

# PROJECT REPORT: **QR CODE GENERATOR**



तत् त्वं पूषन् अपावृणु  
केन्द्रीय विद्यालय संगठन



**FOR PARTIAL FULFILLMENT OF REQUIREMENTS FOR**

**ALL INDIA SENIOR CERTIFICATE EXAMINATION  
(AISSCE)**

**BY**

**CENTRAL BOARD OF SECONDARY EXAMINATION  
NEW DELHI (2021-2022)**

**SUBMITTED BY: - BHASKAR BHAR**

**SUBJECT: Computer Science**

**SUBJECT CODE: 083**

# **CONTENTS**

- a. Certificate**
- b. Acknowledgement**
- c. Objectives**
- d. Introduction**
- e. Hardware and Software  
Requirements**
- f. System approach**
- g. Bibliography**

# Certificate

*This certifies that*

**BHASKAR BHAR**

*Of class XII-C has prepared the report on the project 'QR-CODE GENERATOR'. This report is the result of his efforts and endeavor. This report is found worthy of acceptance as final project report for Computer Science of class 12. He has prepared the report under my guidance.*

**MRS.MADHULIKA DEBNATH**  
PGT (COMPUTER SCIENCE)

EXTERNAL EXAMINER

---

PRINCIPAL

---

# ACKNOWLEDGEMENT

*I would like to express a deep sense of thanks and gratitude to our project guide Mrs. Madhulika Debnath ma'am for guiding us immensely through the course of the project. She always evinced keen interest in our work. Her constructive advice and constant motivation has been responsible for the successful completion of this project. My sincere thanks goes to Shri Arun Kumar, our principle sir, for his co-ordination in extending every possible support for the completion of this project. I also thank our parents for their motivation and support. I would like to thank my classmates, "Gaurav Saha" and "Mainak Mondal" for their help in the project. Last but not the least, I would like to thank all those who had helped directly or indirectly towards the completion of this project.*

# INTRODUCTION

*Computer is an electronic device that has made the human life easy. It helps us to do any kind of work in a very simple manner like calculation, drawing, typing, recording searching something online, etc. It is now used in almost everywhere in the world.*

*Python is a widely used general-purpose, high level programming language. It was created by Guido van Rossum in 1991 and further developed by the Python Software Foundation. It was designed with an emphasis on code readability. It lets you work quickly and integrate systems more efficiently. Python has a simple syntax similar to the English language. Python has syntax that allows developers to write programs with fewer lines than some other programming languages. Python runs on an interpreter system, meaning that code can be executed as soon as it is written. This means that prototyping can be very quick.*

*Nowadays QR CODEs are of great use. It is used in almost everywhere like food products, machines, automobiles, books etc. So this project is basically based on QR Code Generation. The user has to just login in the software, and can give a link or text. And with just one click the QR CODE is generated. It is saved in the user's device so that he/she can share it. The project is kept very simple and user friendly.*

# OBJECTIVE OF THE PROJECT

The main objective of the project is generating QR CODE and saving it.

The program consists of the following:

1. Login Page
2. Login Button
3. Registration button
4. Registration Page
5. OTP button
6. Register Button
7. QR CODE Button

# Hardware and Software Requirements



## **Hardware requirements:**

1. A pc or laptop
2. 32 bit CPU (Intel/ AMD Architecture (x86 64 bit for better performance))
3. 4 GB RAM
4. 5 Gb free disk space



## **Software requirements:**

Modern Operating systems:

- Windows 7 or higher
- Mac OS X 10.11 or higher, 64 bit
- Linux: RHEL 6/7, 64 bit
- Python Version 3.7 or upper

# System Approach

When we run the program, a login window will open. There we have to give our Username and Password, otherwise it will show an Error message 'All fields are required'. You must give correct Username and Password, otherwise the system will not accept it. This system is done using file handling. The usernames and passwords are stored in separate files. We have to click the login button.

