Good Evening all of You !!

- **DSA, C++ से करूँ या Java से .... Python से कर सकते है क्या ?**

- **DSA पढ़े कहाँ से** ...... Youtube पर कौन सी Playlist से या कौन से Course से ?

- मेरा Coding में मन नहीं लगता .... **मुझसे Leetcode के Question नहीं होते ?**

- **Web Development करें या Android ? कौन सा सही रहेगा ....**

- **Projects कैसे बनये ?**

- मेरी तो Internship भी नहीं लगी अभी तक तो मेरा Placement हो सकता है क्या ?

- **मैं अपना Interest Coding में कैसे Increase करूँ ?**

- **What to do to get 18+ Package ?**

- **मेरा कुछ हो जाएगा क्या ?**

Welcome !!

GLAU CodeChef Chapter - CodeBusters

Guide Swift

TARGET

15 LPA — 30 LPA

Who **I am** ?
&
I am Standing Here ?

Why

Software Development Engineer

JUSPAY

Priyanshu Upadhyay

SDE Intern @Juspay

- Currently in **4th Year** of **B.Tech - Computer Science** (Cyber Security) (2019 - 2023)

- Got **Intern + Pre Placement Offer (PPO)** from **Juspay** via On-Campus Placement for

  Software Development Engineer Role.

- Cleared **Hackwithinfy Exam** 2022, got PPO for **Specialist Programmer Role** @Infosys.

- Ex Backend Developer Intern @**Convin**, SDE Intern@**Software Cell GLA University.**

- Recognized by Dell Technologies, Sophos as a **Cyber Security Researcher**.

- Former **Technical Deputy Head** @Codebusters Club, GLA University.

—

I Love to Share my Knowledge & Experiences

My **Journey**

How I Created Healthy **Environment Around me ?**

What **companies are looking for ?**

- **Intelligence**

- **Problem Solving Skills**

- **Flexibility & Adaptability**

- **Can you teach yourself?**

- **Communication Skills**

What we **have to do?**
&
Where to **Start** ?

- **Data Structures & Algorithms (DSA)**

- **Competitive Programming (Basic)**

- **CS Core Subjects (OS, CN, DBMS)**

- **Real-life Projects**

- **Good Resume**

- **Communication Skills**

Preparing **DSA**

1. Learn Topics from **Youtube / Courses**.

2. Follow **DSA Sheets** for Practice.

3. Maintain Good **Leetcode Profile**.

4. Participate in **Weekly Leetcode Contests**.

5. **Solve <u>Problem of the Day</u> (PODS) (Leetcode & GeeksforGeeks)**

DSA Sheets

COMPILED DAY-WISE DSA SHEET	
TOPIC COVERED:	
Array & Matrix	
String	
Sorting and Searching	
Linked List	
Stacks and Queue	
Tree	
Graph	
HashMap and Heap	
Greedy	
Dynamic Programming	
Backtracking	
Bit Manipulation	
Tries	
Array &String	
Day 1	

1.

2.

