

FUZZY TO CRISP

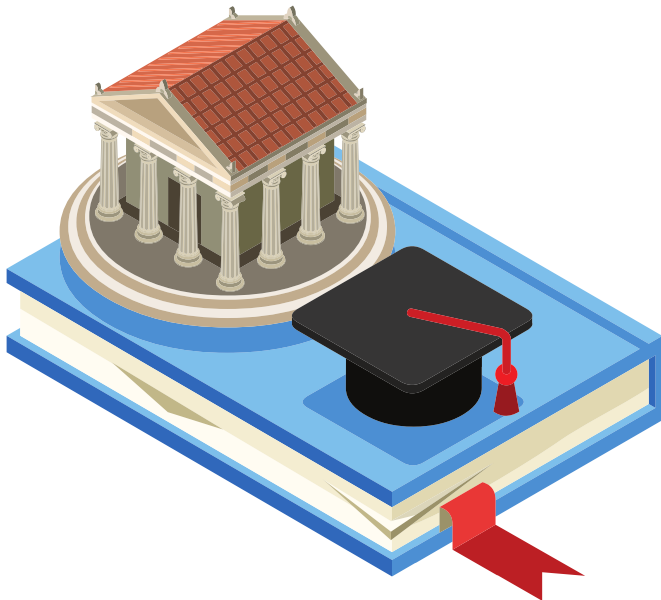
COMPUTER ENGINEERING DEPARTMENT
SAL INSTITUTE OF TECHNOLOGY AND ENGINEERING RESEARCH

SAL
EDUCATION



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- **Asst. Prof. Mohit Bhadla**
- **Asst. Prof. Twinkle Patel**
- **Asst. Prof. Mikin Dadli**
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WORDS FROM THE DIRECTOR

~DR. RUPESH VASANI



I am pleased to congratulate the Computer Engineering Department for issuing the first issue of the Departmental eNewsletter "FUZZY TO CRISP". Huge congrats to the editorial team. A wide number of readers are welcomed by the newsletter "FUZZY TO CRISP" perspectives from the Department of Computer Engineering. The faculty's job is to develop student's talents and skills for their future. Let this be a forum for professors and students to show their creative abilities and revolutionary ideas. The outside world will come to know about the achievements and extraordinary performances of the students and faculty through this online medium. My best wishes will always be with this type of good efforts of the Computer Engineering Department.





HOD'S DESK

~ASST. PROF. VIDHI KHANDUJA



I am very glad that our Computer Engineering Department is releasing this issue of 'FUZZY to CRISP' as an indication of department activities. It is a technical platform to highlight the talent of scholars and experts in our department. The main asset of the department is a team of well qualified, experienced and dedicated faculties who are continuously supporting the students for their academic excellence. I heartily congratulate the team of faculty members and the students for their extensive, outstanding and creative efforts. The department also organizes regular expert lectures delivered by industrial persons, arranges workshops, Industrial visits for motivating the scholars for their further enhancements. My best wishes to all the students and faculties for a prominent career ahead.



VISION AND MISSION OF THE INSTITUTE

VISION:

SAL EDUCATION AIMS AT DEVELOPING YOUNG CREATIVE THINKERS IN A LEARNING ENVIRONMENT OF HIGH ACADEMIC AMBIENCE BY COLLABORATING VALUES, PROFESSIONAL AND TECHNICAL COMPETENCE WITH THE VISION TO BE A PROMINENT CENTRE OF LEARNING WITH SIGNIFICANT INTERNATIONAL IMPACT AND LOCAL COMMITMENT AND THUS PRODUCING LEADERS WITH THE GLOBAL VIEWS AND INDIAN ETHOS.

MISSION:

- TO ENDLESSLY STRIVE FOR THE COMPLETE DEVELOPMENT OF THE LEARNERS BY EDUCATING LEARNERS IN A STATE-OF-ART TECHNOLOGY.
- HELPING THEM TO IMBIBE PROFESSIONAL ETHICS AND SOCIAL COMMITMENTS, SO THAT THEY EMERGE AS COMPETENT PROFESSIONALS TO MEET WITH THE GLOBAL CHALLENGES.
- TO CONTRIBUTE TO SHAPING A BETTER FUTURE FOR HUMANKIND BY DEVELOPING EFFECTIVE AND SOCIALLY RESPONSIBLE INDIVIDUALS AND ORGANIZATIONS.

