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**Xavier Institute of Engineering**
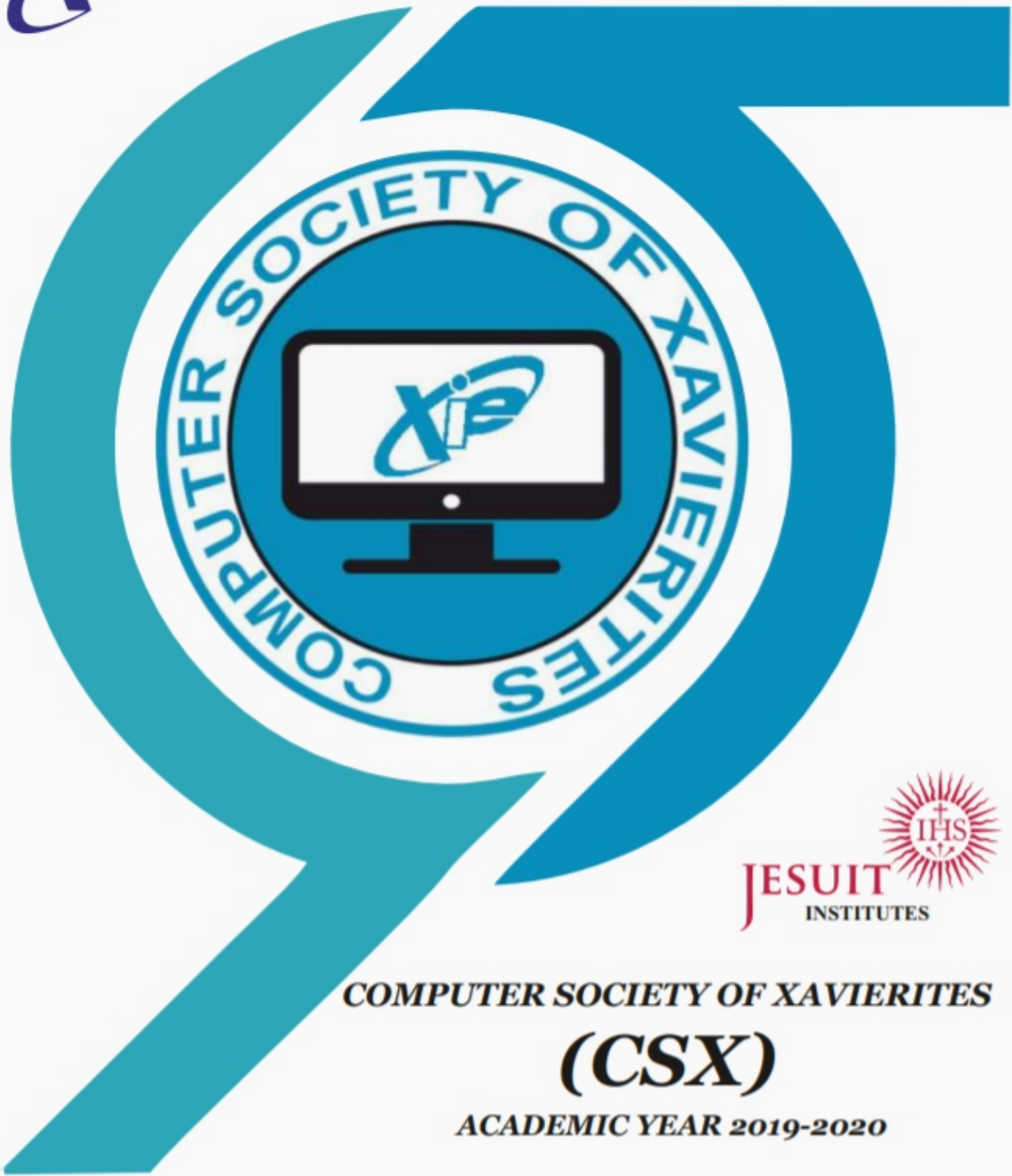
COMPUTER SOCIETY OF XAVIERITES

JESUIT INSTITUTES

**COMPUTER SOCIETY OF XAVIERITES**

# (CSX)

*ACADEMIC YEAR 2019-2020*

# Editorial team

**Prof. Jyotsna More**
CSX Convener

**Prof. Kunal Meher**
CSX Staff president

**Shrishti Karkera**
CSX President

**Yeshwin Anil**
CSX Treasurer

# Vision & Mission

## VISION OF XIE

To nurture the joy of excellence in a world of high technolog.y

## MISSION OF XIE

To strive to match global standards in technical education by interaction with industry, continuous staff training and development of quality of life.

