

“Implementation Documentation”

Table of Contents

a) Compliance with User Expectations.	3
1. Introduction.....	6
2. Purpose.....	6
3. Scope	6
5. Revision History	6
6. Overview of the BMI calculator.....	6
b) Setting Up UrbanFurn’s Payroll program.....	7
Installation Guide.....	7
User Guide (for shift 1, 2 and 3)	10
User Guide – Continuation (for shift 2 and 3 only)	12
c) Installation Plan.	14

a) Compliance with User Expectations.

Test Case 1

- Input Conditions: Hours: 40, Shift: 1
- Expected Outcome: Hourly Pay Rate: R50.0, Regular Pay: R2000.0, Overtime Pay: R0.0, Total Pay: R2000.0, Retirement Deduction: R0.0, Net Pay: R2000.0
- Calculations:
 $R2000.0 \text{ (Regular Pay)} = 50 \text{ (Hourly Pay Rate)} * 40$
 $R2000.0 \text{ (Total Pay)} = 2000.0 \text{ (Regular Pay)} + 0.0 \text{ (Overtime Pay)}$
 $R2000.75 \text{ (Net Pay)} = R2000.0 \text{ (Total Pay)} - 0.0 \text{ (Retirement Deduction)}$
- Actual Outcome: Hourly Pay Rate: R50.0, Regular Pay: R2000.0, Overtime Pay: R0.0, Total Pay: R2000.0, Retirement Deduction: R0.0, Net Pay: R2000.0
- Errors: None

```
run:
Enter your number of hours worked: 40

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
1

-----
Hours Worked: 40
Shift: 1
Hourly pay rate: R50.0
Regular pay: R2000.0
Overtime pay: R0.0
Total of regular and overtime pay: R2000.0
Retirement deduction: R0.0
Net pay: R2000.0
BUILD SUCCESSFUL (total time: 3 seconds)
|
```

Test Case 2

- Input Conditions: Hours: 85, Shift: 3, Retirement: Yes
- Expected Outcome: Hourly Pay Rate: R90.0, Regular Pay: R3600.0, Overtime Pay: R6075.0, Total Pay: R9675.0, Retirement Deduction: R483.75, Net Pay: R9191.25
- Calculations:
 $R3600.0 \text{ (Regular Pay)} = 90 \text{ (Hourly Pay Rate)} * 40$
 $R127,5 \text{ (Overtime Rate)} = 85 \text{ (Hours Worked)} * 1.5$
 $R6075.0 \text{ (Overtime Pay)} = (85 \text{ (Hours Worked)} - 40) * 127,5 \text{ (Overtime Rate)}$
 $R9675.0 \text{ (Total Pay)} = 3600.0 \text{ (Regular Pay)} + 6075.0 \text{ (Overtime Pay)}$
 $R483.75 \text{ (Retirement Deduction)} = 9675.0 \text{ (Total Pay)} * 0.05$
 $R9191.25 \text{ (Net Pay)} = 9675.0 \text{ (Total Pay)} - R483.75 \text{ (Retirement Deduction)}$
- Actual Outcome: Hourly Pay Rate: R90.0, Regular Pay: R3600.0, Overtime Pay: R6075.0, Total Pay: R9675.0, Retirement Deduction: R483.75, Net Pay: R9191.25
- Errors: None

```
run:
Enter your number of hours worked: 85

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
3

Would you like to participate in the retirement plan? (yes/no): YES

-----
Hours Worked: 85
Shift: 3
Hourly pay rate: R90.0
Regular pay: R3600.0
Overtime pay: R6075.0
Total of regular and overtime pay: R9675.0
Retirement deduction: R483.75
Net pay: R9191.25
BUILD SUCCESSFUL (total time: 7 seconds)
```

