

Shri Vile Parle Kelavani Mandal's DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

(Autonomous College Affiliated to the University of Mumbai) NAAC Accredited with "A" Grade (CGPA : 3.18)





ANNUAL REPORT 2020-2021

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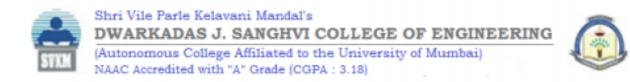
Richa Shah

Dhruvil Shah

Rishabh Patil

Aayushi Upadhyay

CO-SECRETA



DJCSI 2020/21 INTERVIEWS

The interviews for **Co-Committee Members** were taken on 29th and 30th November 2020 and 9th February 2021(for diploma students) online on MS Teams. One by one the interviewees were judged, most of whom were S.E. students from I.T. department, some were from the Computer and EXTC departments too. Ultimately, 37 students were selected.

Technical Team	Marketing Team	Publicity Team
Himanshu Harlalka	Aryan Ringshia	Ved Mistry
Dhrumil Thakore	Rashi Lodha	Dev Ambani
Chirag Jagad	Meith Navlakha	Bhoomika Valani
Shaurya Magar	Rahul Raheja	Ayush Attawar
	Princy Doshi	Manan Doshi
	Hetvi Jain	
	Aakash Sangani	
	Tejanshu Mistry	
Events Team	Editorial Team	Creatives Team
Sagar Dhande	Chirag Jagad	Shreya Kulkarni
Yash Nistane	Muskan Goyal	Devanshi Jhaveri
Raj Sanghvi	Shazia Talib	Purbali Ray
Ishika Choksi	Naitik Vora	Tanvi Save
Prajwal Bandewar		Shruti Waghade
Devanshi Jhaveri	Logistics Team	Shivam Vora
	Deep Suchak	
	Jatin Shihora	
	Vignesh Iyer	



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DJCSI MEMBERSHIP DRIVE 2020-21

DJCSI held a membership drive from 8th to 24th January, 2020 to raise funds for their events and in turn provide benefits to members. The entire co-committee contributed by doing publicity for the membership drive.

Students would avail the following benefits, if they enrolled themselves as members of the DJCSI:-

- Exclusive discounts on all events organized by DJCSI
- Students would be issued a membership card, using which they get preference over other applicants if they wanted their papers published in a CSI journal/conference.
- Since CSI membership wasn't limited to events associated with DJCSI, members could get preference and discounts for events organized by the CSI chapter of any engineering college all over the country.

The drive saw registrations pouring in from other non-IT departments as well. All in all, DJCSI received 56 new memberships for the 2020-21 tenure.

EVENT 1: Git Workshop

Date: 15th January, 2021

For its first event of the year, DJCSI conducted a workshop on git and GitHub, a powerful tool and an important concept for young developers to understand. The workshop, conducted online on MSTeams on 15th January 10 am onwards, enjoyed a healthy influx of 105 students, keen to master Git and Github. The workshop was a highly informative and concise session for introducing students to the basics of Git, GitHub and version control.

It was conducted by committee members and experienced developers Ansh Mehta and Soham Dave, DJCSI's tech heads who did an exemplary job of explaining concepts in a student-friendly and simple way replete with relatable analogies. A meticulously planned event, it was executed smoothly and was a resounding success



amongst all the participants.

The workshop gave participants an overview of what Git and GitHub is. The use and importance of git in the industry was thoroughly explained and participants understood the basic framework of what git is and how it worked. The mentors first carefully explained how git works on the local pc and how to commit code using Git also doubts of the participants were cleared. The hosts cleared the air over the use of branches in Git, and guided them in successfully submitting their first pull request. Also, participants learned how to create their own repository in git and even learned how to push and pull code from the said repository.

A brief introduction on how git is needed in open source projects and the way to work with other people on the same code easily using git was shown. Commit, push and pull are among the commands that were shown and explained in the workshop. To ease the job of remembering the use of each Git command, participants were given a cheatsheet which delineated every command they learnt and it's function.

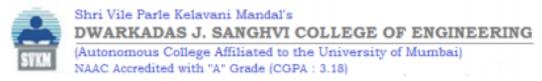
The session provided a basic but thorough overview of the working of the software such that participants could start implementing it in their own projects.



Event 2: CSI Weekend.

