

# RESERVATION APP DEMO GUIDE

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# Introduction

The Reservation app serves as a robust tool tailored for workforce leasing companies, enabling them to effectively offer short-term employment opportunities, often referred to as "gig work," to healthcare professionals. This guide provides an overview of the app's crucial functionalities and its user groups. This document showcases a demonstration of the application's features up to August 22, 2023.

## User Groups and Access

Presently, the app grants access exclusively to authorized users categorized into one of four distinct user groups:

### A. Employer:

- Employers can utilize the user interface to publish and update shifts.
- Deleting shifts is permitted if they have not been reserved by nurses, agency staff, or admins. After reservations, only agency staff can delete shifts.
- Employers can assign specific shifts to employees with pre-approval, effectively reserving shifts.
- A reserved nurse cannot be reserved for the same day by another employer.
- Employers can view their own shifts (open, reserved, unpublished, unfilled, done) but are unable to access shifts published by other employers.

### B. Nurse:

- Nurses are categorized as registered nurses (RNs), practical nurses (PNs), and assistants (ASSTs).
- RNs can access and reserve all available shifts (RN, PN, and ASST).
- PNs can view shifts open to PNs and ASSTs only.
- Assistants are limited to ASST shifts.
- Nurses can view and reserve shifts that match their role offered by various employers.
- Both employers and nurses can update profiles and reset passwords as customers.

### C. Agency Staff:

- Agency staff members can access all open shifts from different employers.
- They can assign shifts to nurses upon mutual agreement.
- Agency staff can publish, update, and delete shifts.

### D. Admin (Superuser):

- Admins hold all the mentioned rights.
- They can create, update, and delete users.
- Admins are responsible for issuing initial passwords to users.

# Technical Framework

The Reservation app is built on the Django framework, with enhanced user experience from Bootstrap and crispy forms. The date selection feature is facilitated by bootstrap\_datepicker\_plus.

## Key Features

### 1 Shift Management Features:

#### 1.1. Create Shift

##### 1.1.1. By Employer:

###### a) Creating shifts through the web interface.

The screenshot shows a web application interface for creating a shift. At the top, the URL is 127.0.0.1:8000/create\_shift/. The header includes a search bar, a user profile for Sanna, and a log out link. The main form has the following fields:

- Status\*: Open
- Role\*: RN
- Planned Start Time\*: 08/23/2023 07:00
- Planned Finish Time\*: 08/23/2023 15:00
- Details:  
Laakso Hospital has several geriatric wards, an infection cohort ward, a wound care ward, two neurological wards for those recovering from cerebrovascular disorders, a trauma ward for those recovering from multiple fractures and an orthopaedic ward where we tend to those recovering from hip fractures. One of our wards is located at Haartman Hospital. Ward 1 (door L), Office, tel. +358 9 310 47510
- Save as template
- Nurse: Nurse dropdown menu
- Published
- Create button

The footer contains links for Privacy Policy, FAQ, Join Us, Site Map, News, Contact Us, and social media icons for Facebook, Twitter, TikTok, Instagram, LinkedIn, and YouTube. It also features a newsletter sign-up form and a speech bubble icon.

Figure 1. Process of an employer creating a shift

The screenshot shows a shift confirmation details page. At the top, there's a purple header bar with 'Home' and a search bar. Below it, a green banner says 'The shift (Shift\_ID: 169) has been created'. The main content area has a left sidebar with employer information (Employer1\_org, Shift Date: Aug. 23, 2023-Wed, Role: RN, Email: employer1@gmail.com, Published: Aug. 21, 2023, 8:04 p.m., Last updated: Aug. 21, 2023, 8:04 p.m.) and a 'Details' section containing a paragraph about Laakso Hospital's wards. To the right is a 'Shift Confirmation Details' table with columns for User, Status, Performance, and Confirmation Date. A 'Read More' button is present. Below the table is a 'Tags' section with 'RN' and 'Open' buttons, and a 'Chatbot' icon.

Figure 2. Shift created by an employer

The screenshot shows a shift list page with three shifts listed:

- Shift 166:** RN-8:30 p.m.-6:30 a.m. on Aug. 22, 2023-Tue at 12:00. Status: Open. Employer: Employer1.org (employer 1 street , 01020, Helsinki). A 'Details' button is shown.
- Shift 169:** RN-8 p.m.-8 a.m. on Aug. 23, 2023-Wed at 8:00. Status: Open. Employer: Employer1.org (employer 1 street , 01020, Helsinki). The 'Shift ID' (169) is circled in orange. A 'Details' button is shown.
- Shift 167:** RN-noon-8 p.m. on Aug. 24, 2023-Thu at 8:00. Status: Open. Employer: Employer1.org (employer 1 street , 01020, Helsinki). A 'Details' button is shown.

At the bottom of the page is a purple footer bar with links: Privacy Policy, FAQ, Join Us, Site Map, News, and Contact Us. A 'Chatbot' icon is also present.

Figure 3. The corresponding shift Appears in the shift list after being created

b) Creating shifts using an Excel or CSV table (uploading to the database) by staff/admin. This feature provides employer flexibility and convenience for managing shifts efficiently, allowing for adjustments to be made according to their preferences, even if they prefer a more traditional working method.