	A	B	C
1		**Questions by Love Babbar:**	
2		Youtube Channel: https://www.youtube.com/channel/UCQHLxxBFrbfdrk1jF0moTpw	
3			
4	**Topic:**	**Problem:**	**Done [yes or no]**
5			<->
6	**Array**	Reverse the array	<->
7	**Array**	Find the maximum and minimum element in an array	<->
8	**Array**	Find the "Kth" max and min element of an array	<->
9	**Array**	Given an array which consists of only 0, 1 and 2. Sort the array without using any sorting algo	<->
10	**Array**	Move all the negative elements to one side of the array	<->
11	**Array**	Find the Union and Intersection of the two sorted arrays.	<->
12	**Array**	Write a program to cyclically rotate an array by one.	<->
13	**Array**	find Largest sum contiguous Subarray [V. IMP]	<->
14	**Array**	Minimise the maximum difference between heights [V.IMP]	<->
15	**Array**	Minimum no. of Jumps to reach end of an array	<->
16	**Array**	find duplicate in an array of N+1 Integers	<->
17	**Array**	Merge 2 sorted arrays without using Extra space.	<->
18	**Array**	Kadane's Algo [V.V.V.V.V IMP]	<->
19	**Array**	Merge Intervals	<->
20	**Array**	Next Permutation	<->
21	**Array**	Count Inversion	<->
22	**Array**	Best time to buy and Sell stock	<->
23	**Array**	find all pairs on integer array whose sum is equal to given number	<->
24	**Array**	find common elements In 3 sorted arrays	<->
25	**Array**	Rearrange the array in alternating positive and negative items with O(1) extra space	<->
26	**Array**	Find if there is any subarray with sum equal to 0	<->
27	**Array**	Find factorial of a large number	<->
28	**Array**	find maximum product subarray	<->
29	**Array**	Find longest coinsecutive subsequence	<->
30	**Array**	Given an array of size n and a number k, fin all elements that appear more than " n/k " times.	<->
31	**Array**	Maximum profit by buying and selling a share atmost twice	<->
32	**Array**	Find whether an array is a subset of another array	<->
	Array	Find the triplet that sum to a given value	

Sheet1   +

Ready   Accessibility: Good to go

3.

Day 1: Arrays   ✕

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
☐	Set Matrix Zeroes	Link 1	YT	Link 2
☐	Pascal's Triangle	Link 1	YT	Link 2
☐	Next Permutation	Link 1	YT	Link 2
☐	Kadane's Algorithm	Link 1	YT	Link 2
☐	Sort an array of 0's 1's 2's	Link 1	YT	Link 2
☐	Stock buy and Sell	Link 1	YT	Link 2

Day 2: Arrays Part-II   +

Day 3: Arrays Part-III   +

Day 4: Arrays Part-IV   +

Day 5: Linked List   +

0/191

Day 6: Linked List Part-II   +

https://450dsa.com/

450 DSA Cracker

Your Gateway to crack DSA 🔥

Start Solving

Array [Start Now]

Total Questions 36

Not yet started

Matrix [Start Now]

Total Questions 10

Not yet started

String [Start Now]

Total Questions 43

Not yet started

Search & Sort [Start Now]

Total Questions 36

Not yet started

Linked List [Start Now]

Total Questions 36

Not yet started

Binary Trees [Start Now]

Total Questions 35

Not yet started

BST [Start Now]

Total Questions 22

Greedy [Start Now]

Total Questions 35

BackTracking [Start Now]

Total Questions 19

his project 🌙 About 🤗

Leetcode

- Focus on **Quality** rather than **Quantity.**

- Always Read **Most Voted** **Discussion Section** for Optimize Solution.

- Must Do **Leetcode Top Interview Section Problems.**

- **Make Short Notes** of Problem Solution.

- Start with Brute Force Solution, then **Optimize.**

- Participate in **Weekly and Biweekly Contest** to Handle New Problems within time-frame.

- **Utilize Leetcode Discussion Section for Company Research.**

How solving Problem of the Day helps me in Maintaining Coding Consistency ?

Preparing Core Subjects

1. Learn Core Concept in-depth from **Youtube Playlists / Notes**.

2. Prepare from **Interviewbit & GeeksforGeeks – Top Interview Questions**.

3. **Make your own Notes for Last Moment Revision before Interviews.**

Preparing **Projects**

What is an API?

End users

Apps in browser, Mobile devices

Request

Response

API

Web Server

Database

Building **Resume**

Recommended Templates

Template 1

PRIYANSHU UPADHYAY
priyanshu.upadh@gmail.com | +91 9084405042 | Mathura, Uttar Pradesh
LinkedIn | Leetcode | GeeksForGeeks | Github

EDUCATION

B. Tech in Computer Science & Engineering	GLA University	**CPI: 8.28/10.0**	Aug' 2019 – May 2023
CBSE – Class XII	Delhi Public School, Mathura	**80.06%**	2018 – 2019

EXPERIENCE

Backend Developer Intern | Convin, Bengaluru, India — Apr' 2022 – Jun' 2022
- Working on the backend application that mutually communicates with React.js frontend and AI System.
- Responsible for **code contribution** to **improve** the application **response time**, **resolving bugs**, and collaborating with the technical team for the development and testing of the RestAPIs.

