











KICT NEWSLETTER

ISSUES NO.9/2024

SEPTEMBER 2024

EDITORIAL BOARD MEMBERS

Advisor:

Assoc. Prof. Dr. Norsaremah Salleh

Chief Editor:

Asst. Prof. Dr. Noor Azura Zakaria

Editors:

Asst. Prof. Ts. Dr. Hafizah Mansor Asst. Prof. Ts. Dr. Dini Oktarina Dwi Handayani Asst. Prof. Dr. Elin Eliana Abdul Rahim Asst. Prof. Dr. Atikah Balgis Basri Asst. Prof. Dr. Nor Saadah Md Nor

Designer

Sr. Nurlaili Sanadi

TABLE OF CONTENTS

Article of the month	1
Islamisation Tips	4
Achievements and Recognitions	5
Activity	7
Talk/Seminar	16
Publications	17
Copyright	18

Motivational Quote

Abu Hurairah reported The Prophet Muhammad (peace be upon him) as saying: "The worst of the people is a man who is double-faced; he present one face to some and another to others.

(Sunan Abi Daud)



Navigating Security and Privacy Through the Eyes of Developers and Consumers (Part 2)

To better understand these two concepts: privacy and security, we must first understand how they are applied and used. Summarising from Part 1 (refer to KICT Newsletter issues 8/2024: https://l1nq.com/KICTNewsletterIssue8), security and privacy are two distinct concepts, although they are closely related and often discussed together. Understanding the differences and interdependencies between them is crucial for consumers and developers. We now know that security and privacy come into the picture when data and information are there to be protected.

Why is data collected?

As consumers, we are usually not concerned about the data being collected. Our objective is mainly to get access to the services or the products. The collected data by the business owners are used for multiple purposes including customer insights and personalisation, marketing and sales, product and service development, competitive analysis, strategic decision-making, and many other purposes. With the advancement of artificial intelligence, data is wealth. As developers, we know that this information and data are going to be used by different parties and stakeholders. We need to know the overall architecture of the solution, and how to protect the data in terms of security and privacy. Consumers, on the other hand, must become more aware and vigilant about how their data is used and shared with various parties.

What are the types of data collected?

For the purposes mentioned above, different types of data are being collected. The data include information on demographics, behaviours, transactions, customer feedback, operations, finance, lifestyle, interest and many other related data. Among these data is Personally Identifiable Information (PII). PII is any information connected to a specific individual that can be used to uncover that individual's identity, such as our myKad number, full name, email address or phone number.

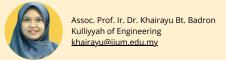
Relating the data to the goals of security and privacy

Security goals include confidentiality, integrity, availability, non-repudiation, authentication, authorisation and accountability. On the other hand, privacy goals include anonymity/pseudonymity, minimisation, purpose limitation, consent, transparency, right to access and rectify, data portability, and right to be forgotten. Developers need to identify the correct security and privacy requirements depending on the type of data collected, and how they are used. Each security and privacy requirement has its own purpose and properties.

Understanding the different goals and matching them to the application/solution is crucial. Let's look at an example of the Touch 'N Go e-wallet application. This application is a mobile payment application used for payments and fund transfers. From the consumers' perspective, it is all about usability (availability) and assurance that the data is secured - the balance of the wallet is accurate (integrity). The developers on the other hand must focus on making sure that the security goals are properly implemented and that the application is robust. In terms of privacy, consumers want control and transparency over their data, while developers need to ensure compliance with legal requirements and build systems that respect user privacy. Based on these requirements and how the data is used, the security features include PIN and biometric authentication, and transaction limits, while privacy features include privacy settings on how data is collected and shared.

In conclusion, understanding the goals of security and privacy is crucial for both consumers and developers. Consumers want assurance that their data is protected and managed transparently. However, privacy awareness remains a challenge. Developers must meet these expectations by implementing strong security measures and adhering to privacy regulations. It is crucial to balance security and privacy to create solutions that protect user data while building trust and reliability in our data-driven world.







JAVA ODYSSEY MOBILITY PROGRAMME 2024 PRESIDENT UNIVERSITY, BEKASI, INDONESIA



Introduction

JAVA ODYSSEY MOBILITY PROGRAM was organized from 27th July 2024 to 4th August 2024. The program is part of IIUM Mobility initiatives where 22 staff and students from KICT, KENMS and KOE visited 6 Universities in Indonesia including East to West Java. After a 2 hours journey from Kuala Lumpur International Airport, we arrived at Soekarno Hatta International Airport at 2:30 pm. We were fetched by a bus at the airport and our first destination was the President University, located at Bekasi, Cikarang Indonesia.

President University

Once we arrived, we received a very warm welcome at the University's lobby by Dr Rila, the Dean of Faculty of Computing, Dr Cut Tifa, Head of Information Systems, who is also our proud Alumni of IIUM and several lecturers from the Faculty of Computing. The University has 6 faculties Including Medicine, Engineering, Law, Humanities, Business and Computing for Undergraduate Programs and 3 Master Programs which are Master in Informatics (MIT), Master in Management Technology (MMTEK) and Master in Law. They also provide a Professional program for Evening Classes specifically designed to focus on students' ability to integrate and synergize knowledge and experience gained at work and create outcomes that can improve and enrich their skills and knowledge in their field of expertise. With the theme of "Where Tomorrow's Leaders Come Together" President University encouraged its students to become leaders in their specialization as embarked by the name of its University President.