Shift-2023-08-21

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	nurse	employer	N_conf	E_conf	S_conf	pub_date	updated_d_address	role	start_time	finish_time	actual_start_time	actual_finish_time	published	deleted_d_details	status	performer	user	created_by_time	rever_nurse_id				
2	169	2				2023-08-2 2023-08-2		1 RN	2023-08-23 07:00:00	2023-08-23 15:00:00									2	2023-08-21 20:04:58			
3	167	2				2023-08-2 2023-08-2		1 RN	2023-08-24 12:00:00	2023-08-24 20:00:00									2	2023-08-21 20:00:22			
4	166	2				2023-08-2 2023-08-2		1 RN	2023-08-22 20:00:00	2023-08-23 08:00:00									2	2023-08-21 19:38:26			
5	161	2				2023-08-2 2023-08-2		1 RN	2023-08-21 19:50:00	2023-08-22 07:00:00									2	2023-08-21 19:36:35			
6	160	2				2023-08-2 2023-08-2		1 RN	2023-08-21 19:40:00	2023-08-22 07:00:00									2	2023-08-21 19:36:37			
7	158	2				2023-08-1 2023-08-1		1 RN	2023-08-19 13:06:17	2023-08-19 21:06:26									2	2023-08-16 13:06:37			
8	155	2				2023-08-0 2023-08-0		1 RN	2023-08-09 12:12:23	2023-08-09 18:12:26									1	2023-08-09 12:12:47			
9	148	2				2023-08-0 2023-08-0		1 RN	2023-08-07 19:00:00	2023-08-07 22:38:05									1	2023-08-07 17:14:53			
0	146	2				2023-08-0 2023-08-0		1 RN	2023-08-07 16:38:00	2023-08-07 16:38:05									1	2023-08-07 16:38:20			
1	145	3	2	2023-08-15 22:23:03		2023-08-0 2023-08-1		1 RN	2023-08-08 11:00:00	2023-08-11 13:30:00	2023-08-11 13:33:00	2023-08-11 20:30:00				thisisempl N_cmfd	Performed	3	2023-08-15 22:23:13				
2	144	3	2			2023-08-0 2023-08-0		1 RN	2023-08-08 13:50:00	2023-08-08 21:00:00						thisisempl cmfd		1	2023-08-07 12:58:14				
3	137	3	2	2023-08-17 18:07:00		2023-08-0 2023-08-1		1 RN	2023-08-09 11:50:00	2023-08-09 20:00:00	2023-08-09 11:50:00	2023-08-09 20:00:00				thisisempl N_cmfd	Performed	3	2023-08-07 13:26:45				
4	136	3	2	2023-08-0 2023-08-0	2023-08-0 2023-08-1	2023-08-0 2023-08-1		1 RN	2023-08-06 11:40:00	2023-08-06 18:25:00	2023-08-06 11:40:00	2023-08-06 18:25:00				thisisempl Unfilled	Performed	1	2023-08-01 done				
5	127	3	2			2023-08-0 2023-08-0		1 RN	2023-08-10 12:43:00	2023-08-10 22:42:00						thisisempl Done		1	2023-08-04 22:39:17				
6	120	3	2			2023-08-0 2023-08-0		1 RN	2023-08-05 17:46:00	2023-08-05 22:46:00						thisisempl Reserved		3	2023-08-05 13:27:21				
7	77	3	2	2023-07-21 2023-07-21		2023-07-0 2023-07-21		1 RN	2023-08-04 14:25:00	2023-08-04 22:25:00	2023-08-04 14:25:00	2023-08-04 22:25:00				thisisempl Archived		1	2023-07-28 15:38:11				
.8	73	3	2	2023-08-0 2023-08-0	2023-08-0 2023-08-0	2023-08-0 2023-08-0		8 RN	2023-07-22 06:55:00	2023-07-22 16:55:00	2023-07-22 06:55:00	2023-07-22 16:55:00				thisisempl Archived	Performed	1	2023-07-20 16:55:49				
.9	37	3	2	2023-08-0 2023-08-0	2023-08-0 2023-08-0	2023-08-0 2023-08-0		1 RN	2023-07-19 12:11:00	2023-07-19 21:11:00	2023-07-19 12:11:00	2023-07-19 21:11:00				thisisempl Archived	Performed	1	2023-07-18 13:04:01				
.0	138	5	2			2023-08-0 2023-08-0		1 PN	2023-08-08 09:25:00	2023-08-08 19:25:00					thisisempl Reserved		5	1 2023-08-07 12:50:41					
.1	94	5	2			2023-08-1 2023-07-31 2023-08-1		1 RN	2023-07-25 17:37:22	2023-07-25 23:37:25	2023-07-25 17:37:22	2023-07-25 23:37:25				Done	Performed	1	2023-07-25 17:37:34				
.2	24	5	2			2023-07-31 2023-07-31		1 PN	2023-07-15 19:07:00	2023-07-16 19:08:00					ook	Reserved	1	2023-07-17 11:41:15					
.3	23	5	2	2023-08-0 2023-08-0	2023-08-0 2023-08-0	2023-08-0 2023-08-0		1 RN	2023-07-16 09:10:00	2023-07-16 15:10:00					dfafa	N_cmfd	Performed	2	2023-07-14 15:10:45				

Figure 4. Alternatively, an employer could also use Excel to create shifts

### 1.1.2. By agent staff or admin:

Employer\*

User\_ID: 7, employer3

Status\*

Open

Role\*

RN

Planned Start Time\*

08/30/2023 14:00

Planned Finish Time\*

08/30/2023 21:00

Details

Katriinan sairaalaan on Vantaan ja Keravan hyvinvointialueen toimipiste. Osastolla 7 on 17 potilaspalkkaa yhden ja kahden hengen huoneissa. Osasto 7 on kuntoutusosasto, jossa hoitetaan eri syistä sekavuudesta kärsivä potilaat. Sekavuuden syynä voi olla esim. muistisairaus, neurologinen sairaus, infektiot tai päihitteiden käyttö.

Save as template

**Nurse**

Ahlo, Linda, User ID: 3, Role: RN

Lauren, Leena, User ID: 5, Role: PN

Puhakka, Jenni, User ID: 6, Role: ASST

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Figure 5. Process of an admin or agency staff creating a shift

### 1.1.3. By Admin:

Django administration

Welcome, ADMIN@GMAIL.COM View site / Change password / Log out

Home > Core > Shifts > Add shift

Add shift

Nurse: -----

Employer: employer3

Address: employer4 street, 01260, Vantaa

Role: RN

Start time: Date: 2023-08-22 Today |  Time: 06:30 Now |

Finish time: Date: 2023-08-22 Today |  Time: 14:30 Now |

Actual start time: Date: Today |  Time: Now |

Actual finish time: Date: Today |  Time: Now |

Published

Deleted date: Date: Today |  Time: Now |

Figure 6. An admin using the admin panel to create a shift

## 1.2. Update Shift

By either Employer/Staff or Admin with minor interface differences. In this case, the shift date was changed.