Project Intern | Erainterfaces, Remote — May' 2021 – Jul' 2021
- Migrated from an older unauthorized person detection system to **Amazon Rekognition, which increased accuracy by 32.5%** and **reduced false-positive alerts.**
- Developed Intrusion Alert **SMS Triggering API** using Python, improved system response time by **31%.**

PROJECTS

Item Picklist App | *Python, React Native, PDF Scraping, Firebase* — Link
- Built a **Mobile App for Colgate Stockist** that acts as a one-stop place to manage and gather all the info. related to daily orders like quantity, product image, route, salesman, and total value.
- Integrated **Python PDF rendering library** to extract data from an uploaded file based on page coordinates.

PhishSpy: Phishing Detection Tool | *Python, Rest APIs, HTML Parsing, React.js* — Link
- The tool comprises **18+ functional checks** to determine the legitimacy of user-submitted URLs.
- Integrated Curl & BeautifulSoup to scrape the webpage and its headers, tldextract to obtain domain name, Who.is database to check the traffic and status of the website.

CryptoShare: Secure File Transfer | *Django, Pycryptodome, File Handling, Hashlib, SQLite* — Link
- Designed a web app that securely sends & receives the file by using **AES & DES** Algorithm, **Hashing**, and OTP Authentication to maintain **Integrity & Confidentiality.**
- Using **MultiThreading** to encrypt & decrypt odd-even chunks at the same time to **reduce runtime.**

ACHIEVEMENTS
- Solved **550+ Problems** based on Data Structures & Algorithms on **Leetcode** & **GeeksForGeeks.**
- Cleared **Infosys HackWithInfy Exam 2022** (Specialist Programmer Role)
- **Gold Certification** in Hybrid Mobile App Development with **React-Native.** (Training) Certificate
- **Runner Up Prize @IBM Project Presentation.** (Cyber Security & Forensics)

SKILLS
- **Programming Expertise:** C, C++, Python, Data Structures, Algorithms, Backend Development
- **Frameworks & Utilities:** Flask & Django, React Native, Git, Mysql, Web Scraping
- **Familiar With:** Java, HTML, CSS, Node.js, Rest APIs, Reverse Engineering

EXTRACURRICULAR
- **Technical Team Head, Codechef Chapter, GLA University** (Jul' 2020 – **Present**): Conducted various hands-on workshops, and Looks over the problem setting in contests.
- Worked with **University Secured Cell (Jun' 2022)** to develop an Online Coding Compiler.
- Hosted **15+ Workshops** on various technologies & programming languages for **800+** university students.
- Achieved the recognition of **Excellent Performance** at **Cyber Cell Gurugram Police**, Haryana. Certificate

Template 2

Priyanshu Upadhyay
priyanshu.upadh@gmail.com | +91 9084405042 | Mathura, Uttar Pradesh
LinkedIn | HackerRank | LeetCode | CodeChef

EDUCATION

GLA UNIVERSITY — Aug' 19 - May' 23
B. Tech Computer Science Engineering — Mathura, Uttar Pradesh undefined: 8.21

DELHI PUBLIC SCHOOL — 2018 - 2019
CBSE Class XII — Mathura, Uttar Pradesh undefined: 80.06%

EXPERIENCE

ERAINTERFACES | PROJECT INTERN — Remote | Apr' 2021 – Jul' 2021
- Migrated from an older unauthorized person detection system to Amazon Rekognition that increased accuracy by 32.5%, false-positive alerts were reduced.
- Developed Intrusion Alert SMS triggering API using Flask that has improved response time by 32%.