VISION AND MISSION OF THE DEPARTMENT

DEPARTMENT VISION:

TO PRODUCE SKILLFUL AND SOCIALLY RESPONSIBLE COMPUTER ENGINEERS, INNOVATORS, RESEARCHERS AND ENTREPRENEURS CONTRIBUTING TO THE DEVELOPMENT OF SOCIETY.

DEPARTMENT MISSION:

1. TO IMPART QUALITY AND SKILLED TECHNICAL EDUCATION WITH EFFECTIVE TEACHING LEARNING PROCESS.
2. TO PROVIDE WELL-EQUIPPED INFRASTRUCTURE FOR MOLDING YOUNG MINDS TOWARDS INNOVATION, RESEARCH AND LIFE-LONG LEARNING.
3. TO FOSTER INSTITUTE INDUSTRY COLLABORATIONS AND DEVELOP THE ESSENCE OF TEAM WORK, COMMUNICATION SKILLS, LEADERSHIP, WORKING ETHICS AND ENTREPRENEURSHIP.
4. TO DEVELOP PROFESSIONALLY AND ETHICALLY RESPONSIBLE CITIZENS WORKING FOR THE BETTERMENT OF SOCIETY.

PROGRAM EDUCATIONAL OBJECTIVES:

PEO-I

THE GRADUATE WILL BE ABLE TO EMPLOY THEIR SKILFUL KNOWLEDGE EXPERTISE TO SOLVE VARIOUS INDUSTRIAL AND REAL WORLD PROBLEMS.

PEO-II

THE GRADUATE WILL EXHIBIT PROFESSIONALISM, ETHICAL ATTITUDE, COMMUNICATION SKILLS AND PRACTICE THEIR PROFESSION WITH LEGAL AND SOCIETAL RESPONSIBILITIES.

PEO-III

THE GRADUATES WILL EXCEL IN THEIR PROFESSIONS AS GOOD LEADERS, INNOVATORS, RESEARCHERS AND ENTREPRENEURS.

PEO-IV

THE GRADUATE WILL BE ENGAGED IN CONTINUOUS EDUCATION AND LIFELONG LEARNING WITH POST-GRADUATION, CERTIFICATION COURSES AND RESEARCH ACTIVITIES.



IN THIS ISSUE :

- From the desk of Director
- From the desk of Principal
- Department Activities
- Faculty Technical Article
- Faculty Activities and Achievements
- Upcoming Technologies
- Placements
- Student's Corner



DEPARTMENT ACTIVITIES



"SEMINAR ON MICROSOFT CLOUD-AZURE"



- Seminar On Microsoft Cloud-Azure was organised on 20/01/2020 by Computer Engineering Department in association with Microsoft Student Partner, **Mr.Lalit Radadiya** in Room No.203 for semester 6th during 10:30 a.m-11:30 pm. at SALITER. Faculty and students were present.

"FDP ON DESIGN ENGINEERING"



- FDP On Design Engineering was organised on 23/12/2020 by Computer Engineering Department SALITER for Faculties and was conducted by **Asst. Prof. Miki Patel, Asst. Prof. Jagrati Shekhawat, Asst. Prof. Harsha Padheriya.**





“SEMINAR ON NODE JS”

PRESENTATION SESSION REPORT ON INTELLECTUAL PROPERTY COMPONENT



- Seminar on Node JS was held on 12/9/2020 by **Mr. Neeraj Agnihotri**, Sr. Technical Trainer on Online Mode. Faculties and students were present during 11.30 to 12.30 PM.
- List of Faculty who have attended the seminar :
 1. Prof. Nidhi Barot .
 2. Prof. Trupti Pathrabe
 3. Prof. Asha Patel.





BLOCKCHAIN TECHNOLOGY

~ASST. PROF. VAIBHAVI JOSHI



- The Blockchain Technology is “to allow digital information to be recorded and distributed, but not edited.”
- Blockchain technology is a structure that stores transactional records, also known as the block, of the public in several databases, known as the “chain,” in a network connected through peer-to-peer nodes.
- A blockchain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain. Each block in the chain contains a number of transactions, and every time a new transaction occurs on the blockchain, a record of that transaction is added to every participant’s ledger.

Why Blockchain is so popular?

- Record keeping of data and transactions are a crucial part of the business. Fortunately, Blockchain avoids long process and facilitates the faster movement of the transaction, thereby saving both time and money.
- Blockchain is an emerging technology with many advantages in an increasingly digital world:
 - 1) Highly Secure
 - 2) Decentralize System
 - 3) Automation Capability

How does Blockchain work?

