

Computer Program Solutions

QUESTION 5

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Learnership Candidate

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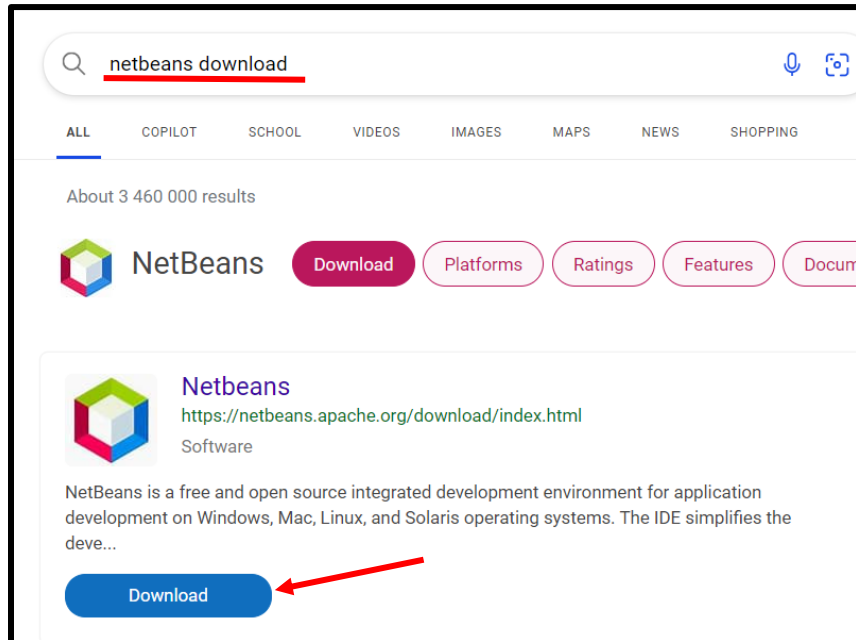
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Step 1:

If the Apache NetBeans IDE application is not installed, then the program will not be able to be run sufficiently. Therefore, it is imperative that it is installed for the program to be executed and used. If the application has been installed, then skip over to Step 2.

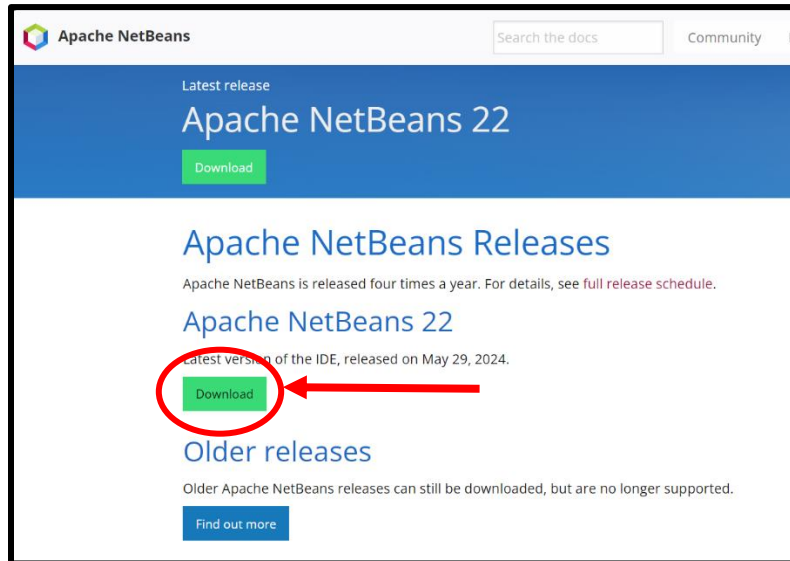
Step 1.1:

Search online for the Apache NetBeans download and click the link below.



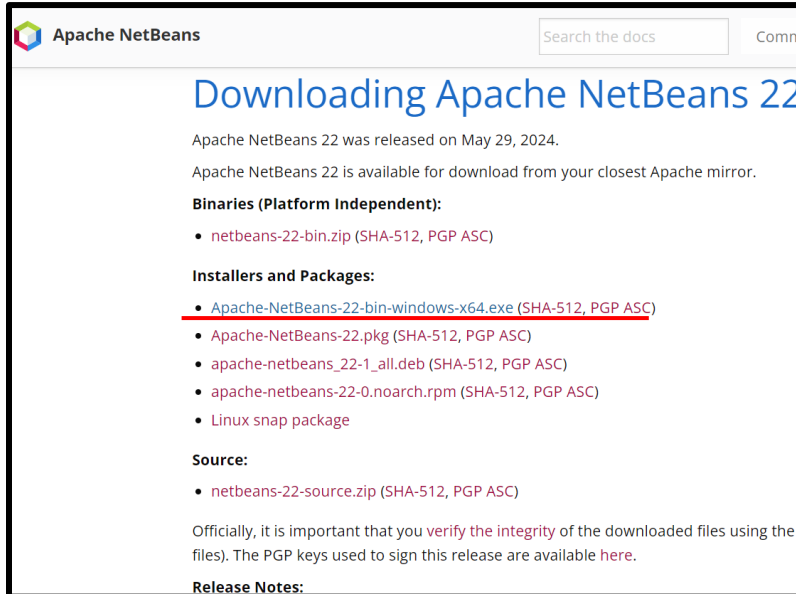
Step 1.2:

After clicking the link, find the next download link and download the latest version.