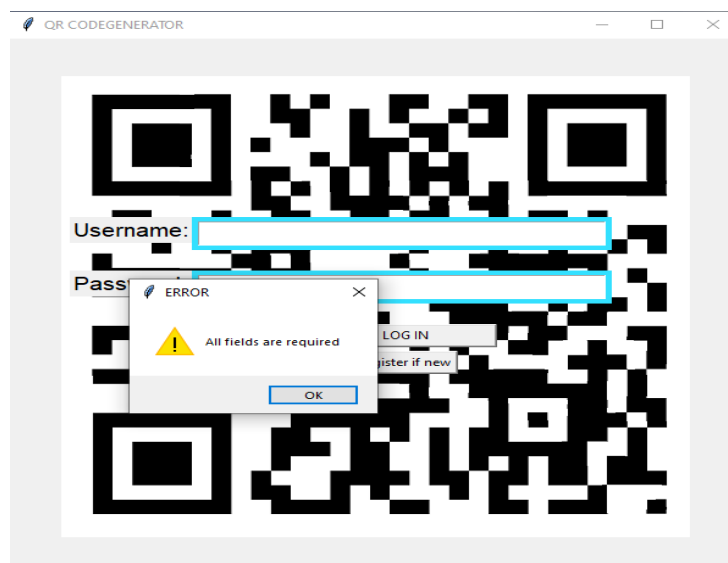
Once we have logged in, QR CODE main window will open. Now we can enter any link for example [www.youtube.com](http://www.youtube.com). Now we have to enter the name of the QR CODE by which we are saving it, like for the above example it can be named as "YOUTUBE". After that, press the button GET QRCODE Your QR code will generated.

Now suppose we are a new user, then we have to go to the main login page, and have to click the button 'Register if new'. A registration window will open, there we have to give our Username, Password and Email id (For OTP verification) and then we have to click the button 'GET OTP'. We have to wait for a moment, an OTP will be sent to our email id. Now we have to enter that OTP in the box. We have to be ensure that OTP must be correct, otherwise it will show an error message" OTP didn't matched". Once we complete our registration, we can head back to the login page and the credentials and can generate a QR Code with a given link.