Blockchain as a career:

- With the number of job openings exceeding qualified developers, blockchain development is one of the fastest rising fields in the labor market. A successful career in blockchain engineering offers multiple job paths and an opportunity to work on innovative projects using cutting-edge technology. Some of the important job roles are:
 1. Analyst Relations Manager
 2. Front End Engineer
 3. Risk Analyst
 4. Crypto Community Manager
 5. Software Engineer
- By 2022, at least one innovative business built on blockchain technology will be worth \$10 billion. By 2026, the business value added by blockchain will grow to just over \$360 billion, then by 2030 grow to more than \$3.1 trillion.



VIRTUAL REALITY AND AUGMENTED REALITY

~ASST. PROF. HARSHA PADHERIYA



- Virtual Reality and Augmented Reality have both been technology buzzwords for over a decade now. However, these top technology trends have so far failed to materialise into widely available consumer products. The presence of virtual reality and augmented reality in our real lives is minimal. Even though VR and AR have been familiar in the industry, they are relatively new technologies in 2021.

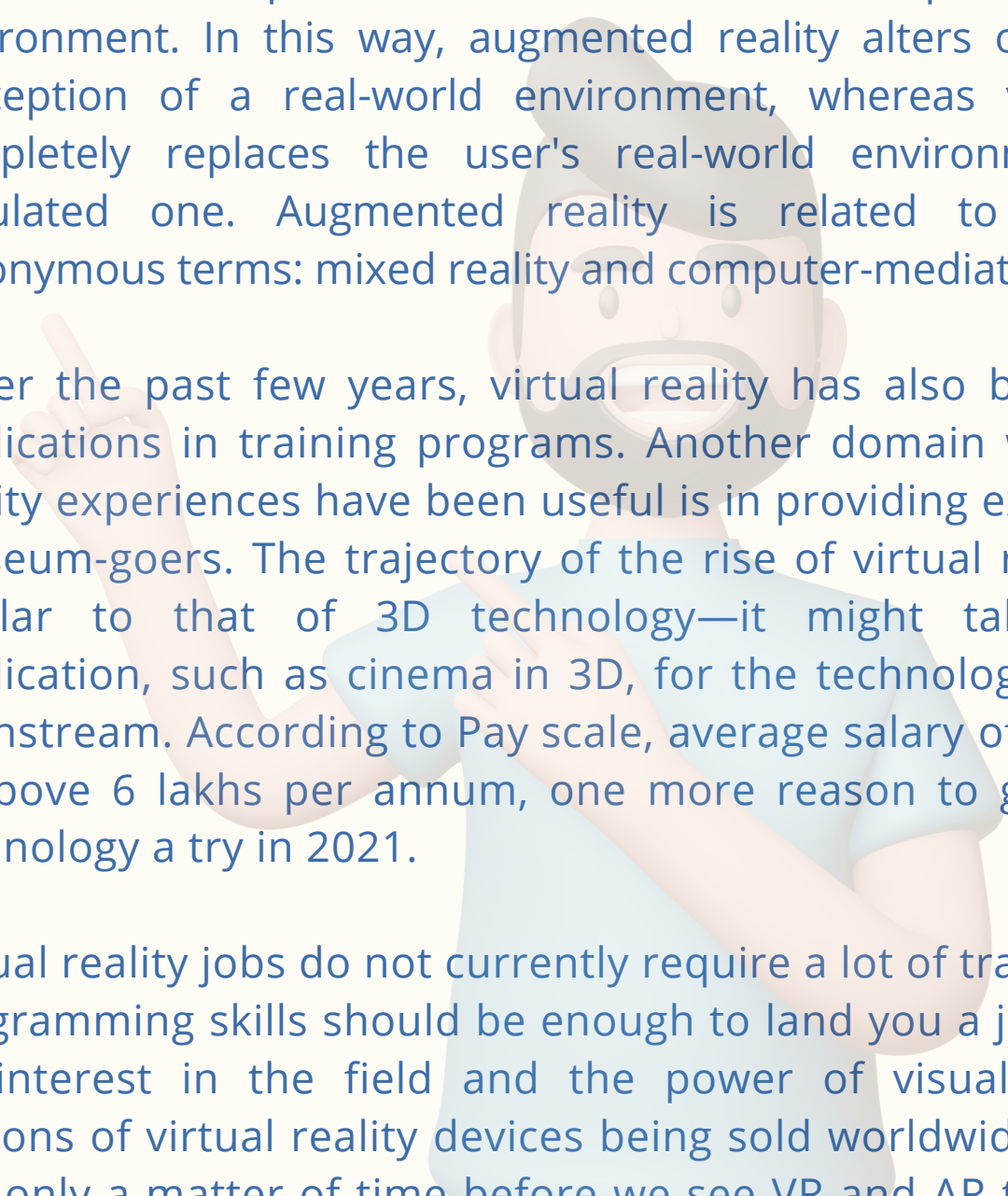
Virtual reality (VR)

