	☐ z: 15:00 - 19:00 (Points: 1)
☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 2)	☐ !: 19:00 - 23:00 (Points: 2)
☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 1)	☐ #: 11:00 - 23:00 (Points: 1)

Submit Schedules

- conflict is prevented in real time

Choose Your Shifts

Back to Dashboard

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
☐ A: 07:00 - 19:00 (Points: 0)	☑ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 1)	☐ A: 07:00 - 19:00 (Points: 1)
☐ B: 19:00 - 07:00 (Points: 4)	☐ B: 19:00 - 07:00 (Points: 4)	☐ B: 19:00 - (Points: 4)	☐ B: 19:00 - 07:00	:00 - 07:00	☐ B: 19:00 - 07:00 (Points: 6)	☐ B: 19:00 - 07:00 (Points: 6)
☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 1 (Points: 0)	Selected shift overlaps with an existing shift on the same day.	:00 - 15:00	☐ D: 07:00 - 15:00 (Points: 1)	☐ D: 07:00 - 15:00 (Points: 1)
☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 2 (Points: 0)	Close	:00 - 23:00	☐ E: 15:00 - 23:00 (Points: 1)	☐ E: 15:00 - 23:00 (Points: 1)
☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 4)	☐ N: 23:00 - 07:00 (Points: 4)
☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 1)	☐ Q: 11:00 - 19:00 (Points: 1)
☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 1)	☐ T: 07:00 - 11:00 (Points: 1)
☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 1)	☐ z: 15:00 - 19:00 (Points: 1)
☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 2)	☐ !: 19:00 - 23:00 (Points: 2)
☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 1)	☐ #: 11:00 - 23:00 (Points: 1)

Submit Schedules

not available after submitting

Schedule System (Unavailable)

Logout

- worker dashboard- your schedule

Your Schedule

Day	Shift Type	Start Time	End Time	Points
1	B	19:00	07:00	4
2	A	07:00	19:00	0
3	A	07:00	19:00	0
4	B	19:00	07:00	4

Back to Dashboard

- next worker is notified

Your Notifications

- It is your turn to choose schedules. - 2025-04-02 19:26:26.784561
  Mark as Read

- only available shift for choice

Choose Your Shifts

Back to Dashboard

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
☐ A: 07:00 - 19:00 (Points: 0)	☐ B: 19:00 - 07:00 (Points: 4)	☐ A: 07:00 - 19:00 (Points: 0)	☐ B: 19:00 - 07:00 (Points: 4)	☐ A: 07:00 - 19:00 (Points: 0)	☐ A: 07:00 - 19:00 (Points: 1)	☐ A: 07:00 - 19:00 (Points: 1)
☐ D: 07:00 - 15:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 0)	☐ B: 19:00 - 07:00 (Points: 4)	☐ B: 19:00 - 07:00 (Points: 6)	☐ B: 19:00 - 07:00 (Points: 6)
☐ E: 15:00 - 23:00 (Points: 0)	☐ N: 23:00 - 07:00 (Points: 3)	☐ E: 15:00 - 23:00 (Points: 0)	☐ N: 23:00 - 07:00 (Points: 3)	☐ D: 07:00 - 15:00 (Points: 0)	☐ D: 07:00 - 15:00 (Points: 1)	☐ D: 07:00 - 15:00 (Points: 1)
☐ Q: 11:00 - 19:00 (Points: 0)	☐ !: 19:00 - 23:00 (Points: 1)	☐ Q: 11:00 - 19:00 (Points: 0)	☐ !: 19:00 - 23:00 (Points: 1)	☐ E: 15:00 - 23:00 (Points: 0)	☐ E: 15:00 - 23:00 (Points: 1)	☐ E: 15:00 - 23:00 (Points: 1)
☐ T: 07:00 - 11:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 0)	☐ N: 23:00 - 07:00 (Points: 3)	☐ N: 23:00 - 07:00 (Points: 4)	☐ N: 23:00 - 07:00 (Points: 4)
☐ z: 15:00 - 19:00 (Points: 0)		☐ z: 15:00 - 19:00 (Points: 0)		☐ Q: 11:00 - 19:00 (Points: 0)	☐ Q: 11:00 - 19:00 (Points: 1)	☐ Q: 11:00 - 19:00 (Points: 1)
☐ #: 11:00 - 23:00 (Points: 0)		☐ #: 11:00 - 23:00 (Points: 0)		☐ T: 07:00 - 11:00 (Points: 0)	☐ T: 07:00 - 11:00 (Points: 1)	☐ T: 07:00 - 11:00 (Points: 1)
				☐ z: 15:00 - 19:00 (Points: 0)	☐ z: 15:00 - 19:00 (Points: 1)	☐ z: 15:00 - 19:00 (Points: 1)
				☐ !: 19:00 - 23:00 (Points: 1)	☐ !: 19:00 - 23:00 (Points: 2)	☐ !: 19:00 - 23:00 (Points: 2)
				☐ #: 11:00 - 23:00 (Points: 0)	☐ #: 11:00 - 23:00 (Points: 1)	☐ #: 11:00 - 23:00 (Points: 1)

