

ADVANCE

DRIVING LICENSE

INSTRUCTION:

Goal of the Project:

In class 145, you have studied the concepts of python, print statements, how to declare a variable, basic template of tkinter and created a small application to display your identity card details using tkinter.

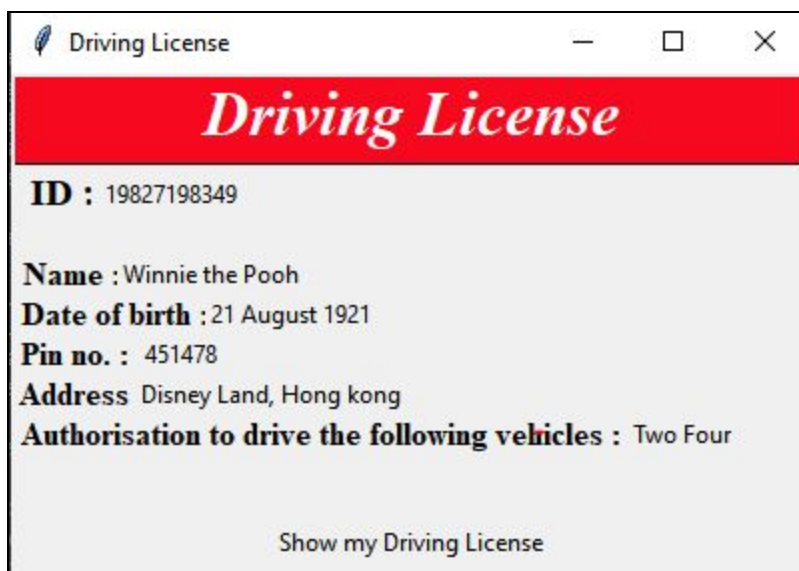
The goal of this project would be:

Building an application which will display Driving License details like driving license id, name, date of birth, address, pincode number and vehicle numbers of all vehicles that a person owns by using tkinter library.

Story:

Dh-drive is a Driving license company who is thinking about having a digital driving license as well. So they want you to show them a prototype and let them know that it is possible to create a digital driving license.

The following output image will give you a clear understanding of how GUI is implemented using tkinter.



Getting Started:

1. Download the **Driving_license.py** file from this link - [Click here](#).
2. Create a folder **Python projects** and copy **Driving_license.py** file from downloads folder and paste it in **Python projects** folder.

Specific Tasks to complete the Project:

1. First add the basic template of the tkinter which you have learned in the class 145.
 - Import * from tkinter - import all the packages of tkinter.
 - Create a root window.
 - Set the title of your root window as shown in the above image.
 - Set the dimensions of the root window.
2. Create a label to hold the driving license ID and store it in a variable **"label_id"**, use this same variable name as we have used this variable name to place the label.
3. Create a label to hold the name and store it in a variable **"label_name"**, use this same variable name as we have used this variable name to place the label.
4. Create a label to hold the Date of birth and store it in a variable **"label_dob"**, use this same variable name as we have used this variable name to place the label.
5. Create a label to hold the Pincode number and store it in a variable **"label_pin"**, use this same variable name as we have used this variable name to place the label.
6. Create a label to hold the Address and store it in a variable **"label_address"**, use this same variable name as we have used this variable name to place the label.
7. Create a label to hold the list of types of vehicle a person can drive eg. Two wheeler, four wheeler and store it in a variable **"label_vehicle_type"**, use this same variable name as we have used this variable name to place the label.
8. Define a function to define variables and update the labels with these variables. Inside this function:
 - Define a variable to hold the driving license id and assign this variable with a 10 digit number.
 - Then print the type of the variable which is holding the driving license id on console.

- Define a variable to hold the name and assign name to this variable in double quotes.
 - Then print the type of the variable which is holding the name on the console.
 - Define a variable to hold the date of birth and assign date of birth to this variable inside double quotes.
 - Then print the type of the variable which is holding the date of birth on the console.
 - Define a variable to hold the pincode number and assign this variable with a 6 digit number.
 - Then print the type of the variable which is holding the pincode number on the console.
 - Define a variable to hold the address and assign the address to this variable in double quotes.
 - Then print the type of the variable which is holding the address on the console.
 - Define a variable to hold the list of types of vehicles license holder is authorized to drive and assign this variable a list of vehicle types eg. two wheeler, four wheeler.
 - Then print the type of the variable which is holding the type of vehicle the person is allowed to drive on the console.
 - Now update the label created to hold the Driving License ID with the variable which holds the ID.
 - Then update the label created to hold the Name with the variable which holds the name of the license holder.
 - Then update the label created to hold the Date of birth with the variable which holds the date of birth of the license holder.
 - Then update the label created to hold the Pincode number with the variable which holds the pincode of the license holder.
 - Then update the label created to hold the Address with the variable which holds the address of the license holder.
 - Then update the label created to hold the Vehicles authorized to drive with the variable which holds the list of all vehicle types license holders are authorized to drive.
9. Now create a button and store it in a variable and add commands attribute and assign it the function that we just created at step number 8.
10. Add an End statement which will execute the application, that is calling mainloop().