- Virtual reality (VR) is a simulated experience that can be similar to or completely different from the real world. Applications of virtual reality include entertainment (particularly video games), education (such as medical or military training) and business (such as virtual meetings). Other distinct types of VR-style technology include augmented reality and mixed reality sometimes referred to as extended reality or XR.

- A person using virtual reality equipment is able to look around the artificial world, move around in it, and interact with virtual features or items. The effect is commonly created by VR headsets consisting of a head-mounted display with a small screen in front of the eyes, but can also be created through specially designed rooms with multiple large screens. Virtual reality typically incorporates auditory and video feedback, but may also allow other types of sensory and force feedback through haptic technology.
- Virtual reality has been used widely in video games thus far and augmented reality-based apps did become popular for a while a few years ago, before waning. However, the best way virtual reality can become a top technology trend for the future is by making it a part of people's daily lives.

Augmented reality (AR)

- Augmented reality (AR) is an interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities, including visual, auditory, haptic, somatosensory and olfactory.
- AR can be defined as a system that incorporates three basic features: a combination of real and virtual worlds, real-time interaction, and accurate 3D registration of virtual and real objects. The overlaid sensory information can be constructive (i.e. additive to the natural environment), or destructive (i.e. masking of the natural environment).

- 
- This experience is seamlessly interwoven with the physical world such that it is perceived as an immersive aspect of the real environment. In this way, augmented reality alters one's ongoing perception of a real-world environment, whereas virtual reality completely replaces the user's real-world environment with a simulated one. Augmented reality is related to two largely synonymous terms: mixed reality and computer-mediated reality.
 - Over the past few years, virtual reality has also begun to find applications in training programs. Another domain where virtual reality experiences have been useful is in providing experiences to museum-goers. The trajectory of the rise of virtual reality is very similar to that of 3D technology—it might take just one application, such as cinema in 3D, for the technology to become mainstream. According to Pay scale, average salary of AR Engineer is above 6 lakhs per annum, one more reason to give this new technology a try in 2021.
 - Virtual reality jobs do not currently require a lot of training. Simple programming skills should be enough to land you a job, alongside an interest in the field and the power of visualisation. With millions of virtual reality devices being sold worldwide every year, it is only a matter of time before we see VR and AR take over our daily lives.





Artificial Intelligence



- The development of Artificial Superintelligence will probably mark the pinnacle of AI research as AGI will become by far the most capable form of intelligence on earth.
- Artificial Intelligence is probably the most complex and astounding creations of humanity yet. And that is disregarding the fact that the field remains largely unexplored, which means that every amazing AI application that we see today represents merely the tip of the AI , as it were.
- With Superintelligence, machines can think of the possible abstractions/interpretations which are simply impossible for humans to think.

Artificial Super Intelligence (ASI)

- The Artificial Superintelligence to be materialized and become real.
- Experts believe that there is a 25% chance of achieving human-like AI by 2030. Furthermore, advancements in robotic approaches and machine algorithms, paired with the recent data explosion and computing advancements will serve as a fertile basis for human-level AI platforms.



Robotic Process Automation (RPA)

- **Robotic Process Automation (RPA) Like AI and Machine Learning.**



- RPA is the use of software to automate business processes such as interpreting applications, processing transactions, dealing with data, and even replying to emails.
- RPA automates repetitive tasks that people used to do.

- Next Generation RPA: Optimized and Situation-aware Decisions by Robots.
- Fully automated decisions with robots may contain multiple steps.
- Robotic process automation is a form of business process automation technology based on artificial intelligent -digital workers.
- In year 2022 RPA is the way of involving robots with more business-oriented activities to make business decisions and be able to explain why the decision has been made.



PLACEMENT



- Knowledge and skills are the most important factors companies use to assess freshers during campus placements. With every business and organization going digital, the IT sector today is a booming field as compared to other sectors and there is a huge demand of Computer Science Engineers and programmers.
- Pathan mohammad sajid mohammadsalim got placed at Yudiz Solutions with the starting package of 3.0 LPA.