## VISION OF IT Department

To nurture the joy of excellence in a world of Information Technology.

## MISSION OF IT Department

**M1.** To develop the critical thinking ability of students by promoting integrative learning.

**M2.** To bridge the gap between industry and institute by giving students exposure to industrial demands and current trends.

**M3.** To promote excellence in learning and research, and to be responsible when dealing with social concerns.

**M4.** To encourage students to pursue higher studies.and make them aware of various career opportunities.

## VISION OF COMP. Department

To nurture the joy of excellence in a world of Computer Engineering.

## MISSION OF COMP. Department

**M1:** To generate high quality professionals with emphasis on global standards of Computer Science and Technology.

**M2:** To prepare industry-ready students by providing training in line with industrial requirements.

**M3:** To nurture social and ethical values in undergraduates to help them to improve quality of life.

# Program Educational Objectives (PEOs) of Information Technology Department

After 3-5 years of graduation, Information Technology Engineering Graduates will be,

**PEO1**:employed as IT professionals, and will be engaged in learning, understanding, and applying new ideas and technologies as the field evolves.

**PEO2**:competent to use knowledge successfully in the diversified sectors of industry, academia, research and work effectively in multidisciplinary environments.

**PEO3**: aware of professional ethics and create a sense of social responsibility in building the nation/society.

# Program Educational Objectives (PEOs) of Computer Engineering Department

After 3-5 years of graduation, Computer Engineering Graduates will be,

**PEO1**:To prepare the learner with a sound foundation in the mathematical, scientific and engineering fundamentals.

**PEO2**: To motivate the learner in the art of self-learning and to use modern tools for solving real life problems.

**PEO3**: To equip the learner with broad education necessary to understand the impact of computer science and engineering in a global and social context.

**PEO4:** To encourage, motivate and prepare the learners for lifelong-learning.

**PEO5**:To inculcate professional and ethical attitude, good leadership qualities and commitment to social responsibilities in the learner's thought process.

Dear Members of CSX,

It was my dream that XIE forms a Computer Society of Xavierites wherein every member gets an opportunity to bring out his / her talents and contribute to XIE family. It has been achieved with concerted efforts of our Dean, Prof. Meena Ugale, who has been giving unconditional support to the talented students of XIE. It is amazing and heartwarming to know that CSX has conducted a number of short term courses contributing to skill development. Bravo. Keep it up. My full support to all the creative works you do.

With best wishes,
Fr. Dr. John Rose, SJ

**Fr. Dr. John Rose S.J.
( Director XIE )**

Dear Members of CSX,

A few years ago, we used to ask students about becoming members of the Computer Society of India. Our students after becoming members did nothing substantially. Then we started telling CSX to become more active at XIE. It has been now greatly achieved and cherished by all the members of CSX. The Computer Society of Xavierites is like a lampstand that sheds light around XIE wherein all others can be enlightened with sound technical knowledge. I encourage all to make use of CSX's activities and become brilliant engineers and take XIE to the next level. I extend my full support to CSX.

Best Wishes.
Dr. Y. D. Venkatesh

**Dr. Y.D. Venkatesh
( Principal XIE )**

Dear Members of CSX,

The idea to form Computer Society of Xavierites is to encourage the students to learn the different technologies and use them in designing different projects. CSX is the platform where students learn, contribute and share their technical knowledge. CSX gives students the experience of being a workshop speaker, organizers, volunteers and attendees. CSX promotes different technical activities such as seminars, guest lectures, workshops, project competitions, etc. I wish more and more students get benefited from CSX activities.
"Learning gives creativity
 Creativity leads to thinking
 Thinking provides knowledge
 Knowledge makes you great."
                    - A.P. J. Abdul Kalam

**Prof. Meena Ugale
(Dean Student's and
Staff Welfare)**

"Change is the only thing that is constant in today's technological world"
Computer Society of Xavierites (CSX) was formed in August 2018. The objective of CSX is to increase technical knowledge among Xavierites. All students are encouraged to join CSX. This forum provides an opportunity to our students to build on existing skills and imbibe new ones. You can be a workshop speaker, organizer or coordinator. This group will increase self-confidence and provide a platform for technical interaction both inside and outside the Institute.It includes activities such as guest lectures, workshops, project exhibitions, competitions and many more. CSX nurtures and moulds the students to enter and compete in the rapidly changing technical arena.

**Prof. Jyotsna More
(CSX Convener)**

**Prof. Kunal Meher**

**(CSX Staff President)**

Computer Society of XAVIERITES (CSX) allows students to exchange views, information and share ideas of current technology among themselves. The main purpose of CSX is to enhance technical knowledge of the students of Xavier Institute of Engineering. It is platform for the students to learn the technologies. Also, the students are also encouraged to deliver workshops as a resource person.

"Anyone who stops learning is old, whether at twenty or eighty."

—Henry Ford

# Committee Members

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**MEENA UGALE**
**DEAN,STUDENTS' AND**
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**MERLYN KOONAMPARAMPATH**
**COMMITTEE MEMBER(SE-IT)**

# Advance Python Workshop

**Date:** 22nd Feb 2020 to 23rd Feb 2020
**Time:** 9am to 4pm
**Resourse Person:** Elton Lemos
**Total no. of attendees:** 64
**Objective:** The objective of the workshop was to give a clear idea of competitive platforms and how to deal with competitive coding questions in general.

**Topics Covered:**
1. Maps, filters, classes, OOPs
2. File systems
3. Dynamic Programming
4. How to tackle complex coding problems
5. Cost function, how to optimize the code to obtain the minimum cost and much more.
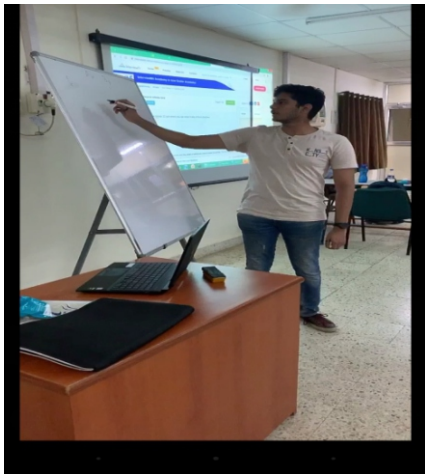
**Description:**
The workshop started at around 9am on 22nd and 23rd Feb 2020 both and was initiated with an introduction on how to tackle basic coding problems. It was further continued slowly by approaching more complex problems and in-depth explanation of each and every problem with alternate ways of solving the problem. Everyone was introduced to a problem and was given a certain amount to solve it. The cruciality and complexity of time was also discussed unfolding the doubts that the attendees had. Several pre schedules breaks were given on both the days to increase the efficiency of all. In brief, the workshop benefitted the students since they learnt new approaches and ways in which one can code. The response shown by the students was overwhelming to the resource persons. They also showed various different coding platforms. The doubts were cleared by them continually in the entire workshop.

# Online COVID Quiz



**Date:** 30th May 2020 to 6th June 2020
**Medium:** Online via google forms
**Total no. of participants:** 241
**Objective:** The quiz was conducted in order to prevent the spread of the disease by creating awareness.

**Conducted by:**

1. Yeshwin Anil
2. Archana Sahoo
3. Shrishti Karkera
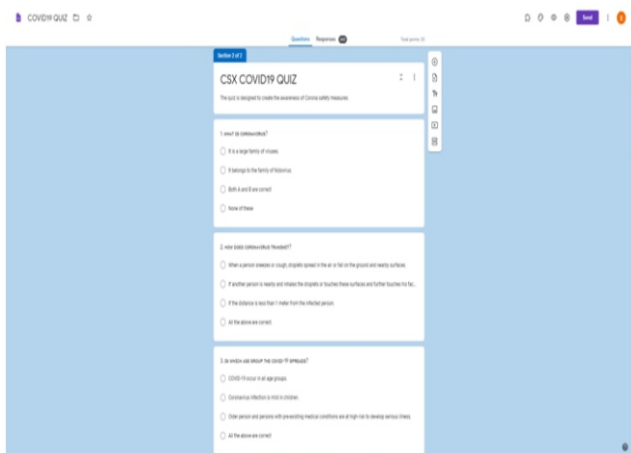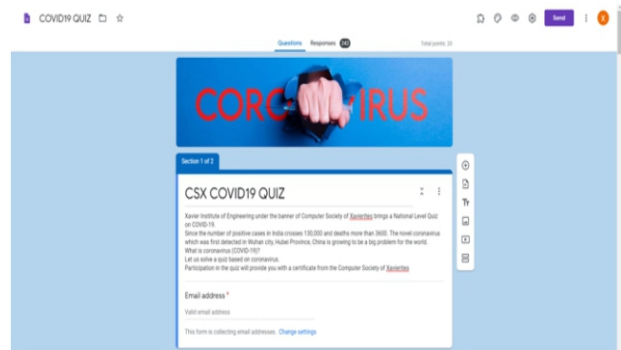


The event was held completely online as per the rules of the lockdown and the quiz which consisted of 20 questions on COVID19 awareness was open for the participants for a period of one week. The candidates scoring more than 60% and above were checked with a certificate which was mailed to their mail IDs. Each candidate had one opportunity to attempt the quiz and after completing the quiz they were provided with the solutions to the questions asked along with their attempt and score.
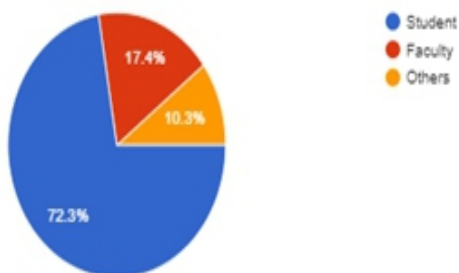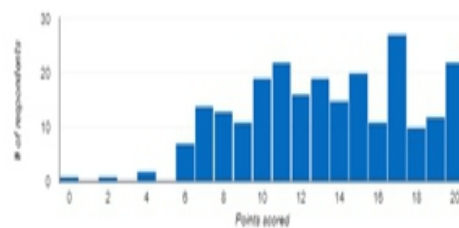
# Online IoT Quiz

**Date:** 2nd June to 13th June 2020
**Medium:** Online via google forms
**Total no. of participants:** 86
**Objective:** The objective for this quiz was to feed the inquisitive minds of students with some good quiz in the lockdown time where everyone got bored staying home.

**Conducted by:**
1. Abhiruchi Patil
2. Srushti Rane
3. Janhvi Mathkar

The quiz helped the students to test their knowledge in the IOT subject and learn some interesting facts. The quiz helped the students build their knowledge as well as have some fun. The Quiz consisted of 20 questions: 10 from basic IOT and 10 questions on Arduino. The Quiz had a time limit of 20 minutes. The students who got 75% marks were given an e-certificates from CSX. Total 96 students registered for the quiz out of which 86 students attempted the quiz. 43 participants cleared the quiz with passing marks of 75%. The students responded positively. A fair number of students participated for the quiz. We got a response from fellow classmates that more of such quizzes should be conducted.

# Online Android Application Development workshop using Kotlin

**Date:** 11th June 2020 to 20th June 2020
**Medium:** Online
**Total no. of participants:** 146

**Objectives:**
1. Learn the core Android app development and Kotlin skills to build real Android apps.
2. Learn how to target current and older versions of Android when writing your apps.
3. Understand how to create Android apps using Kotlin.
4. Be able to apply for Android app development roles.
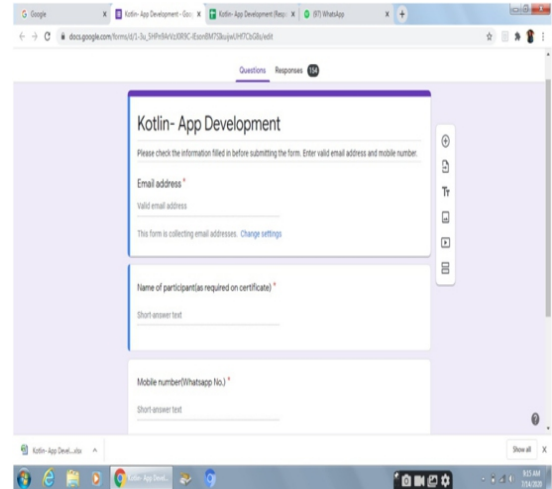
**Conducted by:**
1. Neha Kesarkar
2. Pratik Zinjad

**Topics Covered:**
1. Introduction and course information.
2. Downloading and Installing necessary tools
3. Hello world Application
4. Kotlin tutorials
5. The button counter app
6. The YouTube app.

This workshop was conducted for all students, aiming at introducing students to the basics of App development using Kotlin. By the end of the workshop, students were able to apply all theory basics to practice. 23 students participated and submitted Android Project using Kotlin. (16th Jun to 20th Jun). The workshop was a huge success and the students gave positive feedback about the workshop. Students have learnt the basics of App Development. They can now develop basic applications and test it on Android studio or Android phone. Built two apps demonstrating key aspects of the Android framework.