SKILLS

PROGRAMMING LANGUAGES	C, C++, Python
LIBRARIES/FRAMEWORKS	Fast API, Flask & Django Web Framework, React Native, Node.js
TOOLS / PLATFORMS	Git, GitHub, BurpSuite, VS Code, Postman
DATABASES	Google Firebase, Mysql

PROJECTS / OPEN-SOURCE

EASYRTO: VEHICLE INFORMATION AP | LINK — React Native, Javascript, Expo, Rest APIs, Data Scraping
Developed an app that acts as a one-stop-place for everyone, to manage and gather all information related to Vehicles, Driving Licence, RTO, Fuel Prices & FastTag Balance.
Collecting related data from Parivahan Seva, NAHI, Paytm website & application using Advance Data Scraping techniques & Reverse Engineering of the mobile app.

ITEM PICKLIST APP | LINK — Python, React Native, PyMuPDF (Scrap PDF Data), Firebase
Developed a Mobile App for Colgate Stockist that acts as a one-stop place to manage and gather all the info. related to daily orders like quantity, product image, route, salesman, and total value.
Implemented Airtable's API for fetching product images and other information uploaded by merchants.

CRYPTOSHARE: SECURE FILE TRANSFER | LINK — Django, Pycryptodome, File Handling, Hashlib, SQLite
A web app that helps users to send & receive the file in a secured way using access control & encryption.
Using MultiThreading to encrypt or decrypt odd-even chunks at the same time to reduce runtime.
Implemented AES & DES Algorithm, Hashing, OTP Auth. to maintain Integrity & Confidentiality

PHISHSPY : PHISHING DETECTION TOOL | LINK — Python, Flask, Data Scraping, HTML Parsing
The tool comprises 25+ functional checks to determine the legitimacy of user-submitted URLs.
Integrated Curl & BeautifulSoup to scrape the webpage and its headers, tldextract to obtain domain name, Who.is database to check the traffic and status of the website.

Template 3

Priyanshu Upadhyay
+91 9084405042 | priyanshu.upadh@gmail.com | linkedin.com/in/username | github.com/username

EDUCATION

State University — Sep. 2017 – May 2021
Bachelor of Science in Computer Science — City, State

EXPERIENCE

Electronics Company — May 2020 – August 2020
Software Engineer Intern — City, State
- Developed a service to automatically perform a set of unit tests daily on a product in development in order to decrease time needed for team members to identify and fix bugs/issues.
- Incorporated scripts using Python and PowerShell to aggregate XML test results into an organized format and to load the latest build code onto the hardware, so that daily testing can be performed.
- Utilized Jenkins to provide a continuous integration service in order to automate the entire process of loading the latest build code and test files, running the tests, and generating a report of the results once per day.
- Explored ways to visualize and send a daily report of test results to team members using HTML, Javascript, and CSS.

Startup, Inc — May 2019 – August 2019
Front End Developer Intern — City, State
- Assisted in development of the front end of a mobile application for iOS/Android using Dart and the Flutter framework.
- Worked with Google Firebase to manage user inputted data across multiple platforms including web and mobile apps.
- Collaborated with team members using version control systems such as Git to organize modifications and assign tasks.
- Utilized Android Studio as a development environment in order to visualize the application in both iOS and Android.

PROJECTS

Gym Reservation Bot | *Python, Selenium, Google Cloud Console* — January 2021
- Developed an automatic bot using Python and Google Cloud Console to register myself for a timeslot at my school gym.
- Implemented Selenium to create an instance of Chrome in order to interact with the correct elements of the web page.
- Created a Linux virtual machine to run on Google Cloud so that the program is able to run everyday from the cloud.
- Used Cron to schedule the program to execute automatically at 11 AM every morning so a reservation is made for me.

Ticket Price Calculator App | *Java, Android Studio* — November 2020
- Created an Android application using Java and Android Studio to calculate ticket prices for trips to museums in NYC.
- Processed user inputted information in the back-end of the app to return a subtotal price based on the tickets selected.
- Utilized the layout editor to create a UI for the application in order to allow different scenes to interact with each other.