- Patel Shubham, Abhilasha Movaliya, Sagar Shah, Naitik Barot, Purohit Nipul, Binal Gajjar, Patel Nikhil got placed at TOUJOURSPERITUS with the starting package of 3.75 LPA.

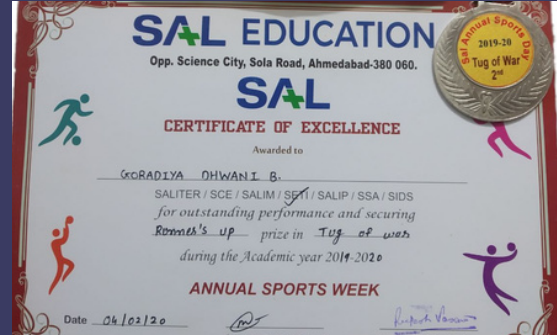


- Sweta Mandani got placed at Gateway Group of Companies with the package of 4.16 to 4.6 LPA.
- Hiral Methaniya, Karan Patel, Priya Thakkar, Gajera Meet got placed at Visudh Ajivam Pvt Ltd with the starting package of 8 LPA.





- **Mehta Kashish got 1st prize and Gold Medal in CHESS in Annual Sports Week organised by SAL Education on 5th Feb 2020.**



- **Goradiya Dhvani got Runner's Up prize in Tug of War in Annual Sports Week organised by SAL Education on 4th Feb 2020.**



- **Meet Khatri Participated in cricket at college level competition**



- **Dipesh Vadgama won 1st prize in chess at annual sports week at college level**



STUDENT'S CORNER : ACHIEVEMENTS



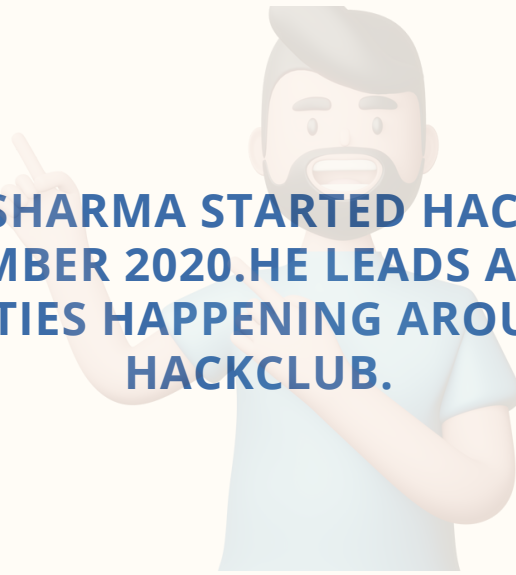
- **Our student from 3rd sem - Aaditya Champaneri got a price voucher and a certificate at drawing competition held at HDFC BANK on June-2020.**

- **Bhavya Patwa's Project "KIYA HOMES" was selected for the SSIP grant through GTU and got funding of 1.98 lakhs on 24 September 2020.**
- Our Kiya homes had been selected for the SIP grant through GTU, based upon the screening that happened on September 18, 2020.
- You can acknowledge your college for the same.
- Statistics of the proposed and Approved Funds;
Proposed Amount for the Project: **Rs. 1,98,800**
Approved Amount for the Project: **Rs. 1,98,000**
Approved Amount for the first Milestone: **Rs. 50,000**
Timeline for the first Milestone: **3 months**





SHIVLAL SHARMA STARTED HACKCLUB IN NOVEMBER 2020. HE LEADS ALL THE ACTIVITIES HAPPENING AROUND AT HACKCLUB.