Status\* Open

Role\* RN

Planned Start Time\* 08/24/2023 07:00

Planned Finish Time\* 08/24/2023 15:00

Details

Laakso Hospital has several geriatric wards, an infection cohort ward, a wound care ward, ward for those recovering from multiple fractures and an orthopaedic ward where we tend Hospital. Ward 1 (door L), Office, tel. +358 9 310 47510

Save as template

Nurse -----

August 2023

Su	Mo	Tu	We	Th	Fr	Sa
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

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Figure 7. The process of updating a shift

The screenshot shows a shift confirmation details page. At the top, there is a purple header bar with a search bar, an Admin\_login link, and a Log out link. Below the header, a green message box displays the text: "x The shift (ID: 169) has been updated". The main content area is titled "Shift Confirmation Details". It contains a table with four columns: User, Status, Performance, and Confirmation Date. The table has two rows. The first row shows "Planned" under Status and "8:00" under Confirmation Date. The second row shows "Hrs" under Status and "8:00" under Confirmation Date. To the left of the table, there is a list of shift details including Shift Date (Aug. 24, 2023- Thu), Role (RN), Email (employer1@gmail.com), Published (Aug. 21, 2023, 8:04 p.m.), Last updated (Aug. 21, 2023, 8:55 p.m.), and a "Details" section which includes a description of Laakso Hospital's wards and a "Read More" button. On the right side, there is a "View Logs" button and a "Tags" section with "RN" and "Open" buttons. A small profile icon for "Employer1.org" is also present.

Figure 8. Shift after update

### 1.3. Delete Shift

By either Employer/Staff or Admin

The screenshot shows a process for deleting a shift. At the top, there is a purple header bar with a search bar, an Admin\_login link, and a Log out link. Below the header, a modal dialog box asks: "Are you sure you want to delete the shift from Employer1.org on Thu, August 24, 2023 with Shift ID: 169?". It has "Cancel" and "Confirm" buttons. The main content area has a purple footer bar with links for Privacy Policy, FAQ, Join Us, Site Map, News, and Contact Us. It also features social media icons for Facebook, Twitter, LinkedIn, and YouTube. A newsletter sign-up form with an "Email address" input field and a "Subscribe" button is located in the center of the footer. The footer also contains a copyright notice: "© 2020 Copyright: blabla.com".

Figure 9. Process of deleting a shift

## 1.4. Reserve Shift

All users, including nurses, employers, and staff/admin, can reserve shifts. Certain rules apply during this process. If the role is for a registered nurse (RN), practical nurses (PN), or assistants, they cannot view and reserve the shift. Additionally, a nurse cannot reserve or be reserved for a shift if there are overlapping shifts, or if the resting time between the last shift or the upcoming shift is less than 6 hours. After a reservation is made, employers cannot update or delete the shift without staff/admin permission. If a nurse wishes to cancel an agreed-upon shift before its start time, they need to contact an admin beforehand. In case of sickness, a sick note is required.

The screenshot shows a web-based application for managing shifts. At the top, there is a purple header bar with 'Home', 'Search', a user profile for 'Linda', and 'Log out'. Below the header, the page title is 'Shift Confirmation Details'.

**Employer1\_org**

Shift Date Aug. 24, 2023- Thu	Shift Time 7 a.m.-3 p.m.	User	Status	Performance	Confirmation Date
Role RN	Phone Number +358411239956	Planned Hrs 8:00			
Email employer1@gmail.com	Address employer 1 street , 01020, Helsinki				
Published Aug. 21, 2023, 8:04 p.m.	Created by None				
Last updated Aug. 21, 2023, 8:55 p.m.	Updated by admin@gmail.com				
Details  Laakso Hospital has several geriatric wards, an infection cohort ward, a wound care ward, two neurological wards for those recovering from cerebrovascular disorders, a trauma ward for those recovering from multiple fractures and an orthopaedic ward where we tend to those recovering from hip fracture  <a href="#">Read More</a>					
Tags <a href="#">RN</a> <a href="#">Open</a>					
<a href="#">Reserve</a>					

Figure 10. Screenshot from the nurse's perspective when reserving a shift

The screenshot shows a web-based application for managing shifts. At the top, there is a purple header bar with 'Home', 'Search', a user profile for 'Linda', and 'Log out'. Below the header, the page title is 'Reserved shifts'.

ID	Date	Weekdays	Time	Role	Employer	Details
169	Aug. 24, 2023	Thu	7 a.m.-3 p.m.	RN	Employer1_org	<a href="#">Details</a>

[More reserved shifts...](#)

**Finished shifts**

ID	Date	Weekdays	Time	Role	Employer	Details
145	Aug. 11, 2023	Fri	1:33 p.m.-8:33 p.m.	RN	Employer1_org	<a href="#">Details</a>
137	Aug. 9, 2023	Wed	11:50 a.m.-8:05 p.m.	RN	Employer1_org	<a href="#">Details</a>
144	Aug. 8, 2023	Tue	1:50 p.m.-9 p.m.	RN	Employer1_org	<a href="#">Details</a>
136	Aug. 6, 2023	Sun	11:40 a.m.-6:25 p.m.	RN	Employer1_org	<a href="#">Details</a>
120	Aug. 5, 2023	Sat	5:46 p.m.-10:46 p.m.	RN	Employer1_org	<a href="#">Details</a>
116	Aug. 5, 2023	Sat	5:01 p.m.-7:01 p.m.	RN	Ward2	<a href="#">Details</a>
39	Aug. 4, 2023	Fri	12:40 p.m.-10:24 p.m.	RN	employer2	<a href="#">Details</a>
38	July 20, 2023	Thu	5:17 a.m.-12:17 p.m.	RN	employer5 org	<a href="#">Details</a>
27	July 15, 2023	Sat	10:54 a.m.-5:54 p.m.	PN	employer2	<a href="#">Details</a>

[More finished shifts...](#)

[Archived Shifts](#) [Search for available shifts](#)

Figure 11. Shift no. 169 reserved and is now shown in that nurse's upcoming shift list

166	12:00	Aug. 22, 2023-Tue	None Open	<a href="#">Details</a>
169	8:00	Aug. 24, 2023-Thu	Linda Aho (ID: 3) Reserved	<a href="#">Details</a>

Figure 12. A view from the shift employer's shift list

## 1.5. Filter Shift

All users can utilize the filter shifts function by selecting desired criteria. However, an employer cannot view or filter shifts offered by other employers. In addition, an admin can filter shifts using the admin panel.

In this screenshot, Employer 1 searched for shifts that have not been filled i.e. there is no nurse reserve those shifts from August 1 up to the present date.