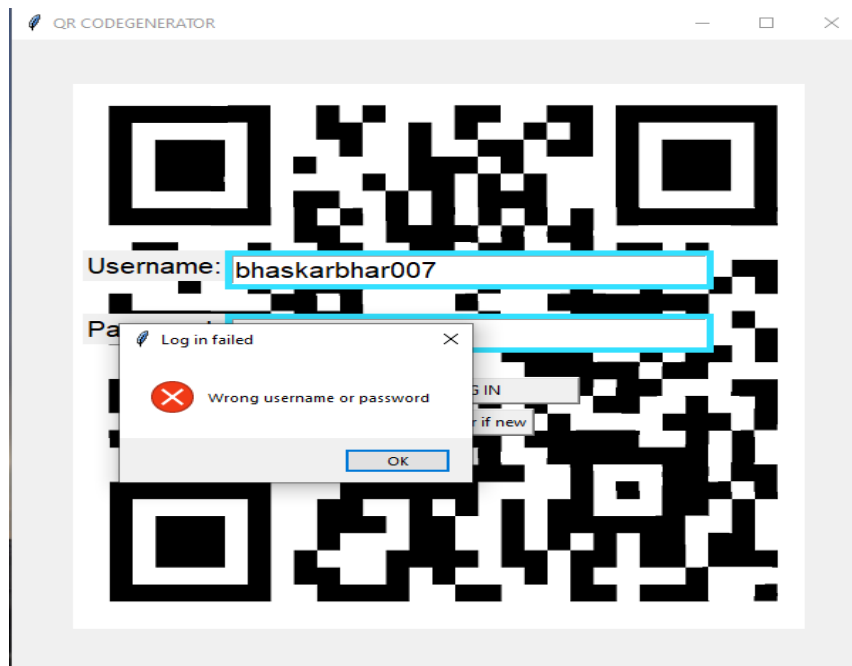




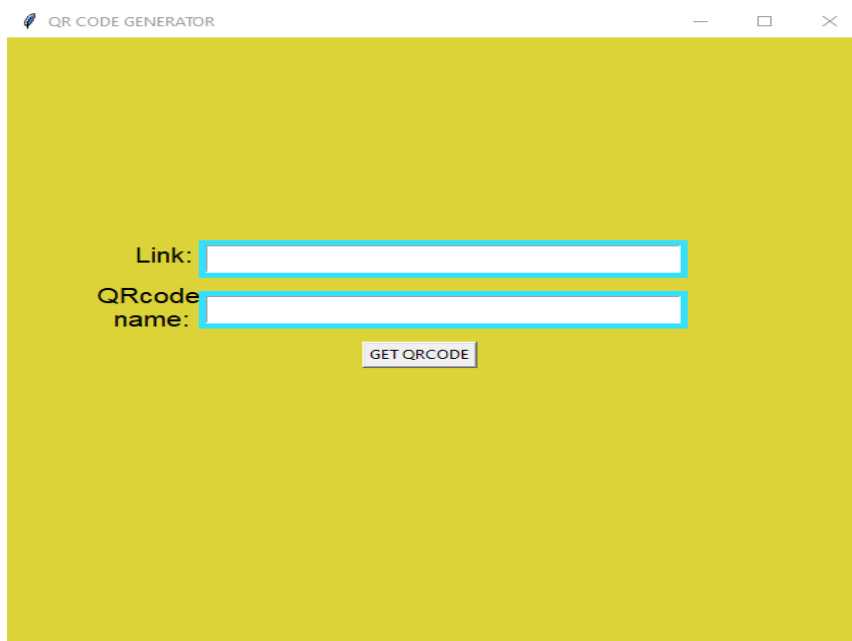
#MAIN LOGIN PAGE



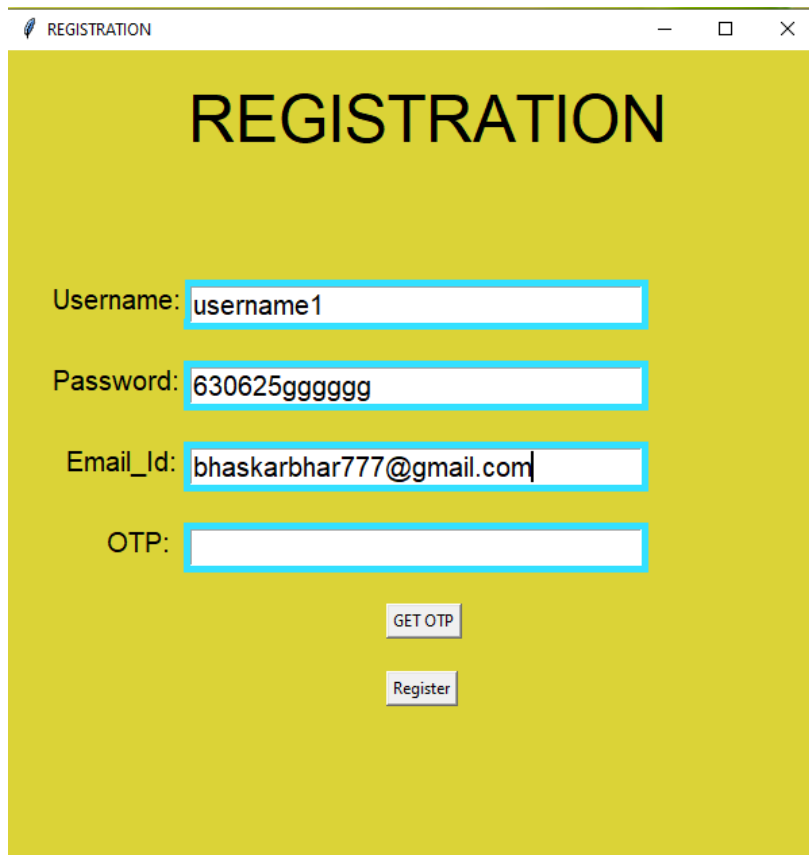
#WHEN USERNAME OR PASSWORD IS NOT GIVEN



#WHEN USERNAME OR PASSWORD IS WRONG



#AFTER SUCCESSFUL LOGIN QR CODE WINDOW WILL OPEN.