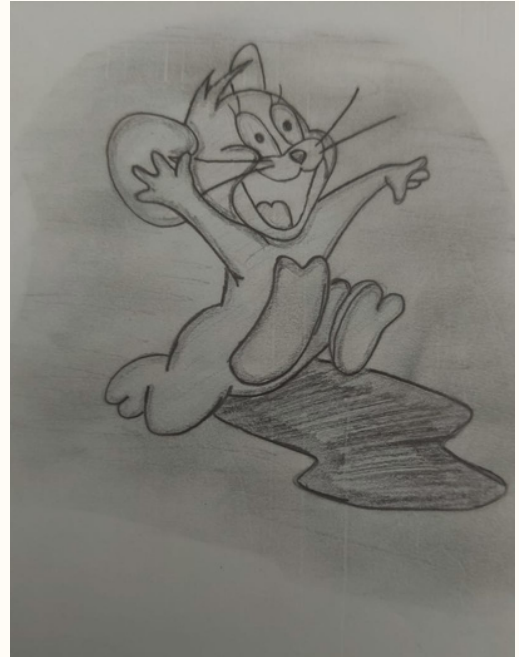
- The first community event was based on Google Crowdsourcing. The event name was Journey to become Google Crowdsourcing Influencer.
- Conducted and Hosted by **Shivalal Sharma** and guest speaker was Mr. Sanjay KV (He is Google Crowdsourcing Community manager Asia).
- In that event, we discussed how one can make Google's apps better by simply contributing to Google Crowdsourcing App. Help one to make Google's algorithms better by contributing and completing various tasks.
- We conducted a team building session in December 2020 where I explained community benefits, how to manage student community, how to contribute to Open-source projects and the benefits of Open-source.



STUDENTS' CORNER: ART



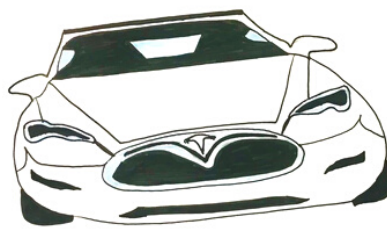
Aaditya Champaneri



Arjun Jadia



**Arjun
Jadia**



Aaditya Champaneri



Urvish Manjarly



STUDENTS' CORNER: POETRY

**Kii mere Dil,Dildar,Dillagi chahhe sab le jao
muhjse(2)
bs Muhje jine k khatir Chahi,Kitab aur Kalam
chahiye!!**

~Aaditya Champaneri

**This is A Daily Reminder
To be calm,
To be relax,
To be adjust,
To not get Angry on small things.**

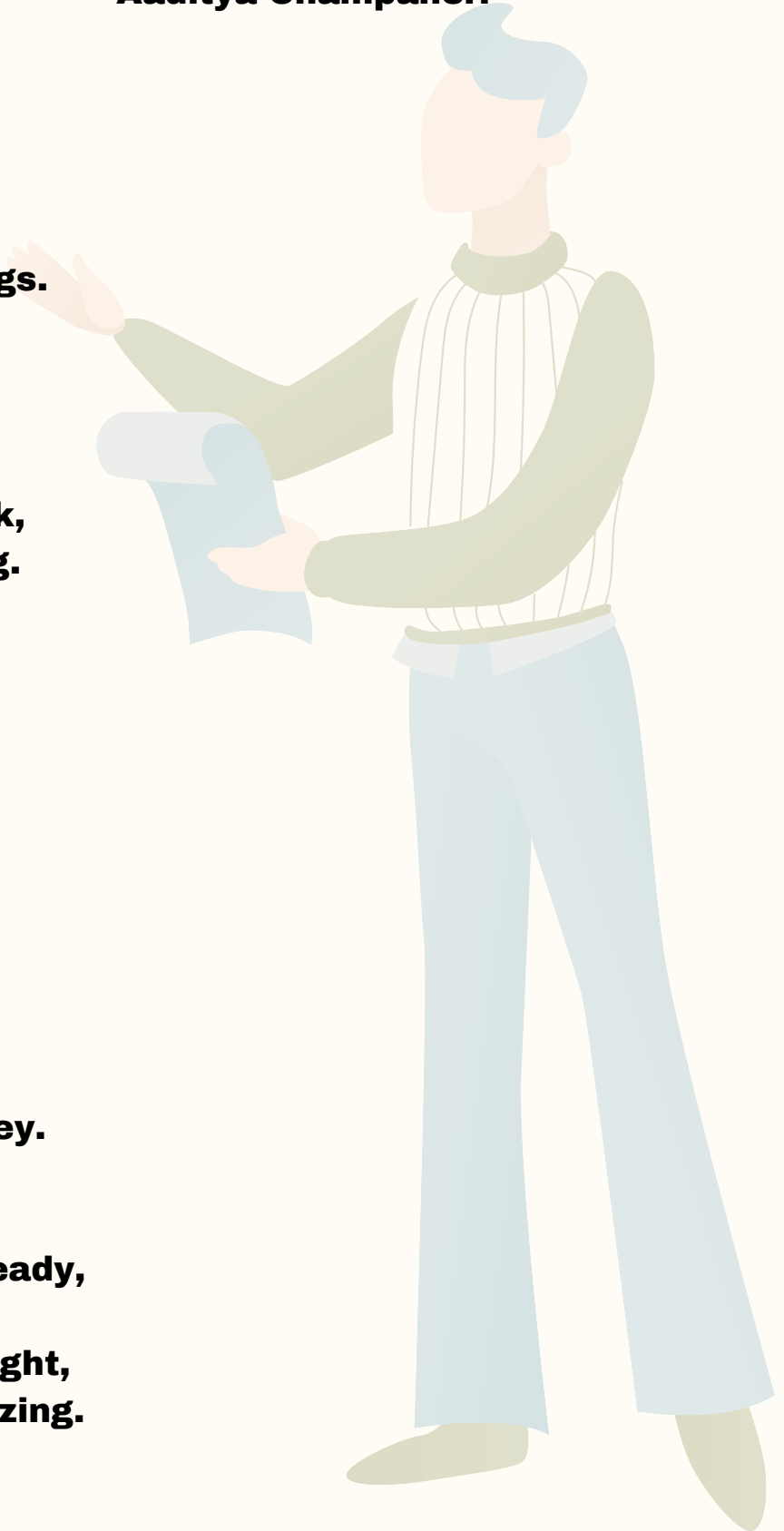
**This is A Daily Reminder
To be Yourself,
To know your worth,
To not care what people think,
To know You can do anything.**