Date: 6-7 February 2021

In an attempt to break the monotony of the virtual semester, DJCSI conducted for the first time ever, a never seen before event: CSI





Weekend. The event was conducted online on discord over the course of two days, Saturday 6th February and Sunday 7th February. Planned with meticulous detail from start to finish, it is safe to say this venture was a resounding success.

The event was envisioned to be a fun-fair like extravaganza, with different booths from which participants could move to and from as they pleased. This vision was brought to life despite it being virtual by using the social platform discord where different channels were set up for different activities.

The chairperson inaugurated the event with a speech welcoming the participants. In the speech, general rules were explained, upcoming events were discussed and the timings for the important fillers were announced. The help desk channel, for anyone who needed assistance throughout the event ,and other relevant details were mentioned for the benefit of the contestants.

<u>DAY 1</u>

This day had two main events, 'tech tac toe' and 'atlasT' both of which saw a very healthy participation from students from all across Mumbai. Tech tac toe, a fresh take on the classic game X & O, was one of our two major technical events. Any doubts pertaining to how the game was to be played, were cleared upfront. Roll it for the century involved emojis and decoding them as fast as possible. This event was meant to cool the participants down after a competitive game of Tech tac toe.

While they were not busy enjoying the main events, participants had a wide variety of filler games at their disposal like among us, call of duty, chess and ludo. In addition, there was a music channel set up for participants to groove to their favourite tunes and let their hair down. In collaboration with DJS Beats and Aura, cultural acts were put on display for the viewing pleasure of the participants

<u>Day 2</u>

On this day, participants had two main events to look forward to; Lockout Debugging and Roll it for the century. Lockout debugging was a quintessential debugging competition with two rounds where participants put their programming skills along with their analytical skills

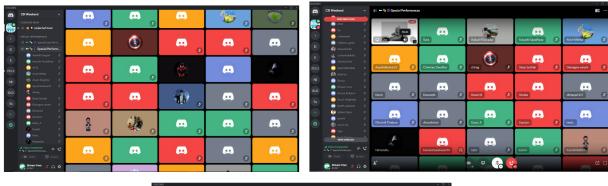


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on full display. atlastT was a combination of childhood favorites atlas and name-place-animal-thing rolled in one.

DJ Lit performed bards of their latest collection of poetry to refresh our participants with some colloquial mastery. They also inspired the new batch of DJSCE to think creatively and cleared all their doubts about the cultural committees of our college.

CSI Weekend was supposed to have something for everyone and we stayed true to that promise with interactive fillers and technical as well as non-technical events all throughout the 2-day extravaganza. The new students and first years got an opportunity to connect with their classmates and seniors, which would hardly be possible otherwise due to college being online. The participants logged off with the boatload of prizes and goodies they had won along with the memories of a weekend worth remembering.





EVENT 3: WEBINARS



Event 3.1: Webinar on GATE preparation by Vidyalankar.

Date: 18 February 2021

DJCSI organised a great live webinar for GATE preparation and career opportunities conducted by Vidyalankar for the benefit of students on 18th February, 2021 online on zoom with the following agenda:

- How you can secure your dream job by preparing for GATE
- GATE know-how: syllabus , paper pattern , dates and much more
- Strategy to get your target score
- Achieving a balance between college and GATE preparations
- Information on IIT's and PSU's

The session was highly informative and interesting and provided valuable insights regarding guidance for gate preparation. All questions put forth by the students were addressed proficiently.

Event 3.2: Webinar on GRE and education abroad by Vidyalankar.

Date: 23 February 2021

DJCSI in association with Vidyalankar conducted a webinar to talk all about GRE and everything that comes with it. On 23rd February, 2021 online on zoom.

The following topics were covered over the course of the webinar:

- Is it worth investing in Education abroad?
- Education in India vs Abroad
- GATE vs GRE
- MS vs MBA
- Career prospects & salaries after Postgraduate Education
- How to be awarded a Scholarship

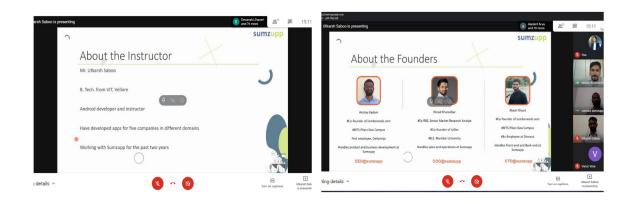
All this and more was covered during the interactive session followed by a doubt solving session where the speakers answered all the questions put forward to them by the curious students.