The screenshot shows a web browser window with the title 'REGISTRATION'. The page has a yellow background and the word 'REGISTRATION' in large black letters at the top. Below the title, there are four input fields: 'Username:' with the value 'username1', 'Password:' with the value '630625gggggg', 'Email\_Id:' with the value 'bhaskarbhar777@gmail.com', and 'OTP:' which is empty. Below the input fields are two buttons: 'GET OTP' and 'Register'.

#REGISTERING AS A NEW USER, GIVING EMAIL ID FOR OTP VERIFICATION.

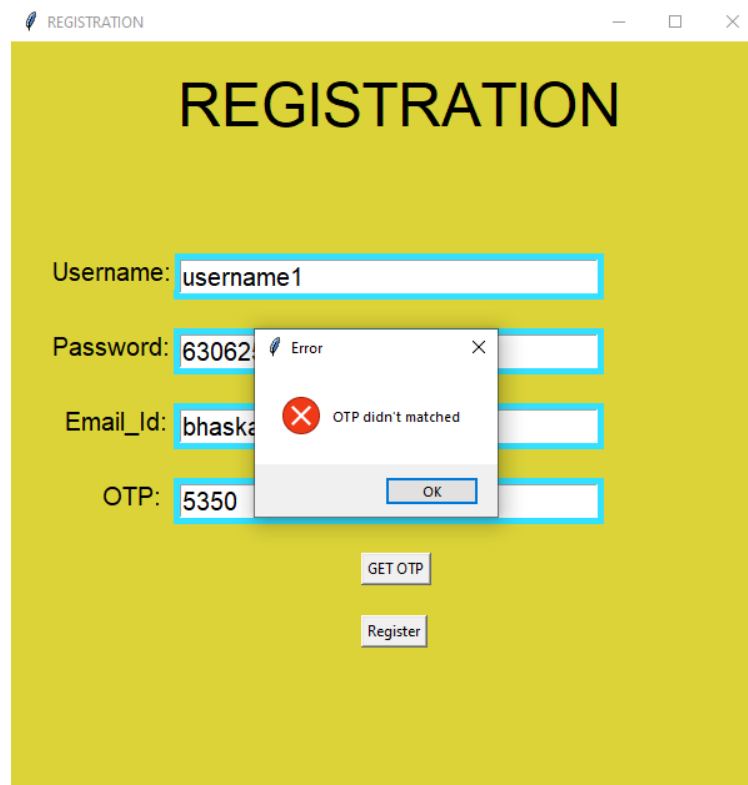


bgmcsproject2021@gmail.com

to ▼

Your otp for registration in QR Code Generator is 1284