**This is A Daily Reminder
That you are amazing,
That you are awesome,
That you are blissful,
That you will succeed.**

**This is A Daily Reminder
To always have Hope,
To have Faith,
To be kind,
To know everything will be okey.**

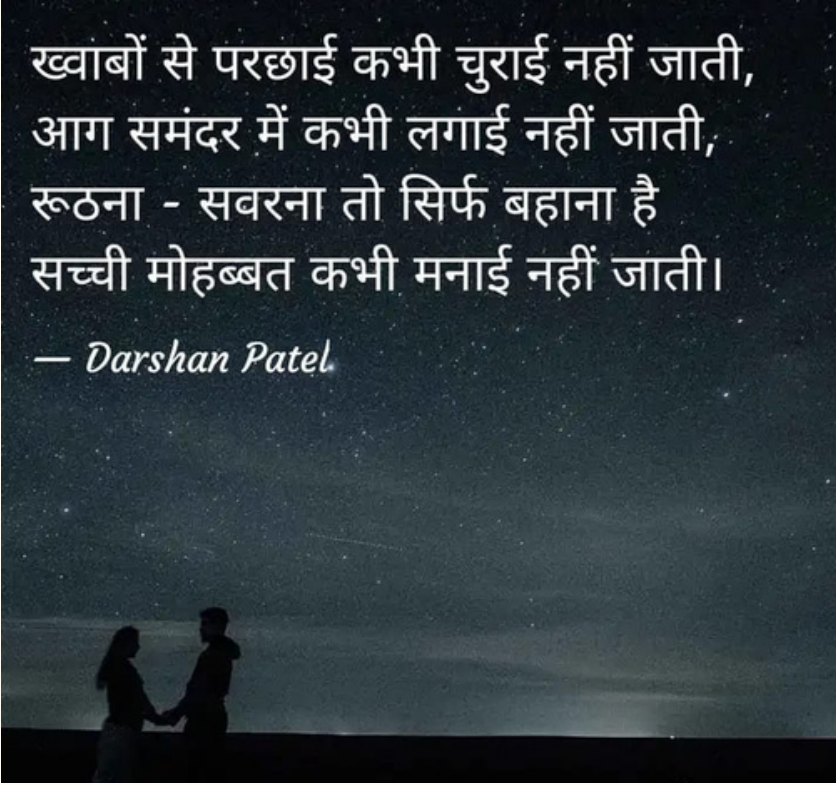
**This is A Daily Reminder
That you have made it so far already,
That you haven't given up,
That whatever you're doing is right,
And That you're going to be amazing.**