Step 1.3:

Locate the installer and packages heading with the latest version's name.



The screenshot shows the Apache NetBeans 22 download page. The header includes the Apache NetBeans logo, a search bar, and a 'Comments' link. The main heading is 'Downloading Apache NetBeans 22'. Below this, it states that Apache NetBeans 22 was released on May 29, 2024, and is available for download from the closest Apache mirror. The page is divided into three sections: 'Binaries (Platform Independent)', 'Installers and Packages', and 'Source'. The 'Installers and Packages' section is highlighted with a red underline. The 'Source' section is also highlighted with a red underline. The 'Release Notes' section is at the bottom.

Apache NetBeans

Search the docs

Comments

Downloading Apache NetBeans 22

Apache NetBeans 22 was released on May 29, 2024.

Apache NetBeans 22 is available for download from your closest Apache mirror.

Binaries (Platform Independent):

- [netbeans-22-bin.zip](#) (SHA-512, PGP ASC)

Installers and Packages:

- [Apache-NetBeans-22-bin-windows-x64.exe](#) (SHA-512, PGP ASC)
- [Apache-NetBeans-22.pkg](#) (SHA-512, PGP ASC)
- [apache-netbeans_22-1_all.deb](#) (SHA-512, PGP ASC)
- [apache-netbeans-22-0.noarch.rpm](#) (SHA-512, PGP ASC)
- [Linux snap package](#)

Source:

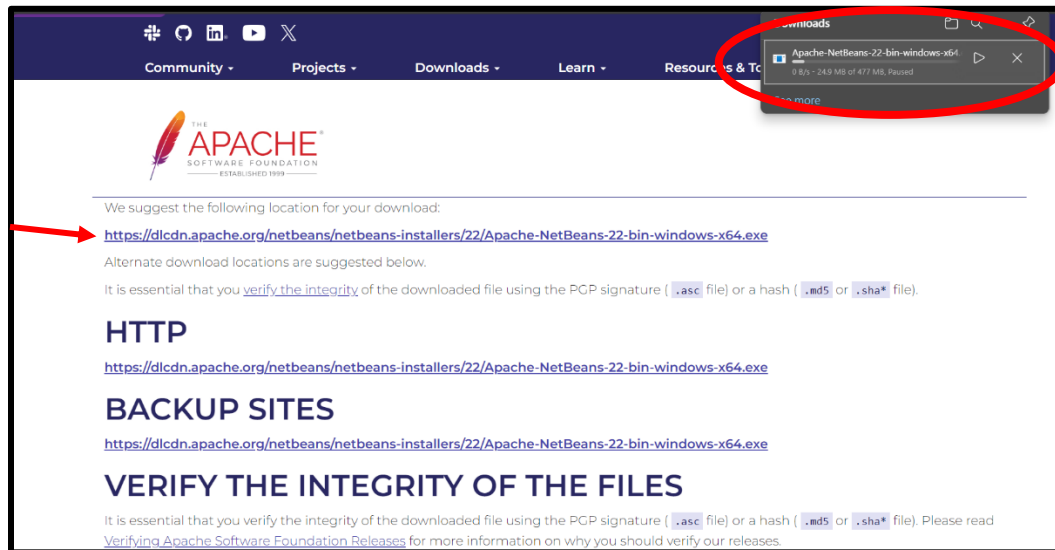
- [netbeans-22-source.zip](#) (SHA-512, PGP ASC)

Officially, it is important that you [verify the integrity](#) of the downloaded files using the files). The PGP keys used to sign this release are available [here](#).

Release Notes:

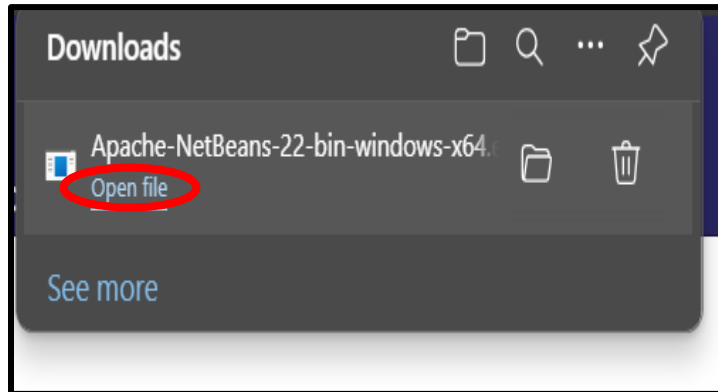
Step 1.4:

Locate the secure download link suggested by the download site and click it to begin the installation of the installer file.



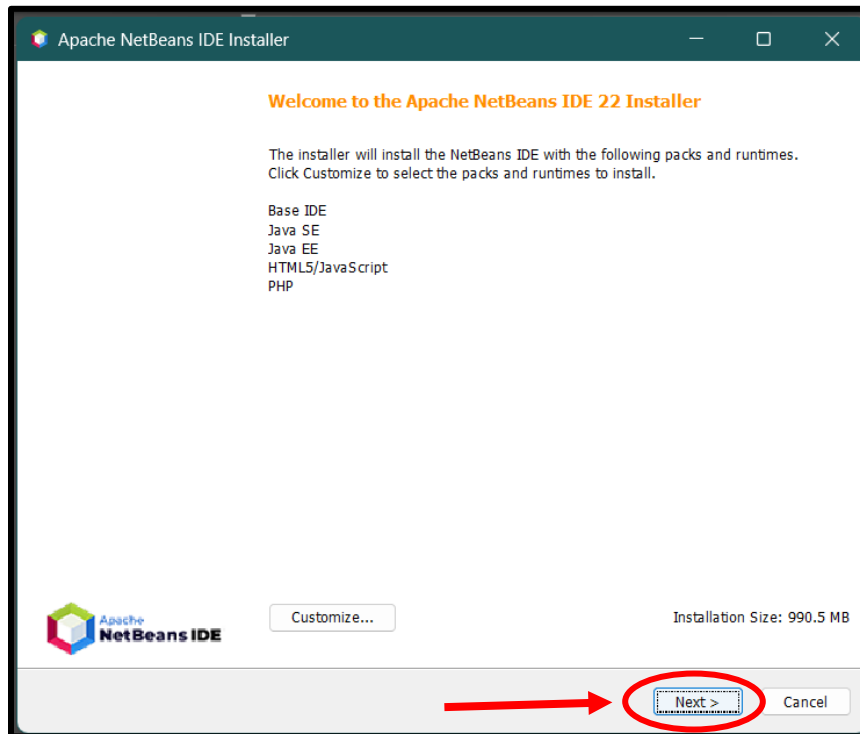
Step 1.5:

Wait until the download has completed and then click on the open file link.



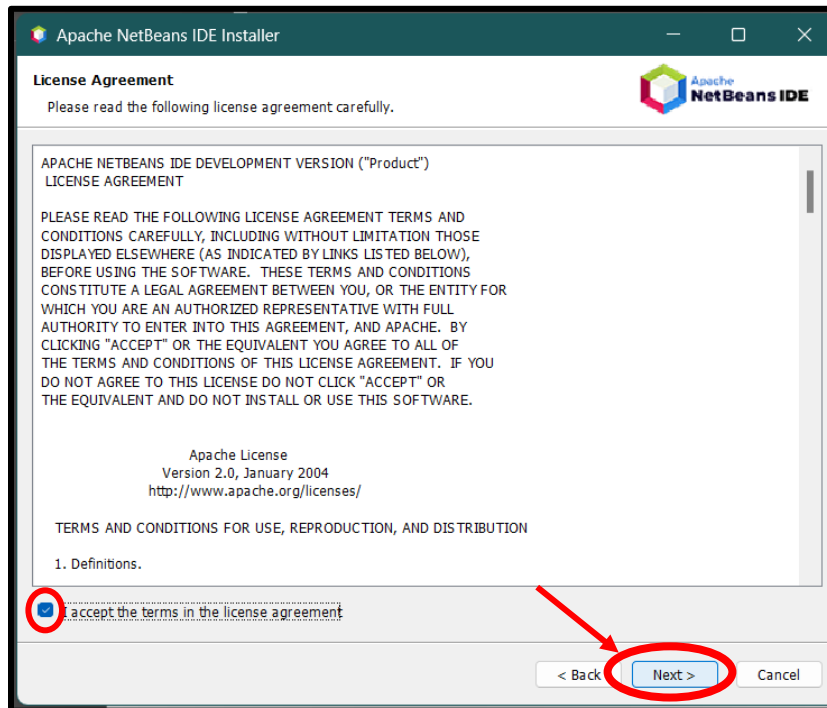
Step 1.6:

The installer will then activate and prompt the user for potential customization, this can be ignored for now. Click the Next button to continue.



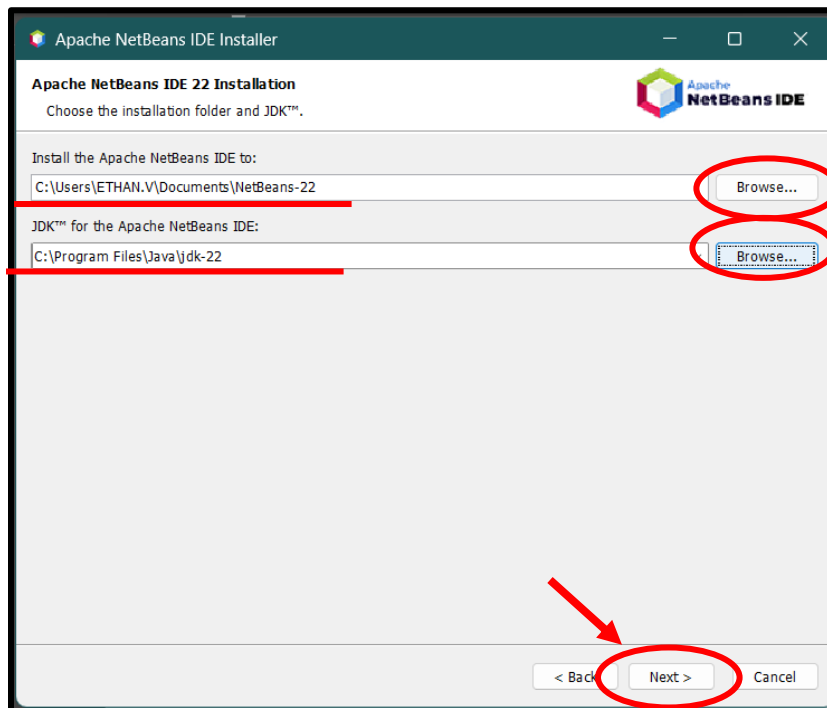
Step 1.7:

There will be a Terms and Conditions screen that will display, the user should click the accept box and then click the Next button.



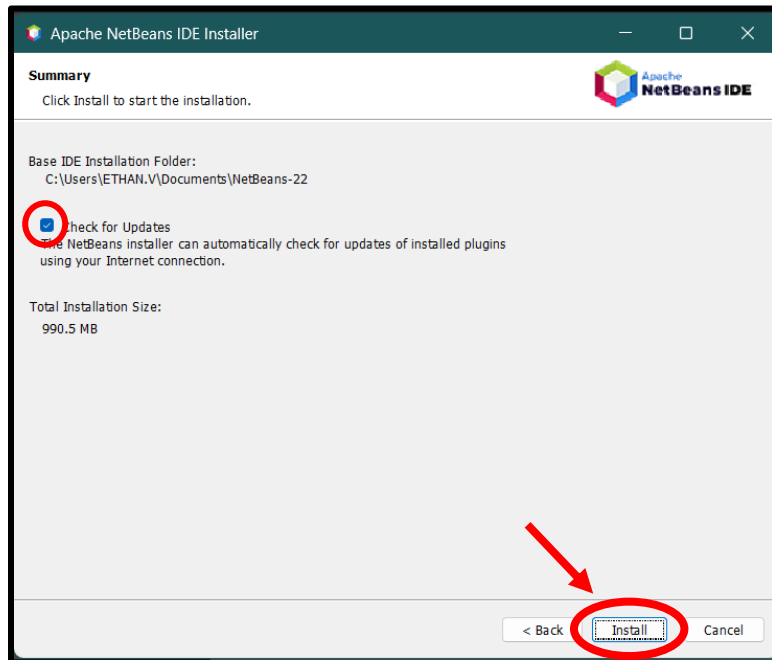
Step 1.8:

The installer will then present both the location of where the application will be installed and the Java Development Kit / JDK that will be downloaded with it. If there any changes that need to be made or added, the user can click the brows button for editing. Click the Next button after all options are to your liking or are like below:



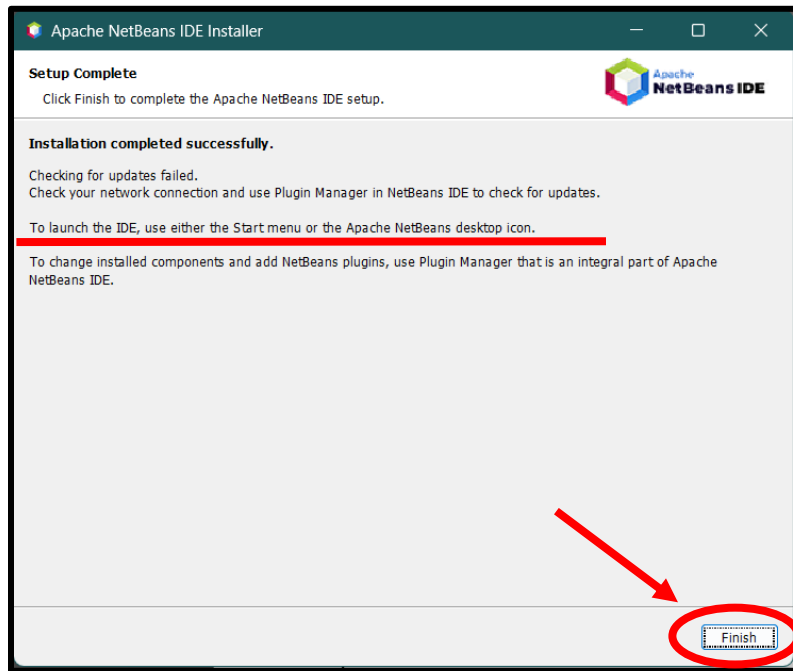
Step 1.9:

After all changes are made, the installer will then finally prompt the user to begin the full installation. The user can also check that the application checks for updates. After all is read, click the Install button to start the installation.



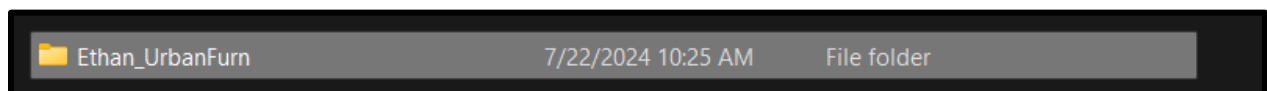
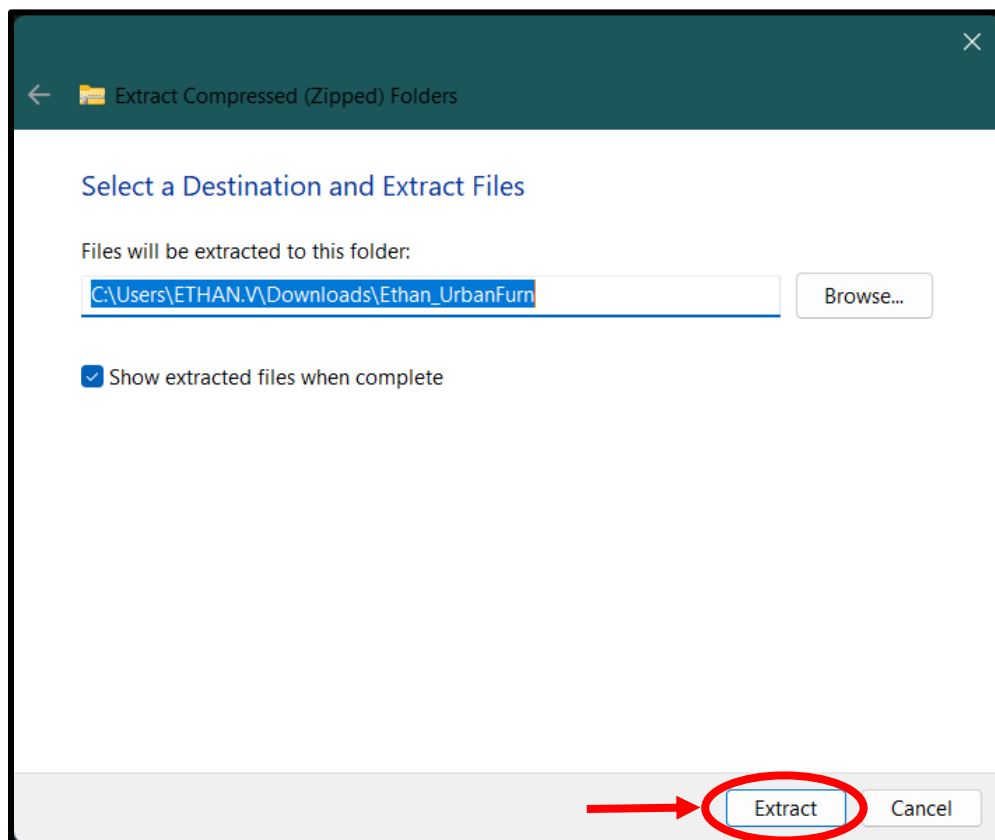
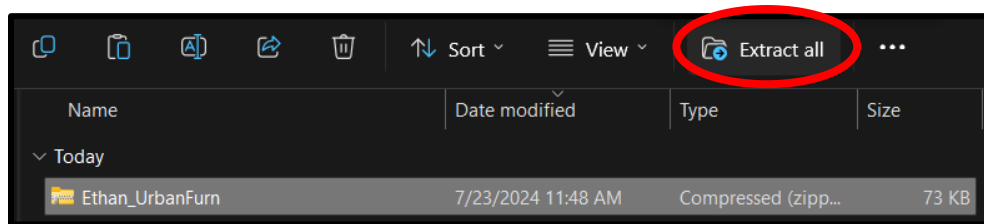
Step 1.10:

After the installation is complete, the user will be presented with a menu from the installer, the user should read what is said based on their choices and then click the Finish button.