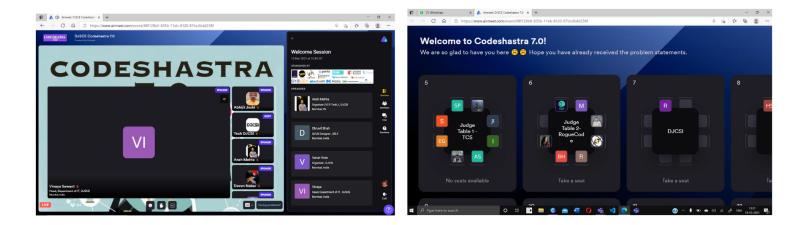
Event 3.3 : Android workshop and webinar by sumzapp Date: 29th January 2021

DJCSI in collaboration with sumzapp conducted a webinar for android development seeing as to how app development is the most thriving ecosystem in India. It was conducted on the 29th of January. This webinar and the associated workshop focused on the following points

- Honing one's skills in mobile app development
- Picking up new tips in the sector
- Bring about a habit to continuously learning new technologies



Event 4: Codeshastra 7.



Date: 13-14 March 2021



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Problem statements:

1. Sabse Bada Rupaiya – Custom Cryptocurrency A bank is a financial institution that accepts deposits from the public and creates a demand deposit while simultaneously making loans. Blockchain is a system of recording information in a way that makes it difficult or impossible to change, hack, or cheat the system. A Blockchain-based Banking System is sought to replicate the functionalities of the existing model.

Below features are desired in an application:

a.) Create your own crypto platform. The correct choice of blockchain platform for your business depends on the consensus mechanism you've selected.

b.) Customers should be able to buy/loan crypto from the blockchain based system.

c.) Upon performing certain amount of transactions, the system should be able to calculate the credit score for a particular user on the blockchain.

This will bring transparency to the entire supply chain and ensure that fraud risk is eliminated, system preserves the transaction anonymity and therefore provides lower operational costs. That means that instead of having to rely on a network of custodial services and correspondent banks, transactions could be settled directly on a public blockchain.

2. 'Yogyata' for Yoga – Al-driven Yoga trainer Yoga is a group of physical, mental, and spiritual practices or disciplines that originated in ancient India. Yoga is one of the six Āstika (orthodox) schools of Indian philosophical traditions. There is a broad variety of yoga schools, practices, and goal in Hinduism, Buddhism, and Jainism. The term "Yoga" in the Western world often denotes a modern form of hatha yoga and yoga as exercise, consisting largely of postures or asanas.

Contestants have to develop an application that will have the following features that we are looking for:

1. It should have a Machine Learning algorithm that identifies all the



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asanas and meditation routines.

2.It should have the ability to give a personalized routine to every person where there should be a feature that allows each person to keep a track of how many asanas they are done with.

3.Augmented Reality should be used to show consumers the correct posture for each asana

Our goal is to make yoga more popular and accessible throughout the world and we can do so by using the technological advancements made in Augmented Reality and Machine Learning.

3. Gaadi Waala Aaya - Smart Traffic Management System

The increasing traffic density on city roads in India has led to a number of measures being taken such as construction of flyovers and new, wider roads in an effort to reduce congestion but to no avail. The root cause for this menace is the outdated and ineffective traffic management systems in place, which allow for sloppy management and lax enforcement of traffic rules. These issues are exaggerated during times of crisis like a disaster requiring evacuation or an incident requiring access by emergency response agencies.

The Internet of Things or IoT is the pathbreaking technology that assists devices in communicating with each other via the internet, forming a network. It enables us to interact with our belongings. An IoT system generates, stores and processes huge amounts of data which is why these systems use cloud technology to save up all the data.

Contestants have to develop a smart traffic management system using IoT and integrate the following features in their product:

1. Violators will be prosecuted

2. Provisions have to be made for the data gathered by this system to be pushed on cloud. A hotspot map of violations done in that period of time must also be presented.

3. Additional features like face tracking and fine according to the person should be included.

4. To those who work in Acres, not in Hours – Smart Portal for Cottonseed Farming





Cottonseed, the seed of the cotton plant, is commercially important and used for oil and other products. The purpose of cottonseed certification is to sustain and make available high-quality seed of the cotton plant.

The team has to develop a solution to implement certified cotton seeds from cotton farmers in India, keeping in mind the following features:

1. Statistics for warehouse stock for effective analysis and decision making

2. Verification of farmers via Aadhar Card or Farmer Certificate

3. To benefits farmers, the system should include application and tracking features

4. Implement live tracking and safe delivery of the products for the satisfaction of farmers and consumers.

5. A portal that will help the farmers to sell the products in a much easier way

6. A Multi-lingual system would be highly appreciated, assuming that the system would be made available across India.

5. Kho Gaye Hum Kahan – Enquiry Portal for Lost and Found Items Lots of people lose their valuable belongings at stations, bus stops, and at various places in the city. When we find hold of such lost items, we are clueless as to what steps should be taken to help to deliver the lost item to the right person.

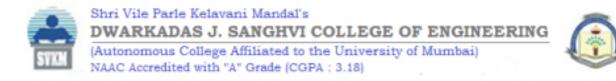
Here are some things to keep in mind :-

1.Create a system in which a person who has found something can add his details of the particular found item and the person who has lost something can go to this portal and search for the object.

2. The search functionality for the people trying to search their item must be smart enough to catch multiple keywords and find out the lost item.

3.It is also important that the person saying that the lost item is theirs should actually be the right person, you have to figure out methods to verify the correct identity of the person claiming to get hold of any lost item from the portal.

Yes, there are measures in place to ensure lost items are found, but the archaic method of keeping records at the Police stations is not optimal and very time-consuming. The portal you create must solve incumbent problems and participants have the liberty to add new features should they think of any.



6. Zindagi ke Saath bhi, Zindagi ke baad bhi – Insurance Lead Generation Chatbot

The greatest financial lesson learnt this year is how important Buying an Insurance for yourself and family could be, which gives you relief on medical expenses amid such uncertain situations. Before buying any insurance, you would probably google search "insurance", click on the first link and look for information on which insurance to buy with a ton of questions in your head. The problem that insurance companies face is that potential customers need to be aware of a significant amount of information before they can even begin to think of buying insurance from any company. Also, these earning customers has only a short span of attention to spend on your website and it becomes clear that a human interaction is required at some point to ensure the conversion of these busy customers and less informed potential people

Human interactions are not always viable unless you are an insurance giant. Human labour is expensive, slow and unscalable.

So, to overcome such problem, we want you to develop an Insurance Lead Generational Chabot. Dataset: Pick any open-source insurance dataset available on web Deliverables: Create a Chatbot model and Build a UI to test where this chatbot is functional and answers questions that a customer may need to know while buying an insurance policy.

The chatbot should be able to capture and store leads information like name, email, contact number mandatorily and other details if required in the database. This should not be done in a direct way but needs to be in an interactive and conversational manner. You can use any framework or technology to build the UI. You can also use pre-trained models if required.

Objectives of the activity:

•Conducting the first online hackathon to push the physical boundaries/limitations and explore what all can be achieved via the online medium.

•To choreograph and fabricate an online platform for optimizing the technical aptitude in a fun and entertaining way in its endeavour to bridge the gap between university and industry.

• To realise the talent within, stimulate new ideas and to inspire





innovation amongst today's generation.

• Theme based hackathon, wherein we test participant's skills and the chosen ones get to participate in Round 1.

•Winners decided through among the final round of the competition, via the complete presentation of the project builds.

<u>DAY 1</u>

The event started with the Opening ceremony, where all the participants were gathered onto the official online platform for the hackathon, 'AirMeet'. Firstly Purva Raut ma'am, the associate head of the IT department imparted a few words of wisdom following with Dr.Abhijit Joshi, an invaluable member of the IT departments faculty who inspired the participants to stay motivated and focused throughout the entire hackathon. The ceremony ended with judges being introduced and they assured the participants that they would be there to assist and try to solve the doubts and oversee the progress. DJCSI's CodeShastra Round 1 was a success. Set up was done and participants had started coding by 12 PM

All the online AirMeet discussion tables were buzzing with teamwork. 4 problem statements were given the previous morning, therefore the installation of the software required was done, and implementation of the project was to be done in 12 hours. i.e the next immediate day. Participants could take a break once a while in those 12 hours to get some snacks and beverages. Mentors were taking rounds asking every team which problem statement they were working on and what their ideas were.

The code was to be pushed onto git repo every 3 hours. A lot of teams take advantage of the night-time's peace to focus on implementing all the features decided upon. It's like once the clock hit 12 Cinderellas all over Mumbai turned into programmers. As the night progressed the projects started taking true shape into

As the night progressed the projects started taking true shape into actual products. The first day is usually all about ideating and implementing features and that's what all the teams did.'