Filter Shifts				
City contains...		Organization name contains...		nurse id exact...
Start Date	Finish Date	Role	Status	
146	0:00	Aug. 7, 2023-M	Aug. 7, 2023-M	None Unfilled
148	3:38	Aug. 7, 2023-Mon	Aug. 7, 2023-Mon	None Unfilled
155	6:00	Aug. 9, 2023-Wed	Aug. 9, 2023-Wed	None Unfilled

Figure 13. Screenshot of the filter shift feature from an employer panel

The screenshot shows the Django admin interface for the 'Shifts' model. The left sidebar lists models under 'CORE': AddressBooks, Custom users, Employers, Nurses, Shift templates, and Shifts (which is selected). The main table displays shift details for six entries, each with a checkbox, ID, Employer, Role, Shift Date, Date Published, Updated Date, Nurse, and Status. The status for all shown shifts is 'Unfilled'. The right sidebar features a 'FILTER' section with dropdown menus for 'By employer' (All, Employer1\_org, employer2, employer3, employer4, employer5 org, ward1, Ward2), 'By role' (All, RN, PN, ASST), 'By start time' (Any date, Today, Past 7 days, This month, This year), and 'By status' (All, Open, Reserved, Done).

Figure 14. An admin can filter shifts effortlessly from both the frontend and the admin panel

## 1.6. Confirm Shift

**1.6.1. Nurse Confirmation:** In this stage, the nurse takes the lead by confirming the shift. They validate the actual start and finish times, which default to the originally planned times. If the shift was carried out as planned, it receives the "N\_cfmd" (nurse confirmed) designation. Conversely, if the shift was not executed, the nurse offers explanations or comments. Furthermore, the nurse can choose to upload a sick note if necessary.

The screenshot shows a confirmation form for a shift. At the top, there's a purple header bar with 'Home', 'Search', and user info ('Linda'). Below is a 'Shift Details' section with fields for Shift ID (144), Employer (Employer1\_org), Employer ID (2), Shift Role (RN), Shift Address (employer 1 street, 01020, Helsinki), and Nurse ID (3) with name (Aho, Linda). Under 'Planned Times', 'Planned Start Time' is Aug. 8, 2023, 1:50 p.m. and 'Planned Finish Time' is Aug. 8, 2023, 9 p.m. In the 'Confirmation Details' section, 'Actual Start Time' is 2023-08-08 13:50:00 and 'Actual Finish Time' is 2023-08-08 21:00:00. The 'Performance\*' field has 'Performed' selected. Below are fields for 'Nurse sick note' (with a file input showing 'No file chosen') and 'Other document' (with a file input showing 'No file chosen'). A large 'Comments' text area is at the bottom, and a green 'Confirm' button is at the very bottom.

Figure 15. The Process of a nurse confirming an implemented shift

1.6.2. Employer Confirmation: After the nurse's confirmation, the employer reviews the shift and provides their confirmation. Employers are requested to validate the shift time and share any relevant comments. If all is in order, the shift is designated as "E\_cfmd" (employer confirmed).

1.6.3. Admin Confirmation: Finally, the admin confirms the shift. If there are no disputes, a completed shift is marked as done and transferred to payroll for payment. In case of a dispute, efforts are made to resolve it. If the shift was not performed, it is marked as undone.

The screenshot shows a web-based application interface for managing shifts. At the top, there is a purple header bar with the text 'Home' on the left, a search bar in the center, and user navigation links 'Admin\_Login', 'lala', and 'Log out' on the right. Below the header, a green banner displays the message 'Shift confirmed successfully.' On the left side of the main content area, there is a sidebar with a profile picture and the text 'Employer1\_org'. Underneath this, there are several data fields: 'Shift Date' (Aug. 8, 2023- Tue), 'Role' (RN), 'Email' (employer1@gmail.com), 'Published' (Aug. 7, 2023, 12:45 p.m.), 'Last updated' (Aug. 21, 2023, 10 p.m.), 'Nurse' (Linda Aho), and 'Details' (this is employer 1 template). Below these details is a 'Tags' section with two buttons: 'RN' and 'Done'. On the right side, under the heading 'Shift Confirmation Details', there is a table showing four rows of data:

User	Status	Performance	Confirmation Date
Linda Aho (ID: 3)	Confirmed	Performed	21-08-2023 21:25
Employer1_org	Done	Performed	21-08-2023 21:57
admin@gmail.com	Done	Performed	21-08-2023 22:00

Below the table, there is a section labeled 'Hrs' with two rows: 'Planned' (7:10) and 'Actual' (7:10). At the bottom right of the main content area, there is a 'View Logs' button and a small circular icon with a speech bubble symbol.

Figure 16. The process of a staff member confirming an implemented shift

## 1.7. Changes to Shift and Email Notifications

The system actively monitors changes to shifts, including creation, updates, reservations, and deletions. When any of these actions occur, the system logs the changes and sends email notifications to the relevant users. This ensures that all stakeholders are promptly informed about the status of shifts, promoting seamless communication and coordination.

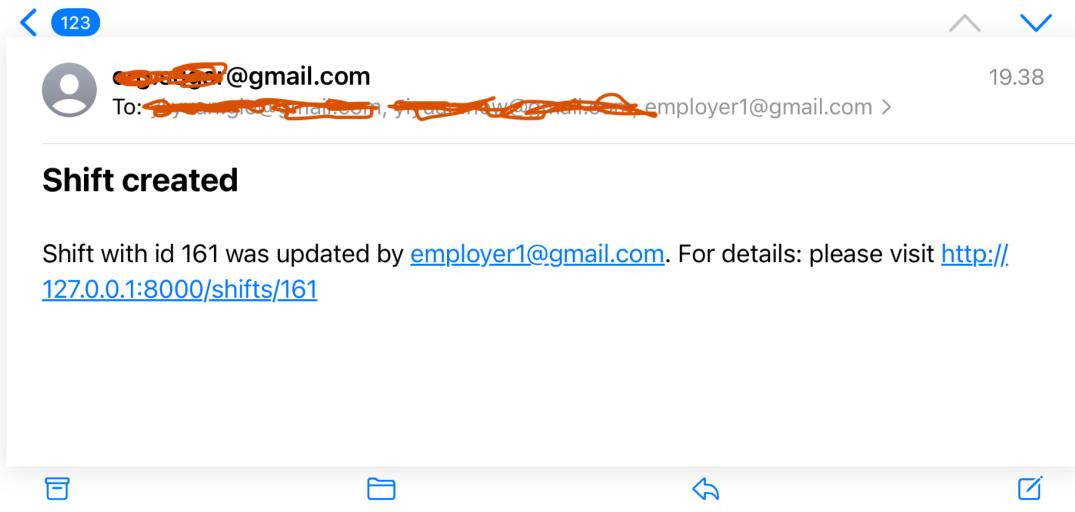


Figure 17. An Email sent to related users when a shift is created

A screenshot of a web browser displaying a log entry for Shift ID 161. The title is "Shift Logs for Shift ID: 161". The log entry shows a single event: "Shift has been created" on Aug. 21, 2023, at 7:38 p.m., logged by employer1@gmail.com. The browser's address bar shows the URL 127.0.0.1:8000/logs/161/.

