

User manual for Super-Li HR System

Activating the program

To activate the program on windows command prompt, first navigate to the ADSS_Group_L\release folder using cd command.

Then use java -jar adss2020_v01.jar to run the program.

Testing the program

Use java -jar tests.jar to run the program's tests.

Initializing the system:

After running the program, the system will ask if you want to initialize the system with data, before moving on to the system's main menu.

If you do press "y" and enter.

If you don't press any letter or digit and enter.

```
Welcome to Super-Li HR System
Do you want to initialize the system with data?(y/n)
y
system's data loaded
```

The following data will be added to the system:

```
The shift are:
1.
date=Fri Aug 14 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[1, 3, 5]
2.
date=Fri Aug 14 00:00:00 IDT 2020
morning=false
manager_id=1
workers=[2, 4]
3.
date=Sun Aug 16 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[1, 5]
4.
date=Mon Oct 19 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[2, 3]
5.
date=Mon Oct 19 00:00:00 IDT 2020
morning=false
manager_id=1
workers=[1, 2, 3, 4, 5]
```

The employees are:

```
1.
name=avi levy
id=1
bank_account_number=202
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager
2.
name=shimon cohen
id=2
bank_account_number=311
salary=1000
pension=10
vacation_days=10
sick_days=10
start_date=Fri Jun 15 00:00:00 IDT 2018
role=manager
3.
name=dan panorama
id=3
bank_account_number=157
salary=1700
pension=10
vacation_days=10
sick_days=10
start_date=Sat Jan 12 00:00:00 IST 2019
role=cashier
4.
name=ben biton
id=4
bank_account_number=802
salary=900
pension=10
vacation_days=10
sick_days=10
start_date=Tue Jan 14 00:00:00 IST 2020
role=cashier
5.
name=avi bitter
id=5
bank_account_number=171
salary=1300
pension=10
vacation_days=10
sick_days=10
start_date=Wed Mar 18 00:00:00 IST 2020
role=driver
```

The constraints are:

```
1.
cid=0
date=Thu Apr 30 00:00:00 IDT 2020
morning=false
id=1
reason=wedding
2.
cid=3
date=Thu May 07 00:00:00 IDT 2020
morning=false
id=3
reason=vacation
3.
cid=4
date=Thu May 07 00:00:00 IDT 2020
morning=true
id=3
reason=vacation
4.
cid=5
date=Fri May 08 00:00:00 IDT 2020
morning=false
id=3
reason=vacation
5.
cid=6
date=Fri May 08 00:00:00 IDT 2020
morning=true
id=3
reason=vacation
6.
cid=1
date=Wed May 20 00:00:00 IDT 2020
morning=true
id=1
reason=surgery
7.
cid=2
date=Fri Jun 19 00:00:00 IDT 2020
morning=true
id=2
reason=doctor
```

Using the program

Main menu:

After the initialization you will be presented with the program's main menu, this menu presents all of the program current operations and executes them according to your choosing:

```
The possible commands are:
1. add new employee.
2. add new shift.
3. add new constraint.
4. edit employee.
5. edit shift.
6. edit constraint.
7. delete employee.
8. delete shift.
9. delete constraint.
10. search employee.
11. search shift.
12. search constraint.
13. present weekly shift report.
14. present weekly constraint report.
15. print all employees.
16. print all shifts.
17. print all constraints.
18. Exit.
Please choose a command:
1
```

Press the number of the command you want to execute and enter.

```
Please choose a command:
1
you have chosen the command:
1. add new employee.
```

Commands:

1. add new employee

After choosing this command the system will ask you to enter the new employee's data field by field:

- id- a positive Integer.
- Full name- a String (Text).
- Salary- an Integer.
- Pension- an Integer.
- Sick days- an Integer.
- Start Date- a date using a dd/mm/yyyy format.
- Role- a String (Text).
- bank account- an Integer.

Enter each field according to the above information and press enter.

If you enter a field with a wrong parameter an error message will be presented and you will be sent back to the main menu.