~Aaditya Champaneri



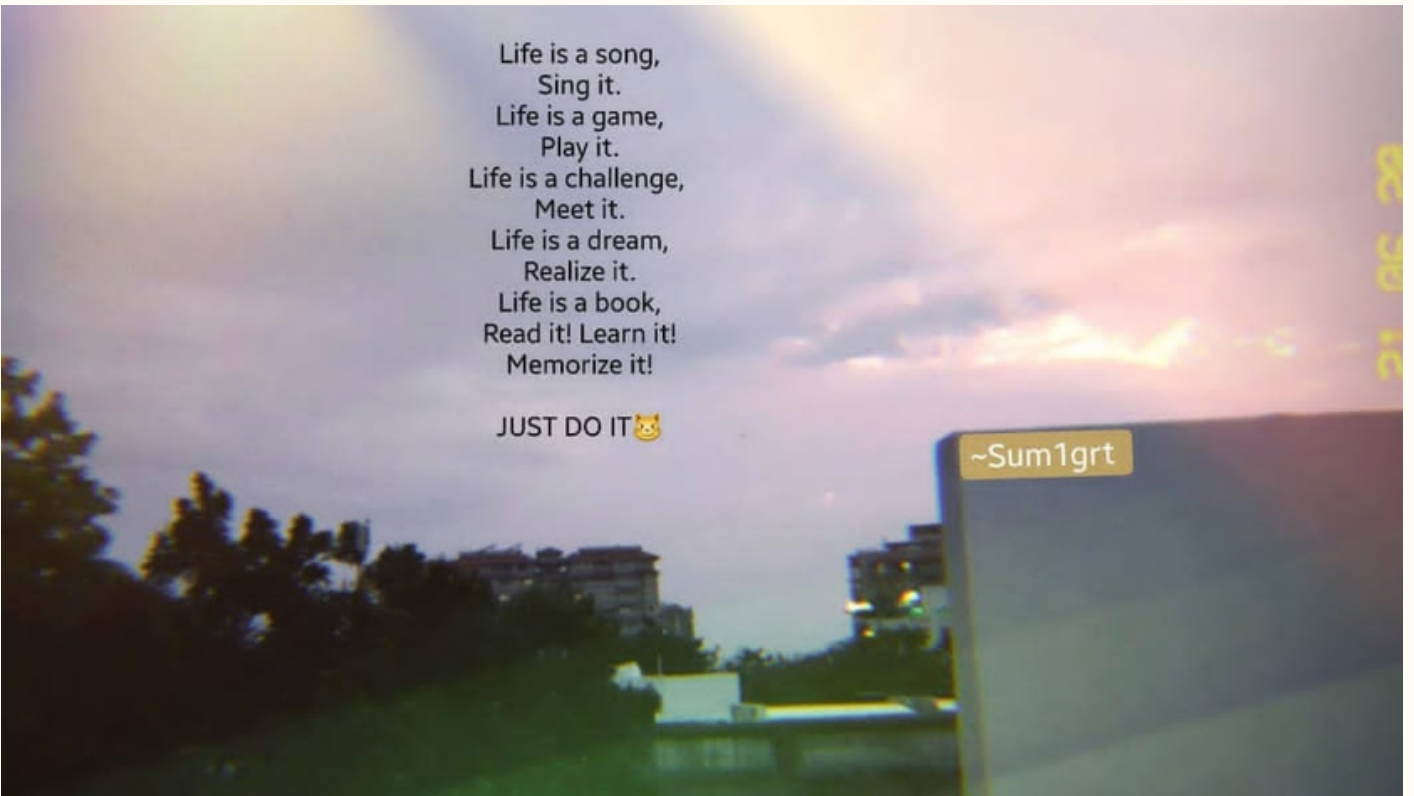
ख्वाबों से परछाई कभी चुराई नहीं जाती,
आग समंदर में कभी लगाई नहीं जाती,
रूठना - सवरना तो सिर्फ बहाना है
सच्ची मोहब्बत कभी मनाई नहीं जाती।

— *Darshan Patel*



Life is a song,
Sing it.
Life is a game,
Play it.
Life is a challenge,
Meet it.
Life is a dream,
Realize it.
Life is a book,
Read it! Learn it!
Memorize it!

JUST DO IT 🐱



जुबान तो तबियत पूछती रही
वहां नैनों ने आपस में बात कर ली,
आराम से चल रही थी जिंदगी
वहीं उन्होंने अचानक से आके मुलाकात कर ली।

— Darshan Patel

ના શિવજીનાં ક્રોધ માં,
ના નારદમુનીનાં પ્રમોદ માં,
નીકળ્યો તો સ્વર્ગ સમા સુખ ની શોધ માં,
ત્યાં જોવા મળ્યું બાળક માતા ની ગોદ માં.

— Darshan Patel



YOGA
~DHAIRYA BHAVSAR



MEME contest between Students

Students
in 2020:

$$x^2=121$$
$$X^2=1\&1$$
$$X= 11$$

Teachers
in 2020:

