

Duck Developers

Hug The Rails

User Guide

This guide will detail how to download, install, execute, and use our product.

How to download & install our product:

- 1) Download Java JDK and Eclipse IDE

Java JDK: <https://www.oracle.com/java/technologies/javase-downloads.html>

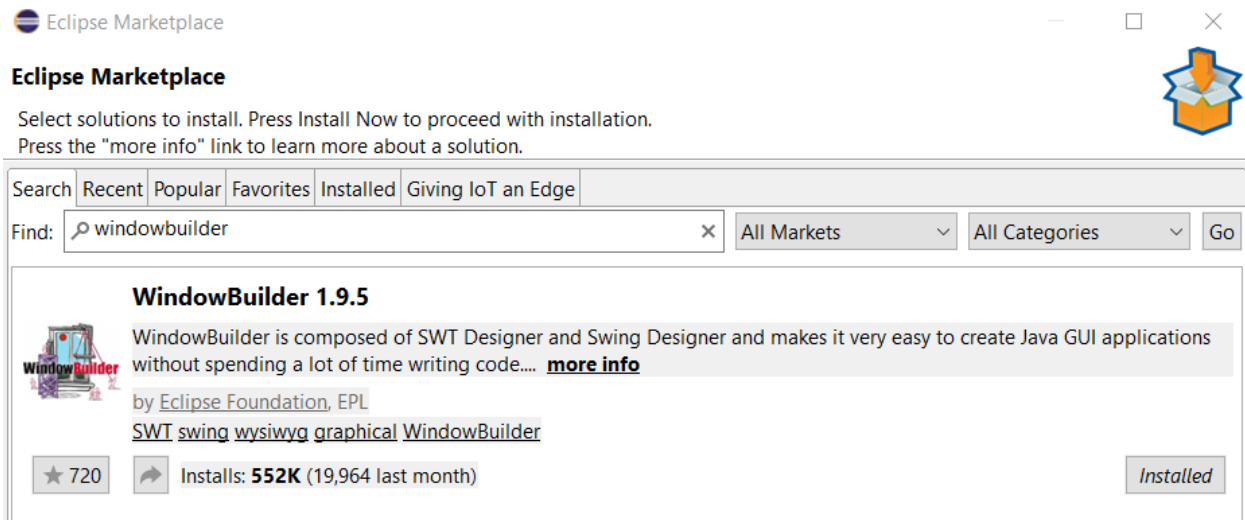
Eclipse IDE: <https://www.eclipse.org/ide/>

For a detailed guide on how to install Java & Eclipse IDE, refer to this YouTube tutorial:

<https://www.youtube.com/watch?v=rSFraftR4I4>

- 2) Once you have downloaded and installed Eclipse IDE, download the WindowBuilder extension. This extension is required to run the GUI. To download the WindowBuilder extension:

- (1) Open Eclipse
- (2) Click the “Help” tab on the top.
- (3) Click “Eclipse Marketplace”
- (4) Click the “Search” tab, type in “WindowBuilder” and click enter
- (5) Click the “install” button under the latest version of WindowBuilder

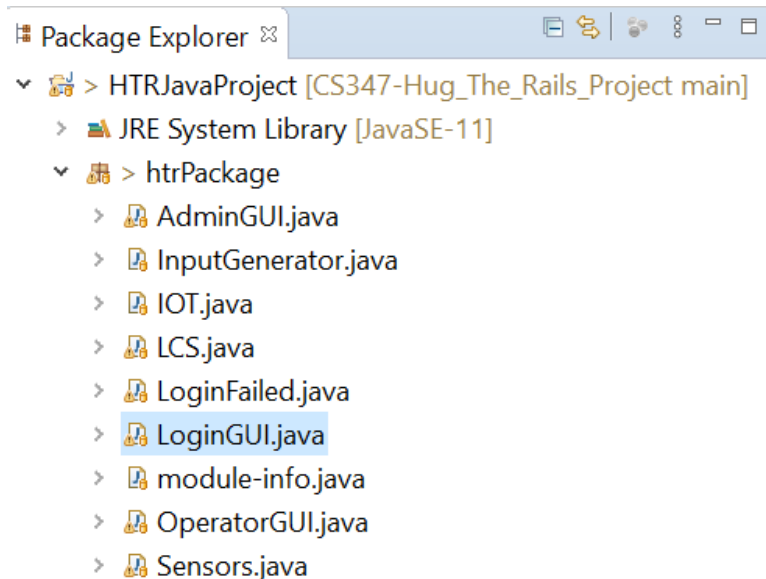


- 3) After you have installed the WindowBuilder extension, you now have to download and install the product software. To download the product, go to the following url and click the download button on the right side. This will download a zip file.
https://gitlab.com/cs347spring21/cs-347-c/duck-developers-11c/hug-the-rail-iot/-/blob/master/CS347-Group11-Hug_The_Rails_Project.zip
- 4) Unzip the zip file. Do so by right clicking the downloaded zip file and clicking “Extract folder”. If you do not see that option, that means you need to download a file archiver utility. For more information on how to download a file archiver utility, see the following YouTube tutorial: <https://www.youtube.com/watch?v=Fku0jktTrLA>

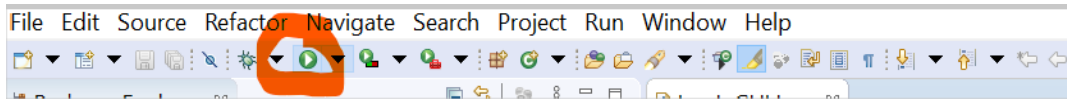
Once you have unzipped the file, you are now ready to run it.