Test Case 3

- Input Conditions: Hours: 10, Shift: 2, Retirement: no
- Expected Outcome: Hourly Pay Rate: R70.0, Regular Pay: R700.0, Overtime Pay: R0.0, Total Pay: R700.0, Retirement Deduction: R0.0, Net Pay: R700.0
- Calculations:
 $R700.0 \text{ (Regular Pay)} = 70 \text{ (Hourly Pay Rate)} * 10$
 $R700.0 \text{ (Total Pay)} = 700.0 \text{ (Regular Pay)} + 0.0 \text{ (Overtime Pay)}$
 $R700.0 \text{ (Net Pay)} = 700.0 \text{ (Total Pay)} - 0.0 \text{ (Retirement Deduction)}$
- Actual Outcome: Hourly Pay Rate: R70.0, Regular Pay: R700.0, Overtime Pay: R0.0, Total Pay: R700.0, Retirement Deduction: R0.0, Net Pay: R700.0
- Errors: None

```
run:
Enter your number of hours worked: 10

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
2

Would you like to participate in the retirement plan? (yes/no): no

-----
Hours Worked: 10
Shift: 2
Hourly pay rate: R70.0
Regular pay: R700.0
Overtime pay: R0.0
Total of regular and overtime pay: R700.0
Retirement deduction: R0.0
Net pay: R700.0
BUILD SUCCESSFUL (total time: 11 seconds)
```

- ✓ All expected and actual outcomes for test case 1, 2 and 3 all match
- ✓ The program meets the requirements stated in the plan and design documentation
- ✓ The logic of the calculation meets the requirements stated in the plan and design documentation

1. Introduction

Welcome to the UrbanFurn's Payroll program, where the workers at UrbanFurn make use of this tool to help them in assessing the accurate calculation of the regular and overtime pay for workers across different shifts and handle retirement plan contributions for second and third-shift workers.

2. Purpose

The purpose of this document is to assist the company, UrbanFurn, and its workers in understanding the workings of the payroll program. It covers the installation and usage of the payroll program, making sure that UrbanFurn can set up and use the program smoothly.

3. Scope

This document covers all aspects of UrbanFurn's Payroll program, including:

- Overview: Provide a high-level description of UrbanFurn's Payroll program.
- Installation Guide: Step-by-step instructions on how to set up UrbanFurn's Payroll program.
- User Guide: Detailed instructions on how to use UrbanFurn's Payroll program, with screenshots and examples.

5. Revision History

UrbanFurn's Payroll program manual will be updated to reflect any changes in software requirements, and any related to user feedback.


6. Overview of the BMI calculator

UrbanFurn's Payroll program is a simple, yet powerful tool designed to help the workers of UrbanFurn in assessing the accurate calculation of pay for workers across different shifts, including those who wish to partake in the retirement plan contributions. It provides an easy-to-use console-based interface and accurate logic.


b) Setting Up UrbanFurn's Payroll program

Installation Guide.

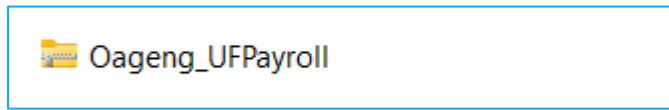
Step 1: Make sure to install an Integrated Development Environment (IDE) such as NetBeans (recommended).

 Apache-NetBeans-21-bin-windows-x64

Step 2: Download and install the JDK from the official Oracle website.

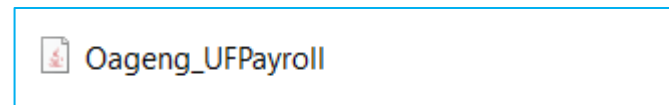
 jdk-22_windows-x64_bin

Step 3: Open your IDE and open the Java project “*Oageng_UFPayroll.java*”. Extract the file.