Transaction Management GUI | *Java, Eclipse, JavaFX* — October 2020
- Designed a sample banking transaction system using Java to simulate the common functions of using a bank account.
- Used JavaFX to create a GUI that supports actions such as creating an account, deposit, withdraw, list all acounts, etc.
- Implemented object-oriented programming practices such as inheritance to create different account types and databases.

SKILLS SUMMARY

Languages	Python, PHP, C++, JavaScript, SQL, Bash, JAVA
Frameworks	Scikit, NLTK, SpaCy, TensorFlow, Keras, Django, Flask, NodeJS, LAMP
Tools	Kubernetes, Docker, GIT, PostgreSQL, MySQL, SQLite
Platforms	Linux, Web, Windows, Arduino, Raspberry, AWS, GCP, Alibaba Cloud, IBM Cloud

LEADERSHIP / EXTRACURRICULAR

Fraternity — Spring 2020 – Present
President — University Name
- Achieved a 4 star fraternity ranking by the Office of Fraternity and Sorority Affairs (highest possible ranking).
- Managed executive board of 5 members and ran weekly meetings to oversee progress in essential parts of the chapter.
- Led chapter of 30+ members to work towards goals that improve and promote community service, academics, and unity.

Grabbing **Off-Campus Opportunities**

GLA University
Placement Process / Insights

Third Year - 6th Semester

Placement Readiness Exam

FYI : Not Permitted / 08.03.2022 / Online Campus Recruitment @ Josh Technology Group ▶

GLA University, Mathura <glams_placements2@gla.ac.in>   Fri, Mar 4, 9:46 PM ☆ ↩ ⋮
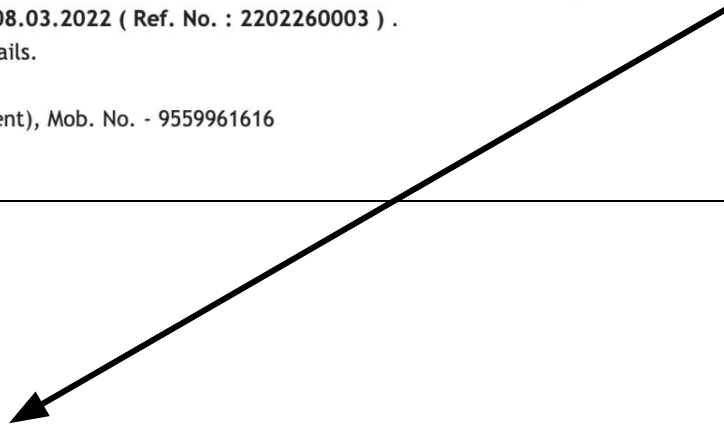to me ▾

Dear Priyanshu Upadhyay,
As per the records and performance in the pre placement activities held for the mentioned schedule, you are `Not Permitted` to participate in Online Campus Recruitment
of `Josh Technology Group` scheduled on **08.03.2022 (Ref. No. : 2202260003)** .
Kindly contact to undersigned for futher details.

Suresh Pratap Singh (Training And Development), Mob. No. - 9559961616

This will make you cry sometimes ...