If the Employee was successfully added the message "employee was added:" along with the employee's details will be presented to the screen.

```
please enter the details of the new employee
id: 123456789
Full name: inbar mai
salary: 30
pension: 30
vacation: 30
sickDays: 30
startDate: 20/2/2020
role: manager
bank account: 1515
employee was added:
name=inbar mai
id=123456789
bank_account_number=1515
salary=30
pension=30
vacation_days=30
sick_days=30
start_date=Thu Feb 20 00:00:00 IST 2020
role=manager
```

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

2. add new shift

After choosing this command the system will ask you to enter the new shift's data field by field.

Enter each field according to the information below and press enter:

- Date- a date using a dd/mm/yyyy format.
- Morning shift? - enter true or false.

```
please enter the details of the new shift
date: 20/7/2020
is it a Morning shift? (true/false)true
```

After entering those two fields you will be presented with a list of available managers for this shift, if no managers are available you will be returned to the main menu because a shift has to have at list one manger.

Then enter the chosen manager's id and press enter.

```
The available managers are:
1.
name=avi levy
id=1
bank_account_number=202
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager
2.
name=shimon cohen
id=2
bank_account_number=311
salary=1000
pension=10
vacation_days=10
sick_days=10
start_date=Fri Jun 15 00:00:00 IDT 2018
role=manager
please enter the chosen manger's id
```

The system will ask if you need more employees or not answer by y/n in accordance, the following operation will happen as long as you answer y:

If you do need more employees the system will ask what is the role of the employee you want to add, type the role and press enter. Then the system will print to the screen all of the employees of that role that are available in that date and time' and will ask you to enter the chosen id of the employee type the id and press enter.

```
Do you need more employees? (y/n)
y
please enter the role for the employee you require
cashier
The available cashiers are:
1.
name=dan panorama
id=3
bank_account_number=157
salary=1700
pension=10
vacation_days=10
sick_days=10
start_date=Sat Jan 12 00:00:00 IST 2019
role=cashier
2.
name=ben biton
id=4
bank_account_number=802
salary=900
pension=10
vacation_days=10
sick_days=10
start_date=Tue Jan 14 00:00:00 IST 2020
role=cashier
please enter the chosen id: 3
Do you need more employees? (y/n)
n
```

If the shift was successfully added the message "shift was added:" along with the shift's details will be presented to the screen.

```
shift was added:
date=Mon Jul 20 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[3]
```

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

3. add new constraint

After choosing this command the system will ask you to enter the new constraint's data field by field:

- employee's id- a positive Integer.
- Date- a date using a dd/mm/yyyy format.
- Morning shift? - enter true or false.
- reason- a String (Text).

Enter each field according to the above information and press enter.

If you enter a field with a wrong parameter an error message will be presented and you will be sent back to the main menu.

If the constraint was successfully added the message " constraint was added:" along with the constraint 's details will be presented to the screen.

```
please enter the details of the new constraint
Employee's id: 1
Date: 10/6/2020
is it a Morning shift you will miss? (true/false) true
reason: wedding
Constraint was added:
cid=0
date=Wed Jun 10 00:00:00 IDT 2020
morning=true
id=1
reason=wedding
```

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

4. Edit employee

The system will ask you to enter the employee's id, type it and press enter.

```
please enter the id of the employee you want to edit
|
The employee you selected is
name=avi levy
id=1
bank_account_number=202
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager
Please choose a field you want to change:
```

If the system didn't find the employee it will return you to the main menu, otherwise it will present the employee's details and will present menu asking which field you want to edit' this process will happen until you choose the option finished editing.