<u>DAY 2</u>

It was Day 2 already, and participants were almost ready with their ultimate products. It was a very intense battle, and the stakes were high. You could see the stress levels rising and hear the anxiety in the participants as the first presentation round was nearing. Although the event was online, participants and the judges didn't have a tough time during the presentation rounds. Thanks to Airmeet. Codeshastra was



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touched by great judges from leading companies like Tata Consultancy Services, Rogue Code, and Data Science Wizards. Every product was unique in its way, but only the top 10 teams were destined to go-ahead for the final race. After 24 hours of pitched battle and presentation round, the top 10 teams were selected and were asked to prepare a proposal for the next round.

In the final round, each team got 5 mins to explain their product and give their proposal. It was a very tough decision for the judges to select the winners as all the teams put forward their best work and did an amazing job. After the final round, the judges were making their decision. Meanwhile, we got to have a conversation with our very own Technical Heads - the winners of Codeshastra 6.0. Valuable insights were given regarding hackathons, and everyone took something useful from them. Finally, the judges decided on the three winning teams, and the prize distribution ceremony was held where the winner, 1st runner up, and 2nd runner up were declared.

With this, Codeshastra 7.0 came to a beautiful end. **Winning teams:**

1st prize winners-"Team Avian" got a cash prize of 25k.

College/city- Universal College of Engineering Mumbai, KJ Somaiya, VJTI (Mumbai)

Team members: Mihir Daka, Neel Dandiwala, Harshit Sonawala, Nishant Sidhpura.

2nd prize winners-"Team Custodians of Chronology" got a cash prize of 15k.

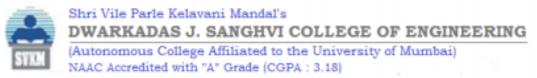
College/City- NIT (Karnataka)

Team members: Pranshu Shukla, Shlok Mange, Manan Jhaveri.

3rd prize winners-"Team White Hat Jrs" got a cash prize of 10k. College/city- DJCSE (Mumbai) Team members: Jay Joshi, Aditya Ajmera, Vidhan Shah, Jazib Dawre.

The top 10 teams that were selected for the final round were

- •CodeDiggers
- Custodians of Chronology
- Code Breakers
- Team outliers

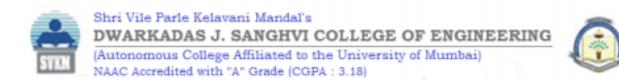




- DeepMind
- •Laxmi Chit Fund
- •Whitehat Jr.s
- Avian
- •ByteArmy
- WebNoob







Event 5: Pitch Please.

Date: 28-29 March 2021

We at DJCSI believe that everything begins with an idea. And with an aim to promote ideas over technical skills, DJCSI hosted an unparalleled event called Pitch Please. Pitch Please was an event that helped forge a path for students who needed a direction and clear view to implement their ideas. Through this event, students pitched their ideas to tackle the prevailing real-world problems provided by eminent companies and NGOs. Furthermore, the best proposals were given an opportunity to bring them into reality in association with the companies, and the selected students are provided with internships. The problem statements presented surely had the potential to make society better, and the problem statements ranged over a plethora of domains viz Artificial Intelligence, Web and App development, I.O.T, and Digital Marketing.

The event took place on 28th and 29th March 2021 and was conducted on online platforms like airmeet and MSTeams. Participants were required to give a presentation of their pitch to the representatives of the companies taking part. Prior to the event, DJCSI had also organised a mentorship/ doubt solving session on airmeet on ____ March to resolve any queries or difficulties participants might have. During the presentation round, participants showcased their ingenuity and



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presentation skills which left the company representatives impressed. Pleased with the ideas they had received, the participating companies selected the teams they felt had the most unique and outstanding pitches and thereafter, the company and the participants will collaborate between themselves to complete their projects.

In conclusion, the event gave the students an opportunity to face real-world issues and take on a project which makes an impact on society. Students made a presentation of their ideas and how they were going to tackle the issue they were facing, during the making of this presentation the students had to research, the technology which they wanted to use, in-depth and got to do research-based learning. The teams who were selected by their respective companies get to implement their ideas as a real-world solution during the summer break as an internship. This provides students with not only an internship but also real experience in the technical industry.