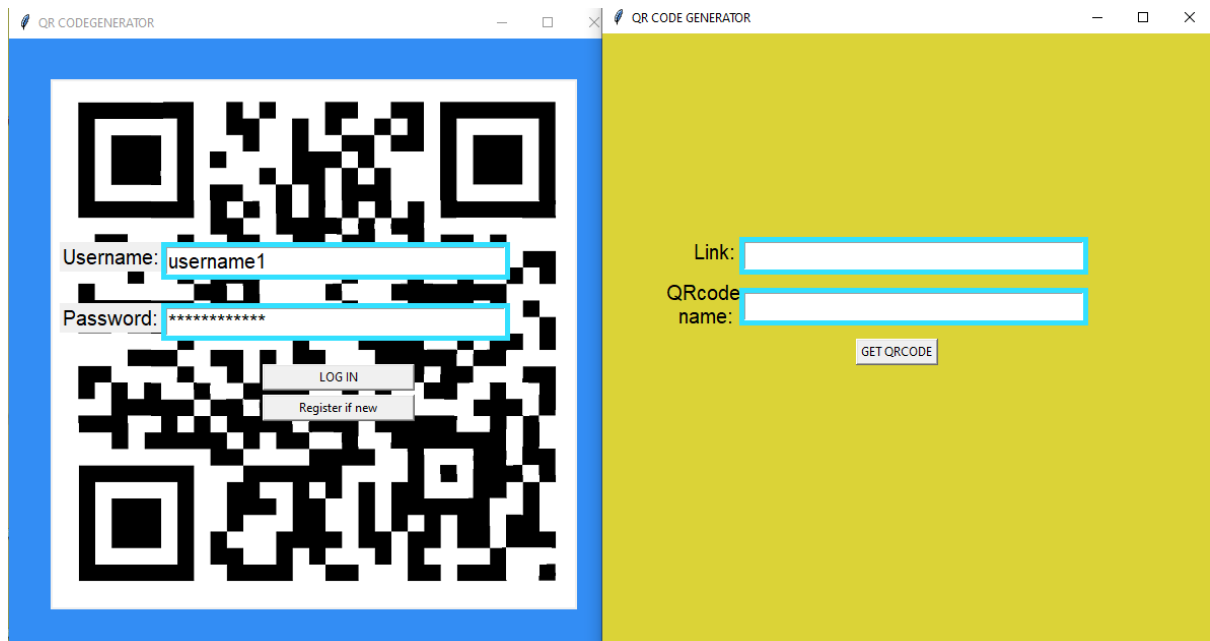
#OTP RECEIVED. (ONLY FOR GMAIL USERS.)



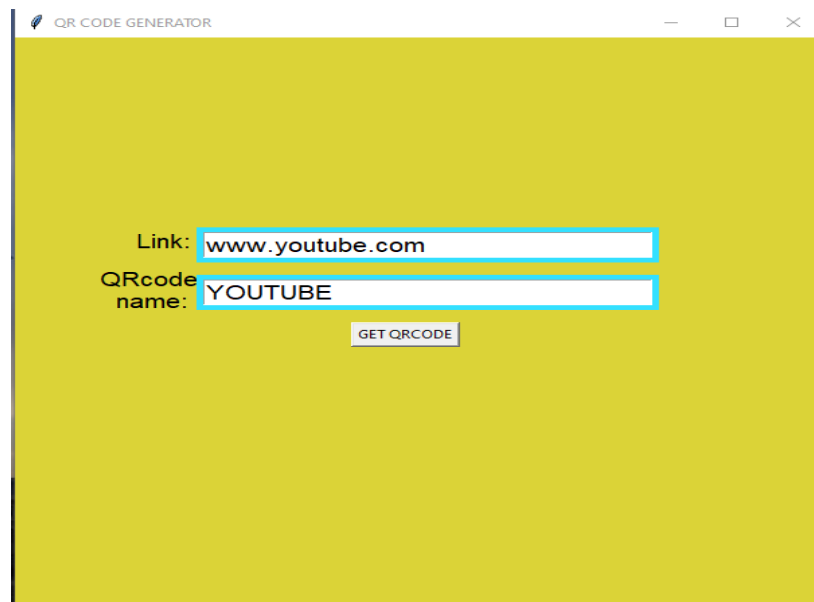
#WHEN THE USER GIVES WRONG OTP.



## #SUCCESSFUL REGISTRATION.



## #LOGIN AFTER REGISTRATION.



## #THE QR CODE PAGE



#THE QR CODE.

# *Bibliography*

## *Books:*

*Sumita Arora Computer Science Class 12*

## *Websites:*

1. *[www.github.com](http://www.github.com)*
2. *[www.youtube.com](http://www.youtube.com)*
3. *[www.geeksforgeeks](http://www.geeksforgeeks)*
4. *[www.quora.com](http://www.quora.com)*
5. *[www.tutorialspoint.com](http://www.tutorialspoint.com)*
6. *[www.Stackoverflow.com](http://www.Stackoverflow.com)*