Submit Schedules

admin export final schedule

- admin will be notified when all senior/junior in a workgroup have chosen their schedule

Your Notifications

- All senior workers in C have chosen their schedules. - 2025-04-02 19:42:25.794857

  [Mark as Read]
- All senior workers in A have chosen their schedules. - 2025-04-02 19:23:20.437915

  [Mark as Read]

export the schedule

Export Schedule By Worker	Export Schedule By Shift	Export Schedule in Spreadsheet

by worker

Worker ID	Worker Name	Shifts
1	Allen, (A)	B: 1 19:00-07:00 A: 2 07:00-19:00 A: 3 07:00-19:00 B: 4 19:00-07:00
2	Bella, (C)	A: 1 07:00-19:00 B: 2 19:00-07:00 A: 3 07:00-19:00 B: 4 19:00-07:00
3	Chris, (C)	B: 1 19:00-07:00 A: 2 07:00-19:00 B: 3 19:00-07:00 A: 4 07:00-19:00

by shift

Shift ID	Shift Type	Day	Start Time	End Time	Workers
1	A	1	07:00	19:00	Bella (C)
2	B	1	19:00	07:00	Allen (A), Chris (C)
3	D	1	07:00	15:00	None
4	E	1	15:00	23:00	None
5	N	1	23:00	07:00	None
6	Q	1	11:00	19:00	None
7	T	1	07:00	11:00	None
8	z	1	15:00	19:00	None
9	!	1	19:00	23:00	None
10	#	1	11:00	23:00	None
11	A	2	07:00	19:00	Allen (A), Chris (C)
12	B	2	19:00	07:00	Bella (C)
13	D	2	07:00	15:00	None
14	E	2	15:00	23:00	None
15	N	2	23:00	07:00	None
16	Q	2	11:00	19:00	None
17	T	2	07:00	11:00	None
18	z	2	15:00	19:00	None
19	!	2	19:00	23:00	None
20	#	2	11:00	23:00	None
21	A	3	07:00	19:00	Allen (A), Bella (C)
22	B	3	19:00	07:00	Chris (C)
23	D	3	07:00	15:00	None
24	E	3	15:00	23:00	None

in spreadsheet
worker name (along with the workgroup they choose)

schedule_spreadsheet

Worker Name	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Allen (A)	B	A	A	B	None	None	None
Bella (C)	A	B	A	B	None	None	None
Chris (C)	B	A	B	A	None	None	None
Dan (D)	None	None	None	None	None	None	None

special events & clear up for next scheduling

manually update the points if there are special events such as shift swipe and absence

Manually Update Worker Points

Reset Schedule

!!! Reset schedule before the next scheduling process!!!