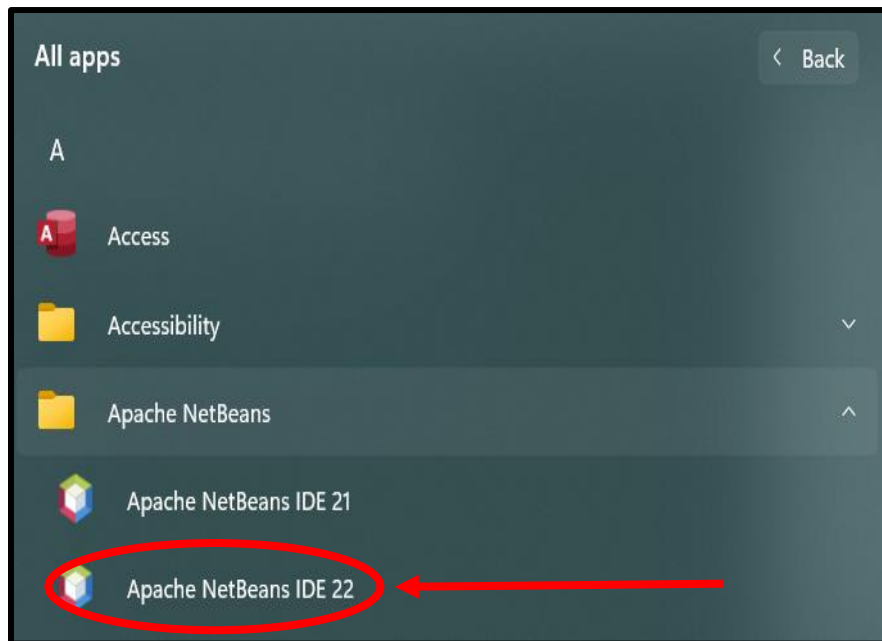
Step 2:

After the Apache NetBeans application has been installed, the user must then locate the program and download it for their device to use, the project is likely to be zipped, so the user must then extract the files and save that to their downloads. Delete the old, zipped folder and keep the new extracted file in your downloads.



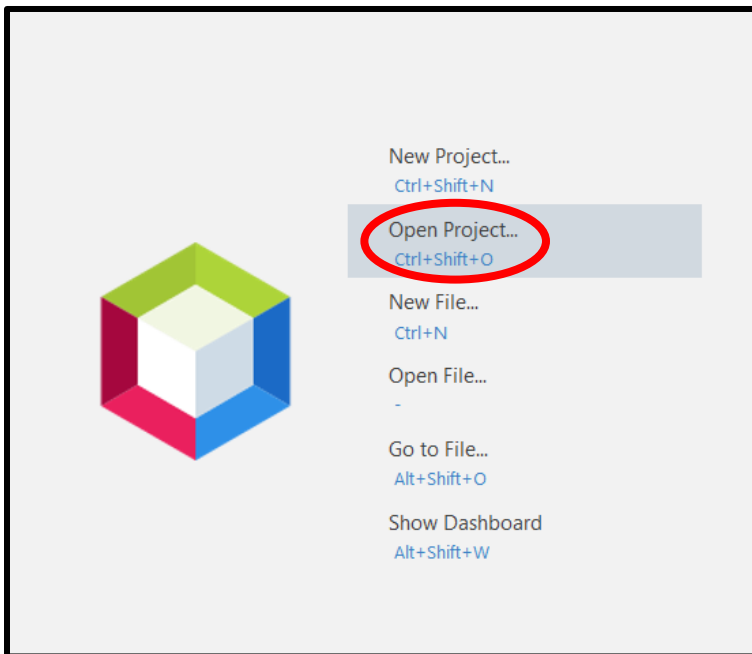
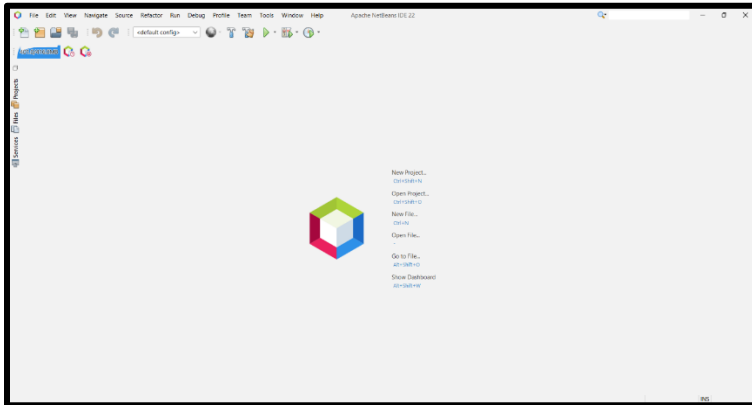
Step 2.1:

Locate and open the Apache NetBeans application.