After choosing the field the system will ask you to type the new field you want, type it according to the rules presented in the new employee's command (Full name is text et.) and press enter.

```
Please choose a field you want to change:
1. Full name
2. salary
3. pension
4. vacation days
5. sick days
6. start date
7. role
8. bank account
9. finished editing
|
Enter new bank account:5555
The employee you selected is
name=avi levy
id=1
bank_account_number=5555
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager
Please choose a field you want to change:
1. Full name
2. salary
3. pension
4. vacation days
5. sick days
6. start date
7. role
8. bank account
9. finished editing
|
```


If the employee was edited successfully the message " employee was edited:" along with the employee's details will be presented to the screen.

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

5. Edit shift

The system will ask you to enter the shift's date, type it and press enter.

Then the system will ask you to enter if it is a morning shift, type true or false and press enter.

```
please enter the Date of the shift you want to edit
16/08/2020
is it a morning shift? (true/false)
true
The shift you selected is
date=Sun Aug 16 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[1, 5]
```

If the system didn't find the shift it will return you to the main menu, otherwise it will present the shift's details and will present menu asking which field you want to edit' this process will happen until you choose the option finished editing.

If you chose the fields date or morning the system will ask you to type the new field you want, type it according to the rules presented in the new shift's command and press enter.

```
Please choose a field you want to change:
1. date
2. morning
3. manager_id
4. add worker
5. remove worker
6. finished editing
1
Enter new date:Enter new start date:2/2/2021
```

If you want to edit the manager the system will present you with a list of manager available to this date and time, then it will ask you to enter the manager's id you choose.

```
Please choose a field you want to change:
1. date
2. morning
3. manager_id
4. add worker
5. remove worker
6. finished editing
?
1.
name=avi levy
id=1
bank_account_number=202
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager
2.
name=shimon cohen
id=2
bank_account_number=311
salary=1000
pension=10
vacation_days=10
sick_days=10
start_date=Fri Jun 15 00:00:00 IDT 2018
role=manager
Enter new manager id: ?
```

If you want to remove/ add employees the system will first present the details of the current shift's employees and then will ask you to enter the id of the employee you want to add/ remove.

```
The current employees are:
name=avi levy
id=1
bank_account_number=202
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager

name=avi bitter
id=5
bank_account_number=171
salary=1300
pension=10
vacation_days=10
sick_days=10
start_date=Wed Mar 18 00:00:00 IST 2020
role=driver

please enter the id of the employee you wish to add: ?
```

If the shift was edited successfully the message "shift was edited:" along with the shift's details will be presented to the screen.

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

6. Edit constraint:

The system will ask you to enter the employee's id, type it and press enter.

The system will ask you to enter the constraint's date, type it and press enter.

Then the system will ask you to enter if it is a morning shift constraint, type true or false and press enter.

```
please enter the employee's id who's constraint you want to edit
1
please enter the Date of the constraint you want to edit
30/4/2020
is it a morning shift constraint? (true/false)
false
The constraints the system found are:
1. cid=0
date=Thu Apr 30 00:00:00 IDT 2020
morning=false
id=1
reason=wedding
```

If the system didn't find the constraint it will return you to the main menu, otherwise it will present the details of the constraints found, enter the number of the constraint you want to edit.

```
The constraints the system found are:
1. cid=0
date=Thu Apr 30 00:00:00 IDT 2020
morning=false
id=1
reason=wedding
please choose the constraint you want to edit
1
The constraint you selected is
cid=0
date=Thu Apr 30 00:00:00 IDT 2020
morning=false
id=1
reason=wedding
```

The system will present menu asking which field you want to edit' this process will happen until you choose the option finished editing.

After choosing the field the system will ask you to type the new field you want, type it according to the rules presented in the new constraint's command (reason is text et.) and press enter.

```
Please choose a field you want to change:
1. date
2. morning
3. Employee's id
4. reason
5. finished editing
4
Enter new reason: doctor
```

If the constraint was edited successfully the message " constraint was edited:" along with the constraint's details will be presented to the screen.

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

7. Delete employee:

The system will ask you to enter the employee's id, type it and press enter.

```
please enter the id of the employee you want to delete
1
The employee you selected is
name=avi levy
id=1
bank_account_number=202
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager
are you sure you want to delete this employee?(y/n)
y
```

If the system didn't find the employee it will return you to the main menu, otherwise it will present the employee's details and will ask if you want to delete this employee if you do press y and enter if you don't press n and enter.