How to **Actually do it ?**
OR
Some Tips to Maintain Consistency
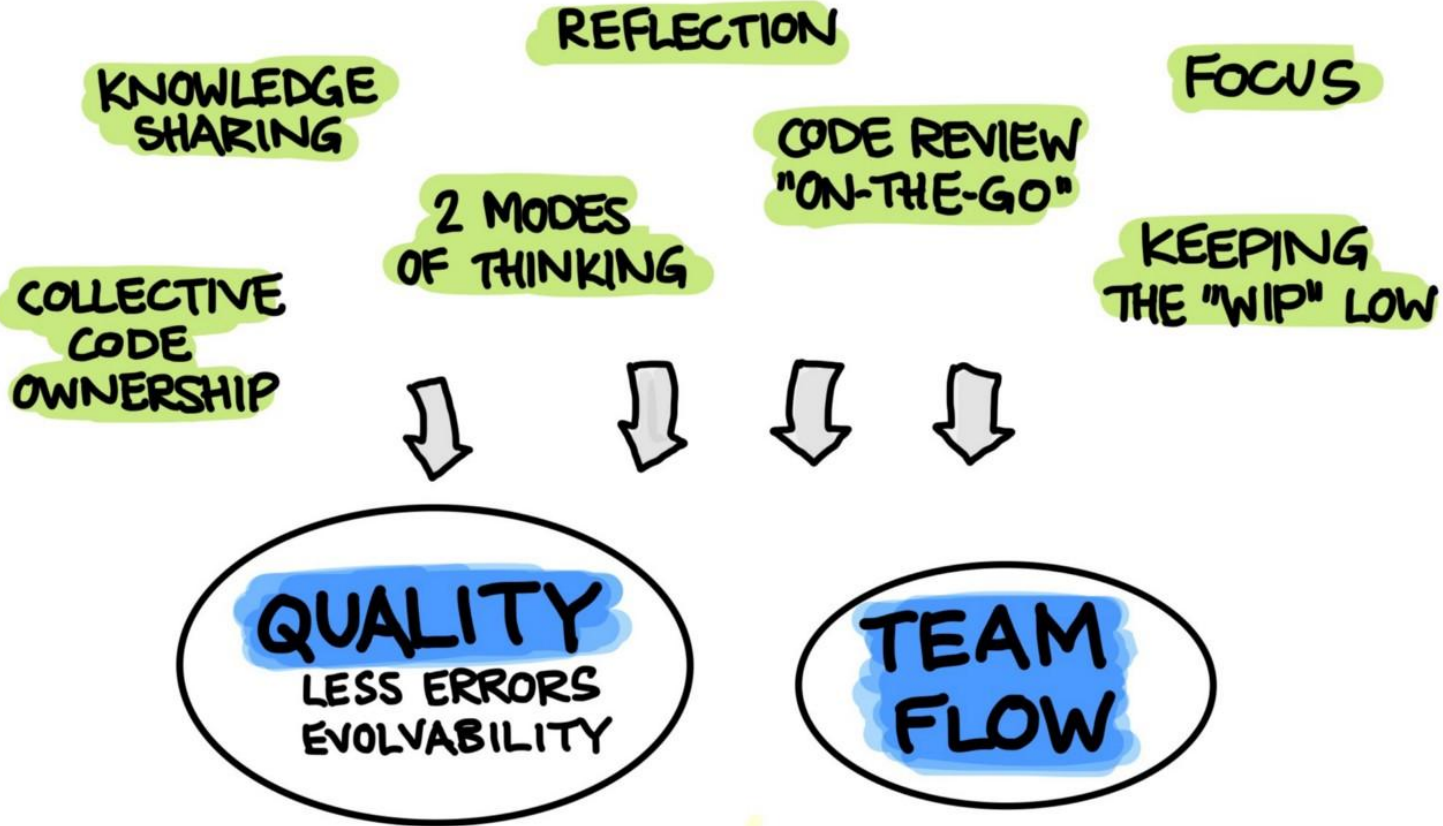
- **Problem of the Day**

- **Track Your Performance**

- **Live Contests**

- **Pair Programming**

- **Teaching (Knowledge Transfer)**

Why Pair Programming is a must!

BENEFITS OF PAIR PROGRAMMING

REFLECTION

KNOWLEDGE SHARING

FOCUS

CODE REVIEW "ON-THE-GO"

2 MODES OF THINKING

KEEPING THE "WIP" LOW

COLLECTIVE CODE OWNERSHIP

QUALITY
LESS ERRORS
EVOLVABILITY

TEAM FLOW

Ask **Questions** !!

Thanks!