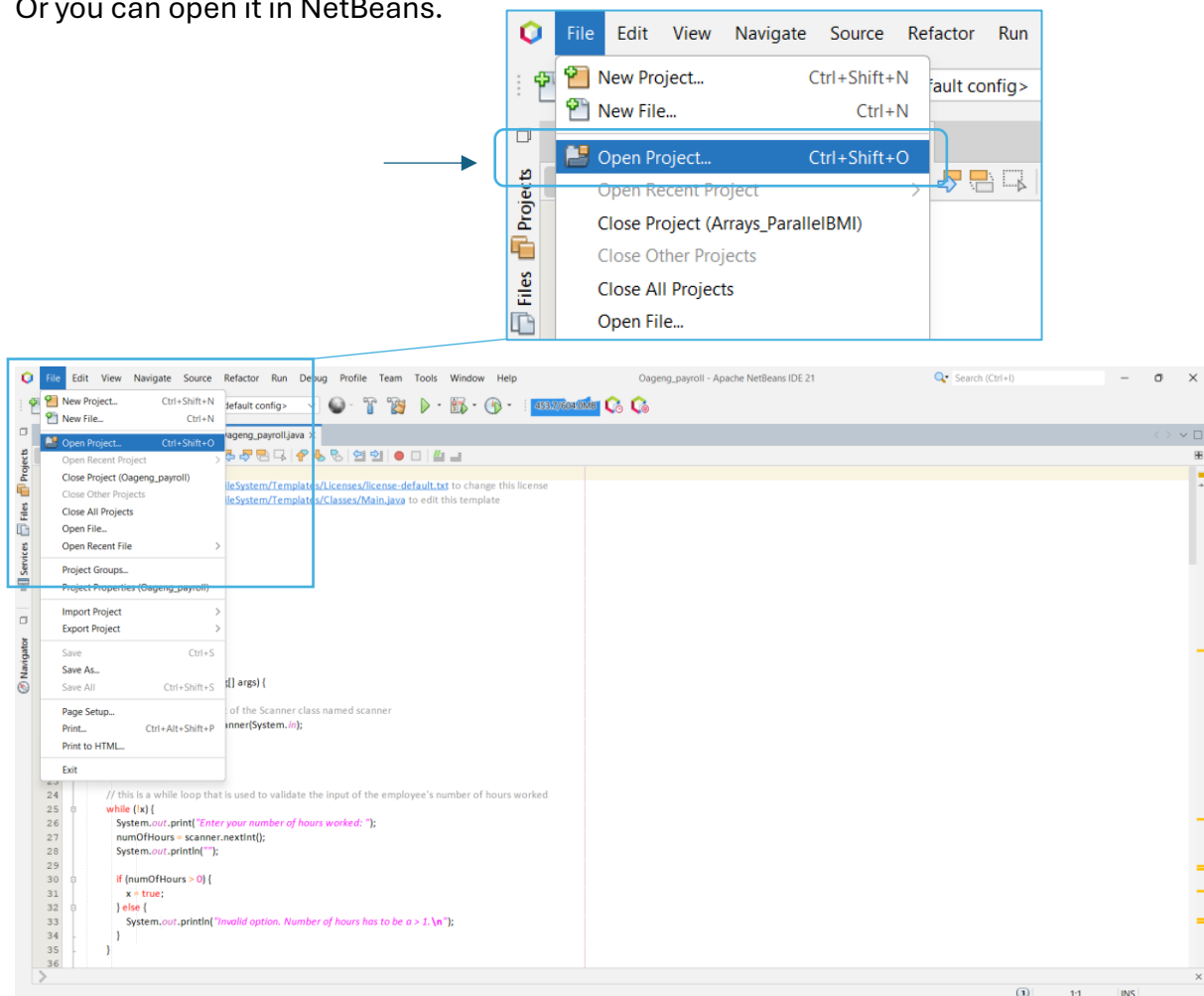


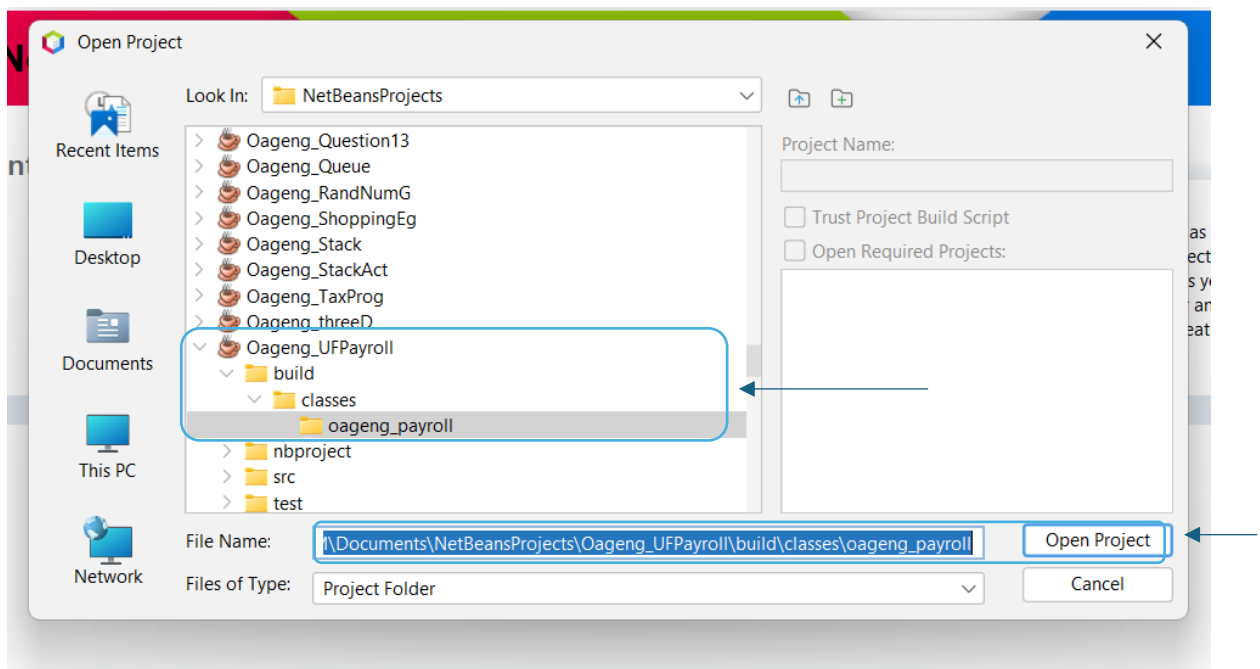
Step 4: Then follow this pathway:

“*Oageng_UFPayroll\src\oageng_payroll\Oageng_UFPayroll.java*” and open this project: “*Oageng_UFPayroll.java*”

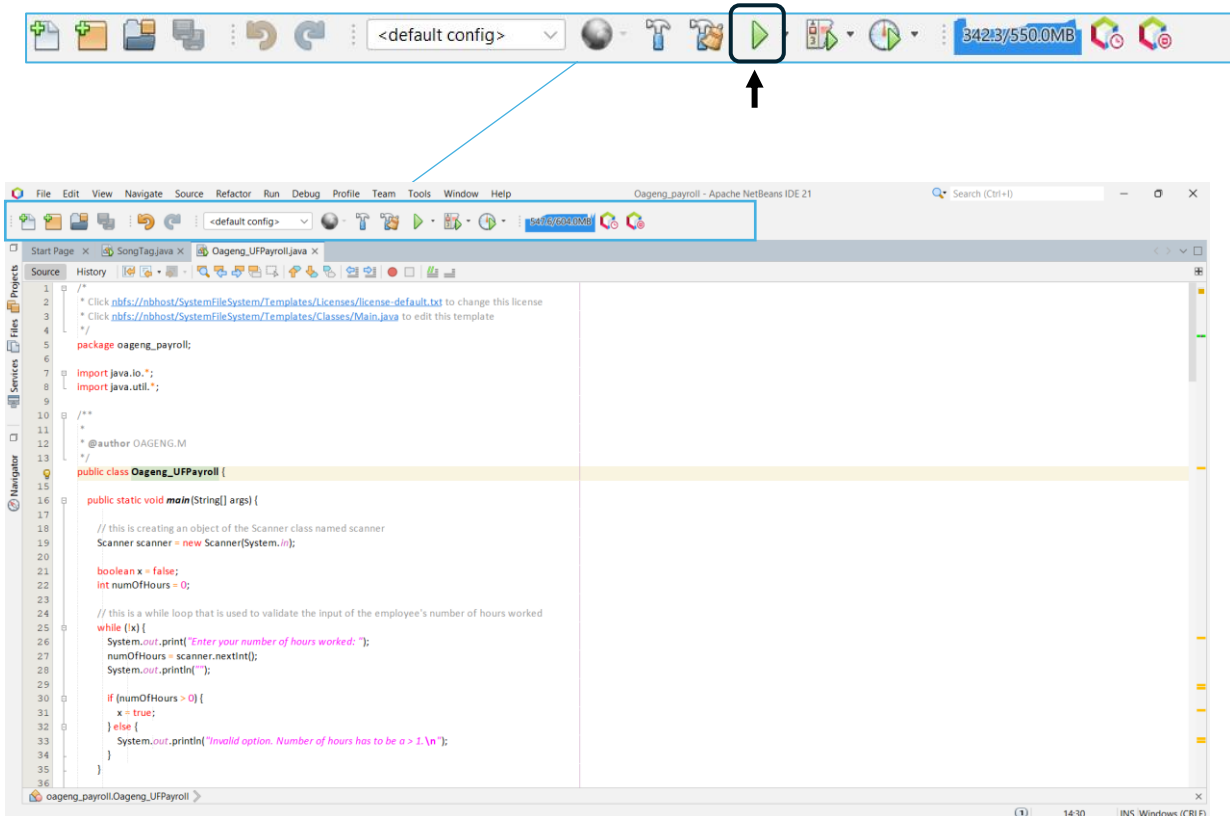


Or you can open it in NetBeans.