# Online Geeky Grinders Coding Contest

**Date:** 26th June 2020
**Time:** 6pm to 11:59pm
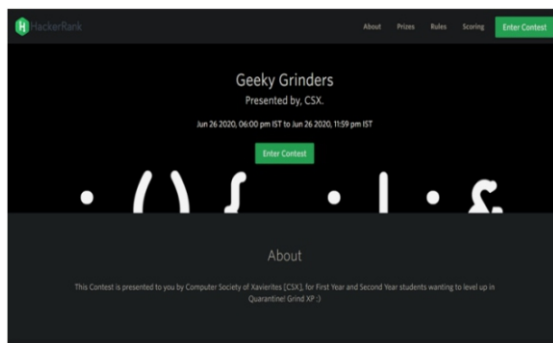**Medium:** Online via Hacker-rank
**Total no. of participants:** 57
**Objective:** With the motive of encouraging students to improve and test their competitive programming skills, a competitive programming contest named 'Geeky Grinders' was conducted on Hacker-Rank.

**Conducted by:**
1. Nikhil Lad
2. Himanshu Gharat

**Description:**

The contest consisted of two sections for FE, SE and for TE respectively where students had to generate an optimized solution for a given problem statement. The participants were graded on the number of test cases passed by the submitted solution and the time taken to submit the solution in case of tie in points. It encouraged students to practice competitive programming and make them aware about various programming platforms which may be useful for future activities including their campus placements.
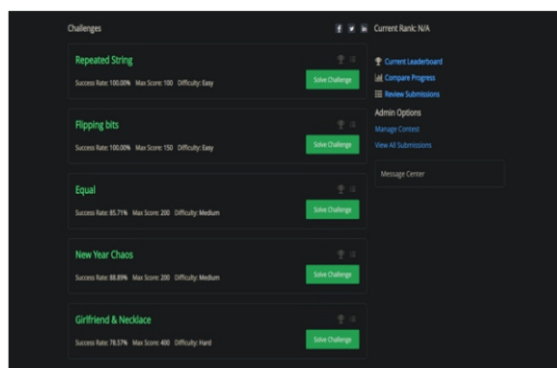
**Results:**

| Rank | Name | Class | Department |
|------|------|-------|------------|
| 1 | Kevin Fernandes | SE | Computer |
| 2 | Joshy Shaji | SE | Computer |
| 3 | Shubham Karande | FE | Computer |

# Online Web Development Quiz

**Date:** 28th June 2020
**Time:** 11:59 am to 1:00pm
**Medium:** Online via google forms
**Total no. of participants:** 76
**Objective:** The objective of this quiz was to evaluate the fundamentals and protocols in Web Development along with a skill test in HTML and CSS.

**Conducted by:**
1. Baljot Singh Kohli
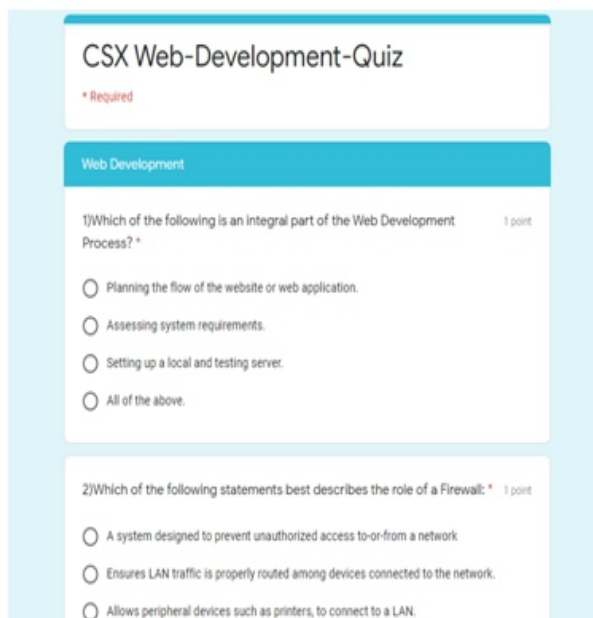2. Bhavin Jain
3. Merlyn Koonamparampath

This quiz was open for all XIE students. The quiz consisted of 20 questions: 7 questions on the basic fundamentals, 7 questions on HTML and 6 questions on CSS. The passing criterion for the quiz was 75%. 24 students successfully achieved this passing criterion while 52 students were not able to do so. These 24 candidates were given an achievement e-certificate from CSX. Others were given e-certificate from CSX. The overall response of this quiz was positive. The response received was fair. Students were able to realize their strengths and weaknesses regarding the topic.s