Figure 18. Any changes made to a shift have been recorded in the logs

## 2. User Authorization and Authentication

### 2.1. User creation

The admin is responsible for creating a user and issuing an initial password to that user. The initial password needs to be changed according to certain rules once the account is activated. The admin assigns specific rights based on the user's role.

The screenshot shows the Django admin interface for 'Custom users'. The left sidebar lists various models: AddressBooks, Custom users (selected), Employers, Nurses, Shift templates, and Shifts. The main area displays a table titled 'Select custom user to change' with 13 rows. The columns are: ID, EMAIL ADDRESS, LAST NAME, IS STAFF, IS ACTIVE, IS NURSE, IS EMPLOYER, SUPERUSER STATUS, and LAST LOGIN. The table includes a search bar at the top and a 'FILTER' sidebar on the right with dropdowns for email address, staff status, active status, and nurse status.

Action:	ID	EMAIL ADDRESS	LAST NAME	IS STAFF	IS ACTIVE	IS NURSE	IS EMPLOYER	SUPERUSER STATUS	LAST LOGIN
<input type="checkbox"/>	1	admin@gmail.com	land	✓	✓	✗	✗	✓	Aug. 21, 2023, 10:19 p.m.
<input type="checkbox"/>	14	agency2@gmail.com	agency2_last	✓	✓	✗	✗	✗	Aug. 16, 2023, 1:34 p.m.
<input type="checkbox"/>	9	agency@gmail.com	lala	✓	✓	✗	✗	✗	Aug. 21, 2023, 8:25 p.m.
<input type="checkbox"/>	2	employer1@gmail.com	Lala	✗	✓	✗	✓	✗	Aug. 21, 2023, 10:12 p.m.
<input type="checkbox"/>	8	employer2@gmail.com	employer2_last	✗	✓	✗	✓	✗	Aug. 21, 2023, 9:56 p.m.
<input type="checkbox"/>	7	employer3@gmail.com	employer3_last	✗	✓	✗	✓	✗	Aug. 6, 2023, 7:43 p.m.
<input type="checkbox"/>	10	employer4@gmail.com	Shell	✗	✓	✗	✓	✗	Feb. 17, 2023, 8:44 a.m.
<input type="checkbox"/>	11	employer5@gmail.com	Isbella	✗	✓	✗	✓	✗	Aug. 21, 2023, 7:50 p.m.
<input type="checkbox"/>	6	jenni.puhakka@gmail.com	Puhakka	✗	✓	✓	✗	✗	-
<input type="checkbox"/>	5	leena.lauren@gmail.com	Lauren	✗	✓	✓	✗	✗	Aug. 7, 2023, 12:49 p.m.
<input type="checkbox"/>	3	nurse1@gmail.com	Aho	✗	✓	✓	✗	✗	Aug. 21, 2023, 9:34 p.m.
<input type="checkbox"/>	12	ward1@katrina.fi	Katrina	✗	✓	✗	✓	✗	-
<input type="checkbox"/>	13	ward2@katrina.fi	Katrina	✗	✓	✗	✓	✗	Aug. 4, 2023, 5:02 p.m.

13 custom users

Figure 19. A view of users from the admin panel

## 2.2. User Login

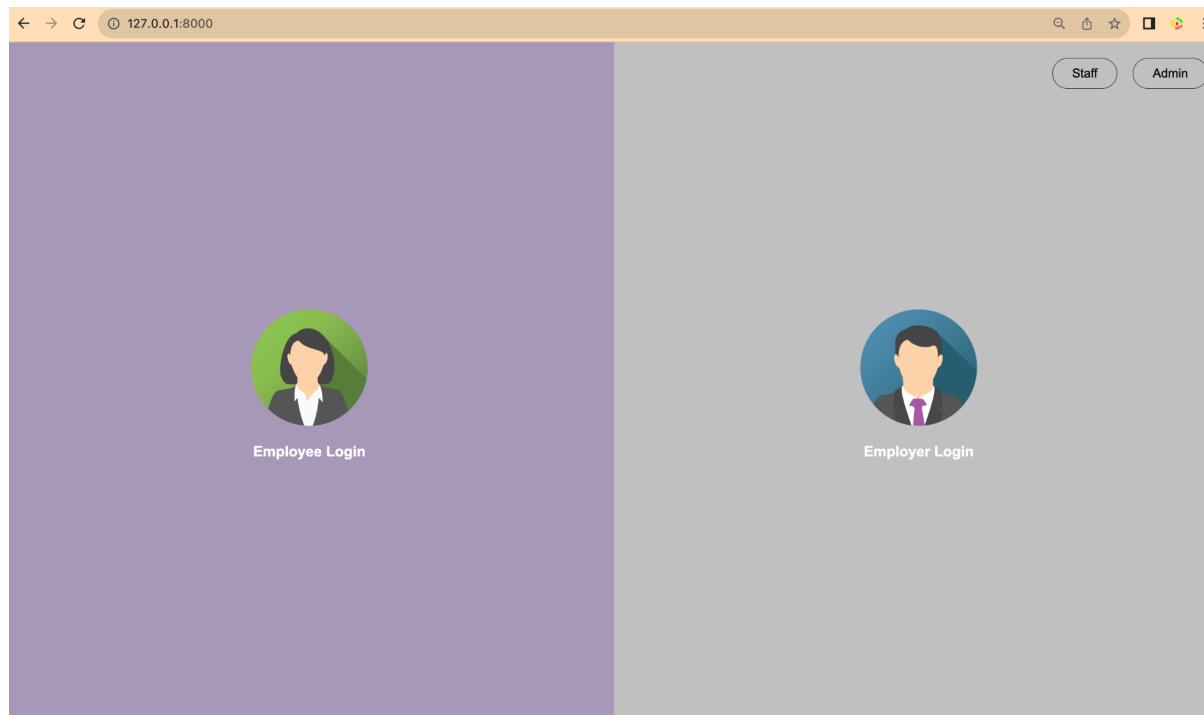


Figure 20. The landing page for user login

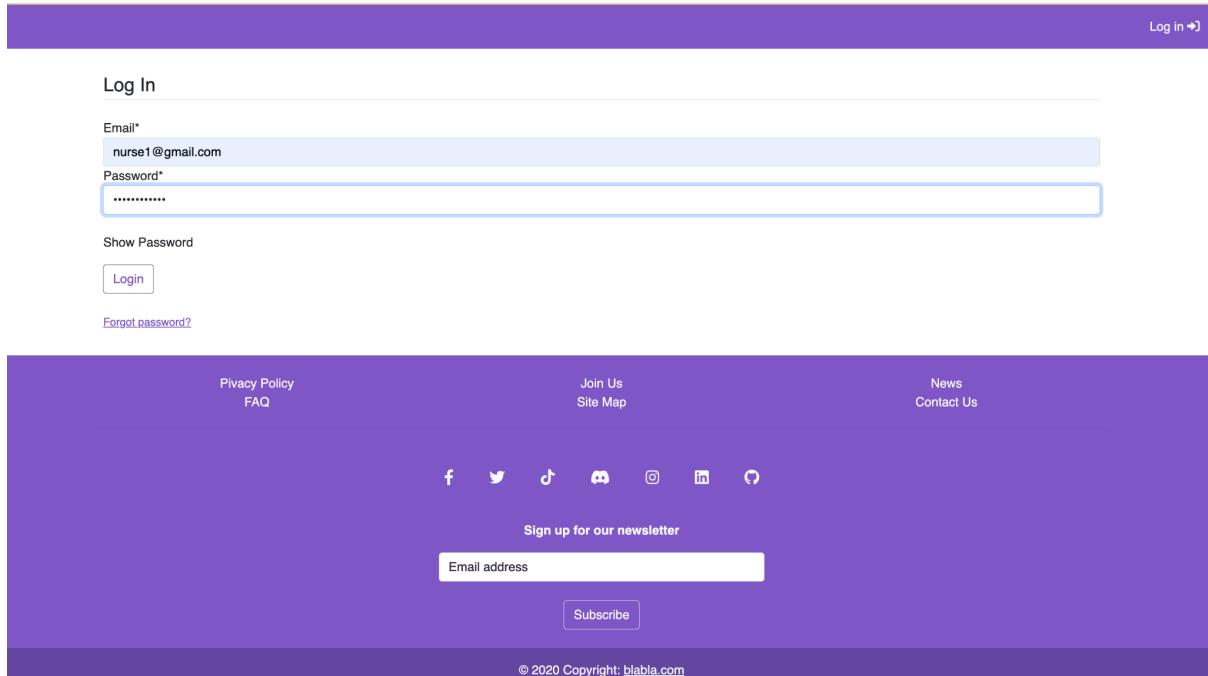


Figure 21. Login page on frontend

### 2.3. User Authentication and Password Management

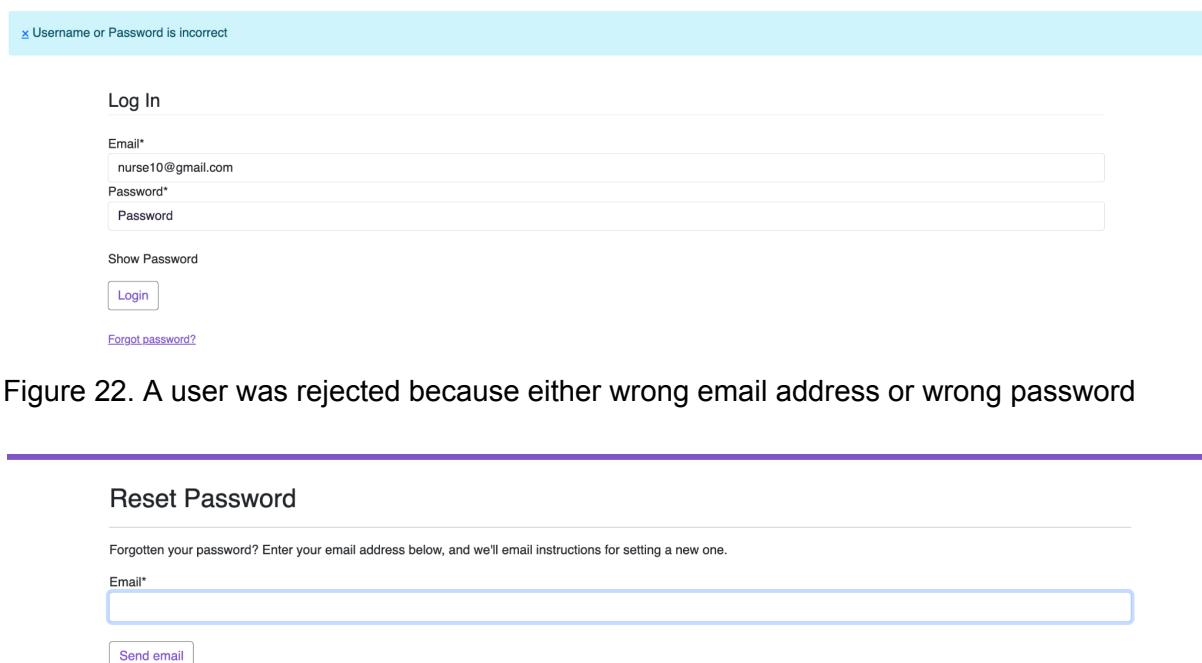


Figure 22. A user was rejected because either wrong email address or wrong password

Figure 23. A password reset link will be sent to a user's email upon receiving such a request

Home Search  Linda Log out

### Password Reset Confirm

Please enter your new password.

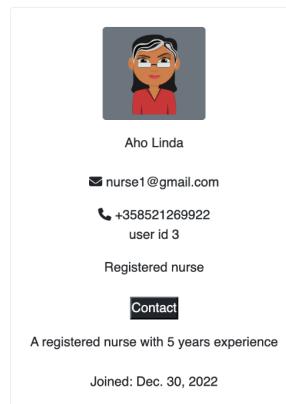
New password\*

Your password can't be too similar to your other personal information.  
 Your password must contain at least 8 characters.  
 Your password can't be a commonly used password.  
 Your password can't be entirely numeric.

New password confirmation\*

Figure 24. Password reset form

## 2.4. Update Profile



### Edit Profile Information

First name*	Last name*	Email*	Phone
Linda	Aho	nurse1@gmail.com	05 21269922
Bio*			
A registered nurse with 5 years experience			
<a href="#">Change password?</a> <input type="button" value="Update"/> <span style="margin-left: 20px;"></span>			

Figure 25. Screenshot of a user's own profile view

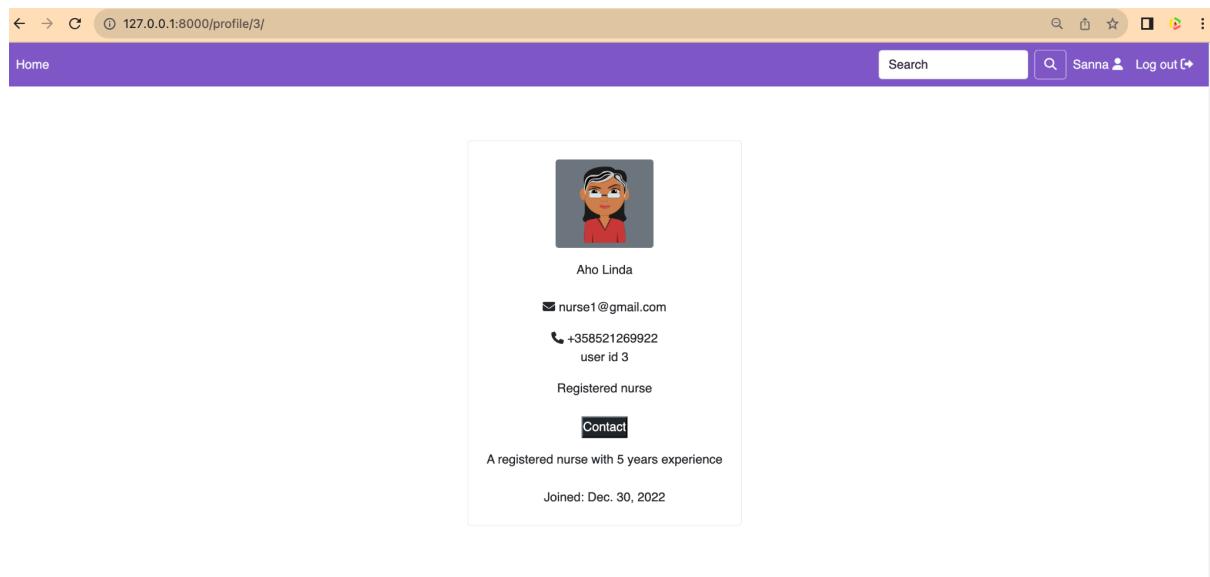


Figure 26. Another user's account viewing the mentioned user's profile

### 3. Additional Features

#### 3.1. Data Analysis

This app provides a feature that allows admin/staff to track the distribution status of shifts. In this example, the screenshots show the number of shifts created by each employer.

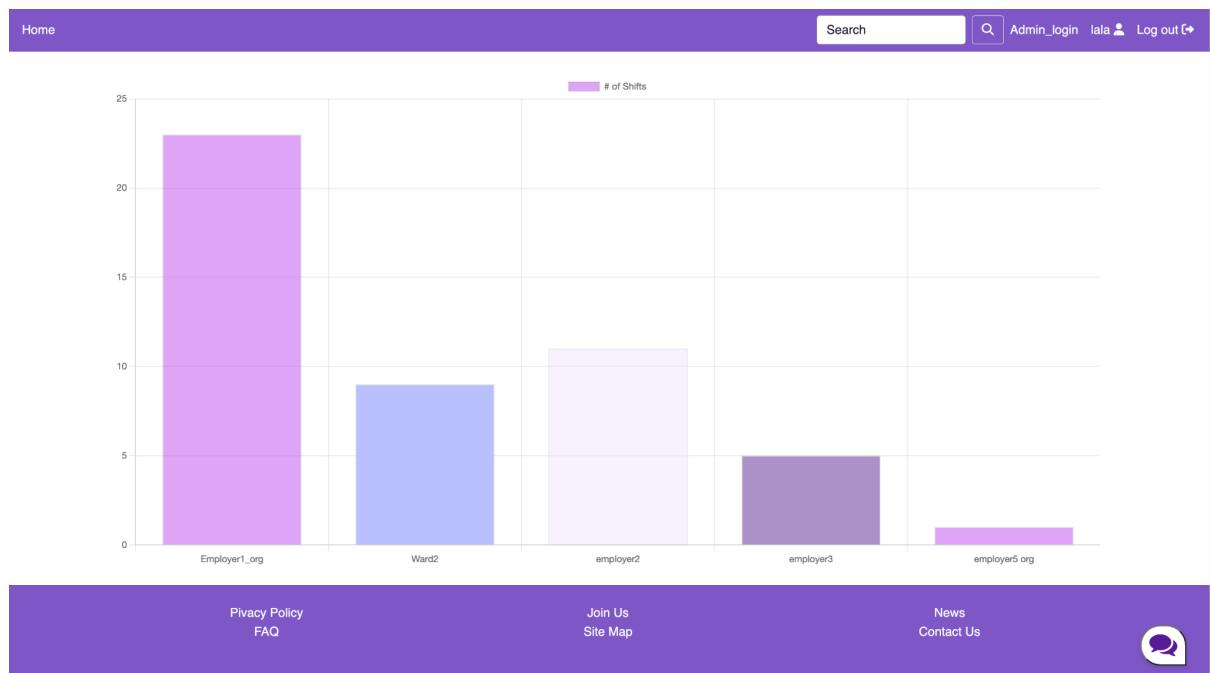


Figure 27. Screenshots depicting the count of shifts created by each employer.

### 3.2. Archive Shift

This feature enables agencies to optimize monthly data consumption costs. Shifts that are older than one month will be considered as inactive data. To achieve cost savings, such data will be transferred to a lower-cost storage solution. This efficient archiving process helps maintain essential data accessibility while managing expenses.

The screenshot shows a web application interface with a purple header bar. On the left of the header is a 'Home' link, and on the right are search, login, and logout buttons. The main content area has a title 'Archived Shifts'. Below it are two tables of shift data, each with columns for ID, Date, Weekdays, Time, Role, Employer, Nurse, and Details.

ID	Date	Weekdays	Time	Role	Employer	Nurse	Details
77	Aug. 4, 2023	Fri	2:25 p.m.-10:25 p.m.	RN	Employer1_org	Linda Aho (ID: 3)	<button>Details</button>
48	Aug. 2, 2023	Wed	11:31 a.m.-7:31 p.m.	RN	employer2	Linda Aho (ID: 3)	<button>Details</button>
96	Aug. 2, 2023	Wed	10:30 a.m.-5:30 p.m.	RN	Ward2	Linda Aho (ID: 3)	<button>Details</button>

ID	Date	Weekdays	Time	Role	Employer	Nurse	Details
78	July 26, 2023	Wed	2:30 p.m.-10:30 p.m.	RN	employer2	Linda Aho (ID: 3)	<button>Details</button>
89	July 25, 2023	Tue	5:26 p.m.-7:27 p.m.	RN	employer3	Linda Aho (ID: 3)	<button>Details</button>
73	July 22, 2023	Sat	6:55 a.m.-4:55 p.m.	RN	Employer1_org	Linda Aho (ID: 3)	<button>Details</button>
37	July 19, 2023	Wed	12:11 p.m.-9:11 p.m.	RN	Employer1_org	Linda Aho (ID: 3)	<button>Details</button>
21	July 15, 2023	Sat	6 a.m.-3 p.m.	PN	employer3	Linda Aho (ID: 3)	<button>Details</button>

At the bottom of the page is a purple footer bar with links for Privacy Policy, FAQ, Join Us, Site Map, News, Contact Us, and social media icons for Facebook, Twitter, TikTok, LinkedIn, and YouTube, along with a blue speech bubble icon.

Figure 28. Archived shifts arranged in reverse chronological order

### 3.3. Chatbot Support

This chatbot is built on top of PyTorch and NLTK, offering both advantages and considerations. The benefit lies in its cost-effectiveness, as it's free and can be customized to meet an organization's specific needs based on user requirements. However, the trade-off involves the substantial package size, potentially leading to higher cloud operating costs. Additionally, training the chatbot to align precisely with an organization's needs necessitates a significant amount of user data.

As the organization scales, an optimal approach could involve leveraging third-party free or low-cost chatbot widgets. Integrating these widgets with your own chatbot offers a balanced solution that aligns with the organization's growth trajectory.

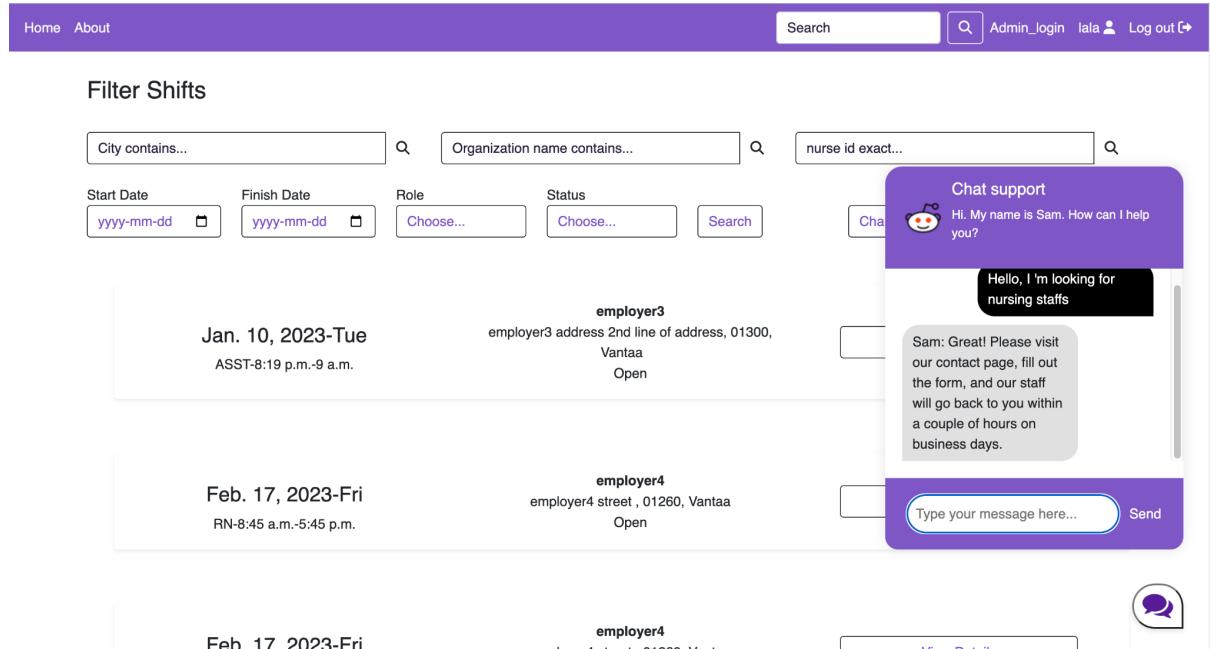


Figure 29. Bot discussing with an employer

## Conclusion

This guide has delved into the various features and functionalities of the Reservation app, providing a thorough understanding of its capabilities and benefits. From user authentication and role-based access to shift management and additional tools like data analysis and chatbot support, the app presents a comprehensive solution for workforce leasing companies.

Throughout the guide, you've explored how different user groups—employers, nurses, agency staff, and admins—can make the most of the app's tools to streamline their operations and enhance communication. By following the step-by-step instructions and explanations provided in each section, you're equipped with the knowledge to effectively use the app's features.

As you start using the Reservation app, consider the opportunities it offers for efficient shift management, improved coordination, and enhanced user experiences. If you have any questions or need further assistance, please refer to this guide or get in touch with our support team.

Thank you for selecting the Reservation app as your workforce management solution. We anticipate your success as you integrate its features within your organization.

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 Web : <https://portfolio-aceiyuan.vercel.app/>

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# Disclaimer

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