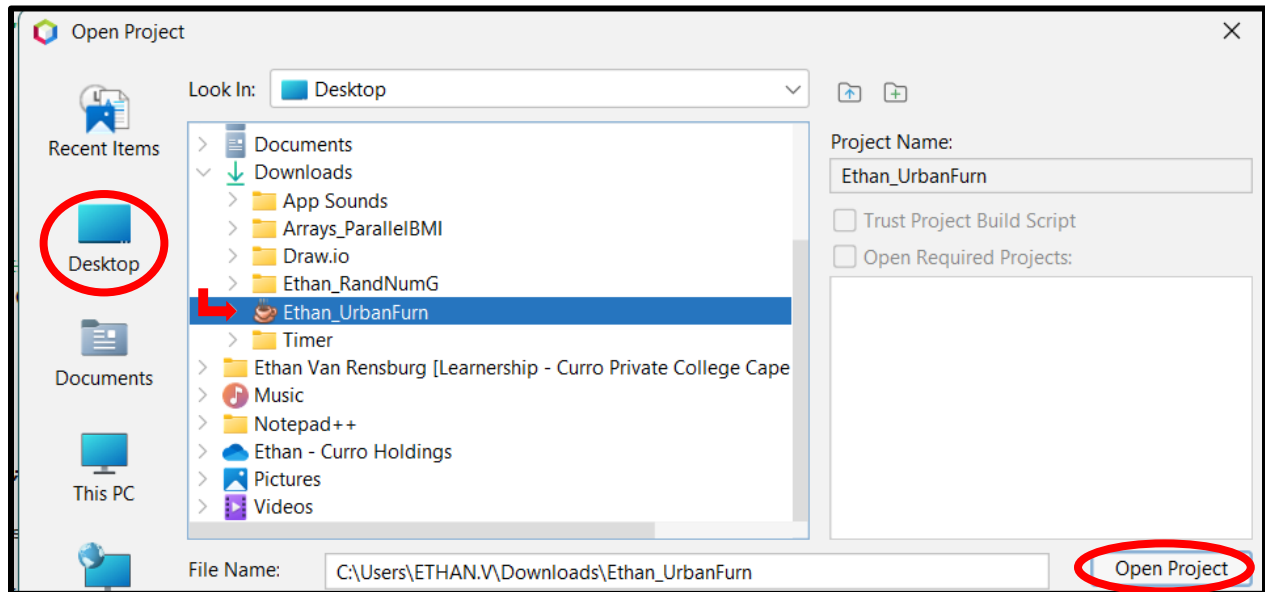
Step 2.2:

The user will then be presented with the start-up menu, they should then select the “Open Project” tab to open the program.



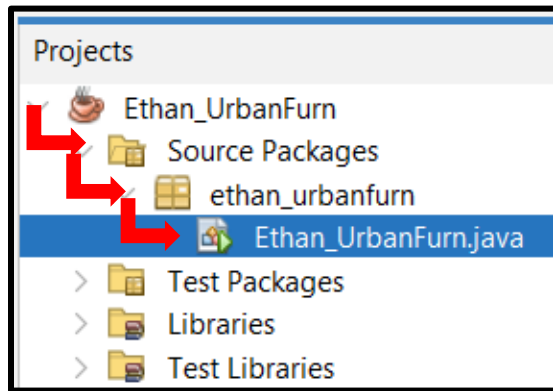
Step 2.3:

The user must then click on the Desktop icon and find the Downloads section, double click on it and find the Arrays_ParallelBMI folder. Open its files until reaching the same file branch as below and then click Open Project:



Step 2.4:

The user must then navigate the Projects pane and the program's files for the file and double click it to open the program.

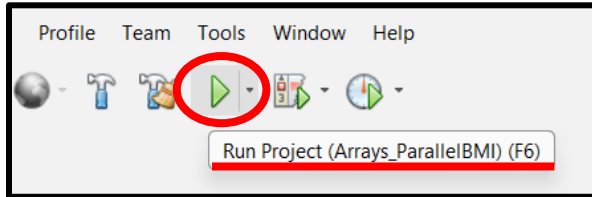


Step 3:

After the program has been installed and imported, the IDE will then make it able to be run and executed for UrbanFurn.

Step 3.1:

The user must look to the top left of their IDE, the ribbon will have many actions to choose from. The user must find and click the green arrow button / Run button to execute the program's code.



Step 3.2:

After clicking the Run button, the user will then be prompted to enter their shift number for the 3 shift types: Morning, Day and Night.

```
Please select your assigned shift:  
1 - Morning Shift  
2 - Day Shift  
3 - Night Shift  
1
```

```
Please select your assigned shift:  
1 - Morning Shift  
2 - Day Shift  
3 - Night Shift  
2
```

```
Please select your assigned shift:  
1 - Morning Shift  
2 - Day Shift  
3 - Night Shift  
3
```

Step 3.3:

After the user chooses their shift, they will then be prompted to enter their work hours for the week.

```
How many hours do you work in a week?  
40
```

Step 3.4:

If the user selects the first shift and their hours are below or equal to 40, they will then be presented with the following results:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
1
How many hours do you work in a week?
40

Payroll:
-----
Hours Worked: 40
Shift: Morning
Hourly Pay Rate: R50.0
Regular Pay: R2000
Overtime Pay: R0.00
Total of Regular and Overtime: R2000
Retirement Deduction: R0.00
Net Pay: R2000
BUILD SUCCESSFUL (total time: 5 seconds)
```


Step 3.5:

If the user selects the second shift and their hours are below or equal to 40, they will then be presented with the following:

```
Do you wish to sign up for the retirement plan? (yes/no)
```

Step 3.6:

If the user selects yes, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
2
How many hours do you work in a week?
40
Do you wish to sign up for the retirement plan? (yes/no)
yes

Payroll:
-----
Hours Worked: 40
Shift: Day
Hourly Pay Rate: R70.0
Regular Pay: R2800.0
Overtime Pay: R0.00
Total of Regular and Overtime: R2800.00
Retirement Deduction: R140.00
Net Pay: R2660.00
BUILD SUCCESSFUL (total time: 1 minute 3 seconds)
```

Step 3.7:

If the user selects no, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
2
How many hours do you work in a week?
40
Do you wish to sign up for the retirement plan? (yes/no)
no

Payroll:
-----
Hours Worked: 40
Shift: Day
Hourly Pay Rate: R70.0
Regular Pay: R2800.0
Overtime Pay: R0.00
Total of Regular and Overtime: R2800.0
Retirement Deduction: R0.00
Net Pay: R2800.0
BUILD SUCCESSFUL (total time: 4 seconds)
```

Step 3.8:

If the user selects the third shift and their hours are below or equal to 40, they will then be presented with the following results:

```
Do you wish to sign up for the retirement plan? (yes/no)
```

Step 3.9:

If the user selects yes, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
3
How many hours do you work in a week?
40
Do you wish to sign up for the retirement plan? (yes/no)
yes

Payroll:
-----
Hours Worked: 40
Shift: Night
Hourly Pay Rate: R90.0
Regular Pay: R3600.0
Overtime Pay: R0.00
Total of Regular and Overtime: R3600.00
Retirement Deduction: R180.00
Net Pay: R3420.00
BUILD SUCCESSFUL (total time: 5 seconds)
```

Step 3.10:

If the user selects no, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
3
How many hours do you work in a week?
40
Do you wish to sign up for the retirement plan? (yes/no)
no

Payroll:
-----
Hours Worked: 40
Shift: Night
Hourly Pay Rate: R90.0
Regular Pay: R3600.0
Overtime Pay: R0.00
Total of Regular and Overtime: R3600.0
Retirement Deduction: R0.00
Net Pay: R3600.0
BUILD SUCCESSFUL (total time: 6 seconds)
```

Step 4:

If the user's input is not within the base range of 40, their work hours are considered overtime and the following steps will result:

Step 4.1:

After the user chooses their shift, they will then be prompted to enter their work hours for the week.

```
How many hours do you work in a week?  
50
```


Step 4.2:

If the user selects the first shift and their hours are greater than 40, they will then be presented with the following results:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
1
How many hours do you work in a week?
50

Payroll:
-----
Hours Worked: 50
Shift: Morning
Hourly Pay Rate: R50.0
Regular Pay: R2000
Overtime Pay: R750
Total of Regular and Overtime: R2750.0
Retirement Deduction: R0.00
Net Pay: R2750.0
BUILD SUCCESSFUL (total time: 8 seconds)
```

Step 4.3:

If the user selects the second shift and their hours are greater than 40, they will then be presented with the following:

```
Do you wish to sign up for the retirement plan? (yes/no)
```

Step 4.4:

If the user selects yes, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
2
How many hours do you work in a week?
50
Do you wish to sign up for the retirement plan? (yes/no)
yes

Payroll:
-----
Hours Worked: 50
Shift: Day
Hourly Pay Rate: R70.0
Regular Pay: R2800
Overtime Pay: R1050.0
Total of Regular and Overtime: R3850.00
Retirement Deduction: R192.50
Net Pay: R3657.50
BUILD SUCCESSFUL (total time: 22 seconds)
```

Step 4.5:

If the user selects no, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
2
How many hours do you work in a week?
50
Do you wish to sign up for the retirement plan? (yes/no)
no

Payroll:
-----
Hours Worked: 50
Shift: Day
Hourly Pay Rate: R70.0
Regular Pay: R2800
Overtime Pay: R1050.0
Total of Regular and Overtime: R3850.0
Retirement Deduction: R0.00
Net Pay: R3850.0
BUILD SUCCESSFUL (total time: 3 seconds)
```

Step 4.6:

If the user selects the third shift and their hours are greater than 40, they will then be presented with the following results:

```
Do you wish to sign up for the retirement plan? (yes/no)
```

Step 4.7:

If the user selects yes, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
3
How many hours do you work in a week?
50
Do you wish to sign up for the retirement plan? (yes/no)
yes

Payroll:
-----
Hours Worked: 50
Shift: Night
Hourly Pay Rate: R90.0
Regular Pay: R3600
Overtime Pay: R1350.0
Total of Regular and Overtime: R4950.00
Retirement Deduction: R247.50
Net Pay: R4702.50
BUILD SUCCESSFUL (total time: 5 seconds)
```

Step 4.8:

If the user selects no, their results will be as such:

```
Please select your assigned shift:
1 - Morning Shift
2 - Day Shift
3 - Night Shift
3
How many hours do you work in a week?
50
Do you wish to sign up for the retirement plan? (yes/no)
no

Payroll:
-----
Hours Worked: 50
Shift: Night
Hourly Pay Rate: R90.0
Regular Pay: R3600
Overtime Pay: R1350.0
Total of Regular and Overtime: R4950.0
Retirement Deduction: R0.00
Net Pay: R4950.0
BUILD SUCCESSFUL (total time: 4 seconds)
```

Feedback:

If there are any issues or concerns, ensure to view the test case document with the possible outcomes.