How to run our product:

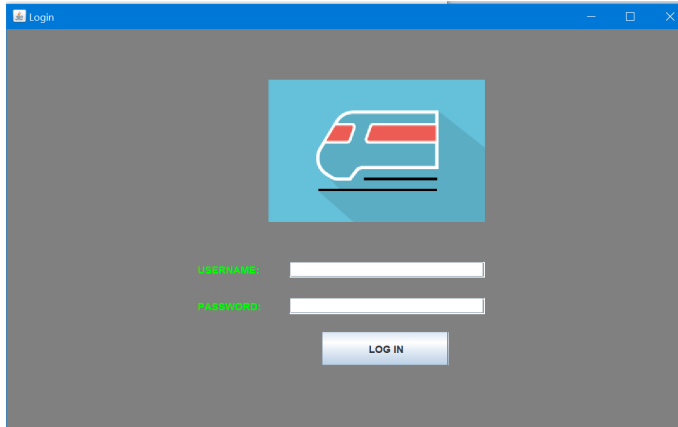
- 1) Open Eclipse IDE
- 2) Set the unzipped folder as your workplace directory.
 - a) To do this, click the “browse” button.
 - b) Find the folder that was created after you extracted the zip file. It should be named “CS347-Hug_The_Rails_Project”
 - c) Click it once. Then click “Select Folder”
- 3) Click “Launch”
- 4) Under the “Package Explorer” tab, double click “HTRJavaProject”, double click “htrPackage”, and double click “LoginGUI.java”



- 5) Click the green “run” button at the top of the screen. It should look like this:

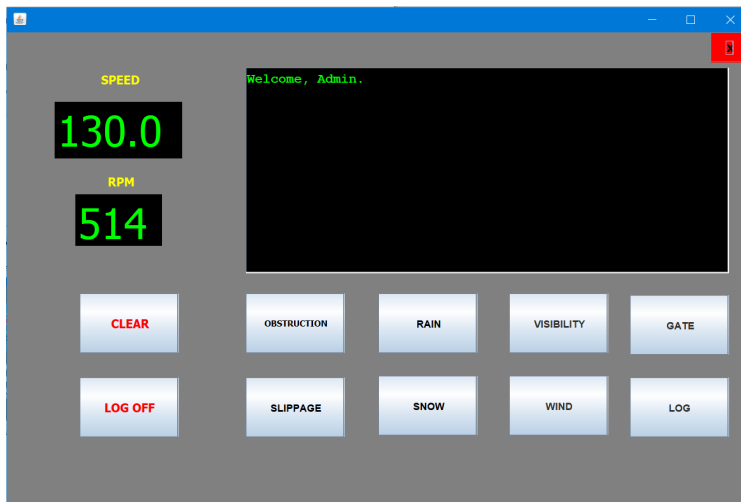


- 6) Now, a login-in screen should appear. It should look like this:



Enter valid login credentials and click “LOG IN”.

- 7) If you see the following screen, you have successfully logged in!



How to use our product:

- 1) The product automatically handles recommendation printing and data is updated every 10 seconds.
- 2) To get specific data, simply click on the properly labeled button (ex: want rain data, push rain button)
- 3) To read from log (if you are admin), press the LOG button
- 4) To clear the screen, press the CLEAR button
- 5) If a new user will be using, press LOG OFF to start a new session with a new user
- 6) To exit the program, click on the bright red X button top right

How to change the inputs to our product:

The test/input file follows the following form:

0 - rpm	(int)
1 - lat	(double)
2 - long	(double)
3 - gate distance	(double)
4 - gate status	(boolean)
5 - moving obstruction	(boolean)
6 - stationary	(boolean)
7 -distance	(double)
8 - rain	(double)
9 - snow	(double)
10 - wind	(double)
11 - visibility	(double)

In other words, the 1st line, 12th line, 23rd line etc... of the txt file represent the rpm, the 2nd line, 13th line, 24th line etc ... of the txt file represent the latitude, etc ...

- 1) Open the sensor_inputs.txt file. This file is found in the HTRJavaProject folder of the main unzipped folder.
- 2) Change the inputs to what you want them to be.
Note: ****Keep in mind of the data types and what position the data is in the txt file****
- 3) Save the file
- 4) Run the program.