Step 5: Once open, compile and run the program from your IDE.



User Guide (for shift 1, 2 and 3)

Step 6: After running the program, this is the output that will automatically appear. A question asking you to “Enter your number of hours worked:” will be asked, follow the on-screen prompts and then click Enter.

```
run:  
Enter your number of hours worked:
```

Step 7: After following the on-screen prompts and then click Enter, you will be asked to enter your shift number between the options: (1 for First Shift, 2 for Second Shift, or 3 for Third Shift) and then click Enter.

```
run:  
Enter your number of hours worked: 40  
  
Enter your shift number (1, 2, or 3):  
1 - First shift  
2 - Second shift  
3 - Third shift
```

Step 8: If the option entered is valid, then the program will display the number of hours worked and the shift entered along with the full breakdown of the payment.

```
run:
Enter your number of hours worked: 40

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
1

-----
Hours Worked: 40
Shift: 1
Hourly pay rate: R50.0
Regular pay: R2000.0
Overtime pay: R0.0
Total of regular and overtime pay: R2000.0
Retirement deduction: R100.0
Net pay: R1900.0
BUILD SUCCESSFUL (total time: 3 seconds)
```

If the option entered is invalid, then the program will display an error message and allow you to try again.

```
run:
Enter your number of hours worked: 40

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
4

Invalid option. Please choose 1, 2, or 3.

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
|
```

User Guide – Continuation (for shift 2 and 3 only)

Step 9: If the shift enter is either 2 or 3, you will get asked if you would you like to participate in the retirement plan? (yes/no)

```
run:
Enter your number of hours worked: 40

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
2

Would you like to participate in the retirement plan? (yes/no):
```

Step 10: If you entered yes, then 5% of your total pay will be deducted and will be evident in the breakdown.

```
run:
Enter your number of hours worked: 40

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
2

Would you like to participate in the retirement plan? (yes/no): yes

-----
Hours Worked: 40
Shift: 2
Hourly pay rate: R70.0
Regular pay: R2800.0
Overtime pay: R0.0
Total of regular and overtime pay: R2800.0
Retirement deduction: R140.0
Net pay: R2660.0
BUILD SUCCESSFUL (total time: 4 minutes 51 seconds)
```

And if not, then 5% of your total pay will not be deducted and will be evident in the breakdown.

```
run:
Enter your number of hours worked: 40

Enter your shift number (1, 2, or 3):
1 - First shift
2 - Second shift
3 - Third shift
2

Would you like to participate in the retirement plan? (yes/no): no

-----
Hours Worked: 40
Shift: 2
Hourly pay rate: R70.0
Regular pay: R2800.0
Overtime pay: R0.0
Total of regular and overtime pay: R2800.0
Retirement deduction: R0.0
Net pay: R2800.0
BUILD SUCCESSFUL (total time: 5 seconds)
```

c) Installation Plan.

Step 1: Meet up with the supervisor of the payroll, Mr. Singh on the 21 July 2024, at 06:00 before the working day starts at the UrbanFurn. If for some reason the meeting is not possible, then re schedule the meeting to the 25 July 2024, at 06:00.

Step 2: Prepare the installation progress by check system requirements to make sure their computer/system meets the minimum system requirements for the software\program.

Step 3: Update their Operating System to make sure that your Windows is up-to-date with the latest security patches and updates to help prevent compatibility issues with new software. If updating the operating system is not an option, install a security software to protect against malware, viruses, and other threats.

Step 4: Read Installation Prompts and Follow the Installation Guide Carefully.

Step 5: After successfully installing the payroll program, run the program and run a few tests to make sure that everything works on their side.

Step 6: If everything runs well, then run the user-manual guide through the people who will be using the program and help them understand, where necessary.