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Submitting the Project:

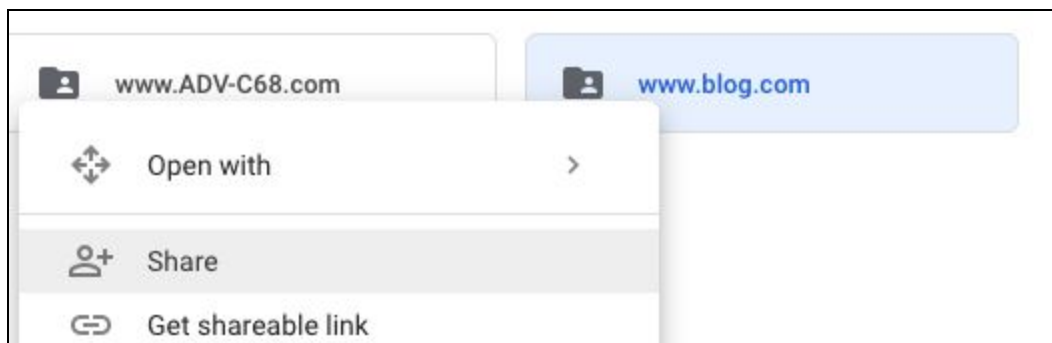
After you have completed coding do the following:

1. First create a folder on your google drive and rename it as project-C145
2. Then start screen recording and record the output using loom and upload the video in the folder which you have created. [Steps for screen recording](#).
3. Then upload **Driving_license.py** in which you have written python code in the folder which you have created in point 1.

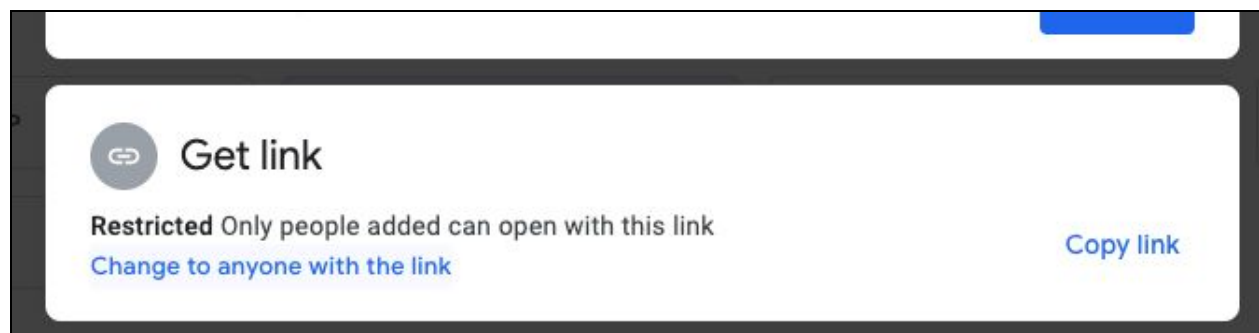
Then generate the link of the folder.

Steps for generating a link of the folder:

1. Right click on the folder and click share



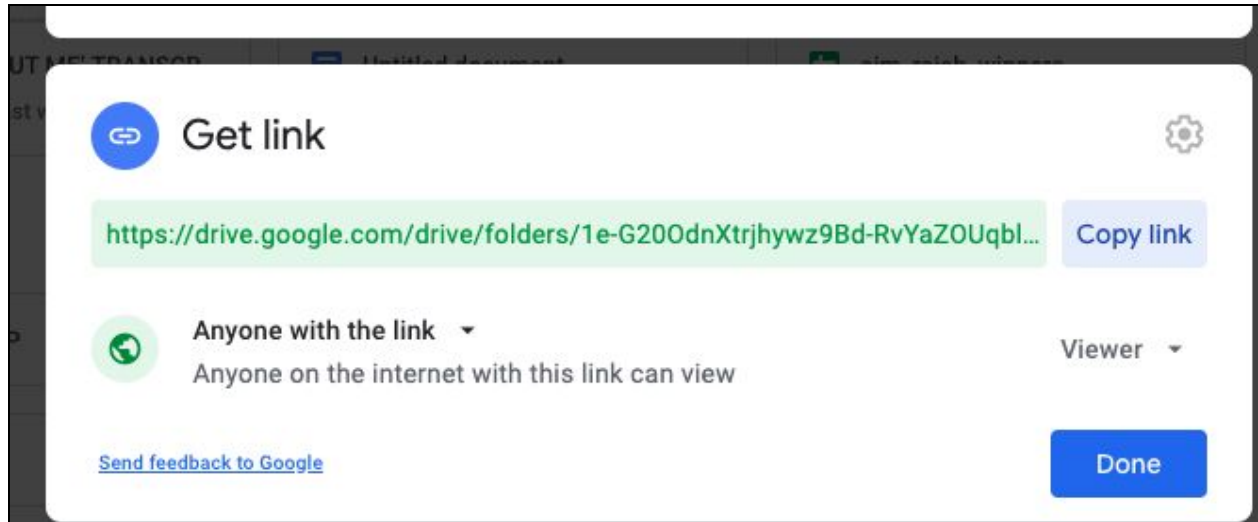
2. Then click on [Change to anyone with the link](#).



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3. Then the setting will change so anyone can view it.



4. Now click on the copy link to copy the link.
5. Now share and submit this copied link in the Student Dashboard Projects panel against the correct class number.

Hints:

1. Be careful while giving names to all the variables, make sure to give different names to different elements like:
 - label_id , label_name, label_dob , label_pin , label_address, label_vehicle_type etc for labels.
 - Id_value , name , dob , pin , address , vehicle_type etc for the variables defined inside the function.
 - The same goes for buttons.
2. For creating a label:
 - Use Label() function and pass the **root** variable which holds the root window on which we want to display the label.
3. Print the type of variable:
 - Write type() function inside the print() function and pass the variable name to type() function.
4. Update the label:
 - **label_name['text'] = variable_name_which_holds_value**
 - Where label_name is a variable which holds the label

REMEMBER... Try your best, that's more important than being correct.

After submitting your project your teacher will send you feedback on your work.

————— **xxx** ————— **xxx** ————— **xxx** ————— **xxx** ————— **xxx** —————