If the employee was deleted successfully the message " employee was deleted:" along with the employee's details will be presented to the screen.

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

8. Delete shift:

The system will ask you to enter the shift's date, type it and press enter.

Then the system will ask you to enter if it is a morning shift, type true or false and press enter.

```
please enter the Date of the shift you want to delete
16/8/2020
is it a morning shift? (true/false)
true
The shift you selected is
date=Sun Aug 16 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[1, 5]
are you sure you want to delete this shift?(y/n)
y
shift was deleted
date=Sun Aug 16 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[1, 5]
```

If the system didn't find the shift it will return you to the main menu, otherwise it will present the shift's details and will ask if you want to delete this shift if you do press y and enter if you don't press n and enter.

If the shift was deleted successfully the message "shift was deleted:" along with the shift's details will be presented to the screen.

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

9. Delete constraint:

The system will ask you to enter the employee's id, type it and press enter.

The system will ask you to enter the constraint's date, type it and press enter.

Then the system will ask you to enter if it is a morning shift constraint, type true or false and press enter.

If the system didn't find the constraint it will return you to the main menu, otherwise it will present the details of the constraints found, enter the number of the constraint you want to delete.

```
please enter the employee's id who's constraint you want to delete
|
please enter the Date of the constraint you want to delete
00/5/2020
is it a morning shift constraint? (true/false)
true
The constraints the system found are:
1. cid=1
date=Wed May 20 00:00:00 IDT 2020
morning=true
id=1
reason=surgery
please choose the constraint you want to delete
|
The constraint you selected is
cid=1
date=Wed May 20 00:00:00 IDT 2020
morning=true
id=1
reason=surgery
```

If the constraint was deleted successfully the message " constraint was deleted:" along with the constraint's details will be presented to the screen.

If not an Error message "The action have failed due to" and the reason for failing will be presented to the screen.

10. Search employee:

The system will ask you to enter the employee's id, type it and press enter.

```
please enter the id of the employee you want to search
1
The employee you searched is
name=avi levy
id=1
bank_account_number=202
salary=2000
pension=10
vacation_days=10
sick_days=10
start_date=Sat Feb 14 00:00:00 IST 2015
role=manager
```

If the system didn't find the employee it will return you to the main menu, otherwise it will present the employee's details.

11. Search shift:

The system will ask you to enter the shift's date, type it and press enter.

Then the system will ask you to enter if it is a morning shift, type true or false and press enter.

```
please enter the Date of the shift you want to search
19/10/2020
is it a morning shift? (true/false)
true
The shift you searched is
date=Mon Oct 19 00:00:00 IDT 2020
morning=true
manager_id=1
workers=[2, 3]
```

If the system didn't find the shift it will return you to the main menu, otherwise it will present the shift's details.

12. Search constraint:

The system will ask you to enter the employee's id, type it and press enter.

The system will ask you to enter the constraint's date, type it and press enter.

Then the system will ask you to enter if it is a morning shift constraint, type true or false and press enter.

```
please enter the employee's id who's constraint you want to search
3
please enter the Date of the constraint you want to search
7/5/2020
is it a morning shift constraint? (true/false)
true
The constraints the system found are:
1. cid=4
date=Thu May 07 00:00:00 IDT 2020
morning=true
id=3
reason=vacation
```

If the system didn't find the constraint it will return you to the main menu, otherwise it will present the details of the constraints found.

13. present weekly shift report:

Prints all of the shifts that has been scheduled for the current week.

14. present weekly constraint report:

Prints all of the constraints that has been submitted for the current week.

15. print all employees:

Prints all of the employees that's in the system.

16. print all shifts:

Prints all of the shifts that's in the system.

17. print all constraints:

Prints all of the constraints that's in the system.

18. Exit:

Shut the program down.