Facilities

We were informed that President University has a Fabrication Laboratory (Fablab) which is a collaborative project with PT Jababeka Infrastruktur. Fablab Jababeka was created to inspire students, community, startups and industries to collaborate to build an Industry 4.0 Ecosystem in industrial areas.

They also took us on a tour of their university campus facilities. The facilities include the Charles Himawan Auditorium, basketball court, canteen, Adam Kurniawan Library, President Executive Club, swimming pool, President University Convention Center, and tennis court. The campus also offers student housing at New Beverly Hills, the Student Boarding House, and Elvis Tower, with options for both single and shared rooms. We also were given the opportunity to visit and to play golf at Jababeka Golf, one of the facilities provided by President University. In brief, it was an exciting experience to learn about President University, which uses English as its medium of instruction and is one of the best private universities in Indonesia located in the largest industrial area in Southeast Asia, Jababeka.











Islamisation











WEEKLY IOHK TIPS

MORAL EDUCATION

The role of the lecturer during the teaching of the material is to:

- ☐ Utilize study time effectively.
- ☐ Judge students fairly.
- Provide constructive feedback to support student growth.
- Acknowledge students' efforts and abilities.

WEEKLY IOHK TIPS

USEFUL KNOWLEDGE

The role of the lecturer during the teaching of the material is to:

- *Apply knowledge for the benefit of students and society.
- Encourage the dissemination of knowledge to others.
- The concept of Zakat of Knowledge is giving back to society through educating others.

WEEKLY IOHK TIPS

WISDOM AND REASONS IN EDUCATION

The role of the lecturer during the teaching of the material is to:

- Encouraging contemplation and searching for the underlying wisdom and reasons in the subject matter.
- Apply the Critical Thinking and analysis in understanding the subject.
- Use of logical reasoning and wisdom in the study and interpretation of theories and laws.

WEEKLY IOHK TIPS

ITQAN IN EDUCATION

The role of the lecturer during the teaching of the material is to:

- Embody Itqan by thoroughly preparing and mastering the material before teaching, ensuring the highest level of accuracy and understanding.
- Apply Itqan in the organization and structure of the content, making sure it is logically sequenced and easy for students to follow and absorb.

Achievements & Recognitions



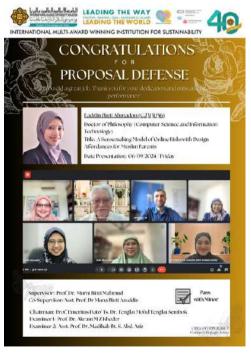
Congratulations

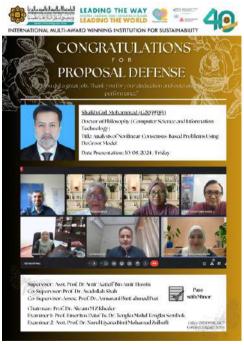
for Completing Computing Project/Viva Voce/Proposal Defense













Achievements & Recognitions

Congratulations

Gold Award in Digital Innovation

Creativepreneur (DICE) 2.0



Congratulations
Gold Award in International
Industrial Revolution 4.0 Exposition
2024.



Welcome to KICT







Nurul Nuha Abdul Molok Department of Information Systems nurulnuha@iium.edu.my

BACHELOR OF INFORMATION TECHNOLOGY INDUSTRIAL ATTACHMENT PROGRAM (IAP) VISIT AT NEXAGATE SDN. BHD.

On the 22nd of March 2024, I had the privilege of examining three Bachelor of Information Technology (BIT) students who are undergoing the Industrial Attachment Program (IAP) at Nexagate Sdn. Bhd., KL Eco City, Jalan Bangsar, Kuala Lumpur.

The students are as follows:

- 1. Nur Alya Nadirah Binti Mohd Fauzi (1911914)
- 2. Siti Hasanah Binti Mazlan (1918934)
- 3. Nur Syazwani Binti Jamaludin (1929958)

All three BIT students are placed in the Security Risk and Compliance Division, a division that provides consultancy services for the ISO/IEC 27001 Information Security Management Systems (ISMS), Central Bank of Malaysia's Risk Management in IT (RMIT), Data Loss Prevention and Business Continuity. The BIT IAP students are tasked with assisting Nexagate consultants on ISMS certification projects for Malaysian government agencies, telecommunication companies, financial institutions, startups, etc.

As a lecturer who has taught them Management of Information Security and Risk Management, I felt so proud of them when their company supervisors mentioned that their ability and diligence exceeded their expectations. The Chief of Security Risk Consulting, Mr. Benyazwar Mohmd even asked us to supply more interns in the future since he was so impressed with our interns and graduates who have become Nexagate employees for three years. Nexagate has employed five KICT students so far, and two are currently graduate trainees after completing their internship.

As their lecturer who taught them Management of Information Security and Risk Management, I felt immense pride when their company supervisors acknowledged that our students' abilities and dedication surpassed their expectations. Mr. Benyazwar Mohmd, the Chief of Security Risk Consulting, was so impressed with our interns and graduates who now work at Nexagate that he even requested more interns from us in the future. He applauded KICT IIUM for designing our IAP to be one semester long (approximately 6 months) and conducted during the final semester of the IAP students. This allows opportunity for Nexagate to employ the highflyers at the end of the internship period. Furthermore, he also mentioned that cybersecurity governance is much sought after by the security industry.

He applauded KICT, IIUM for structuring our IAP to span one semester, approximately six months, and scheduled during the final semester for IAP students, unlike other local higher education institutions. This arrangement provides an opportunity for Nexagate to hire exceptional interns as permanent employees after their internship period. Finally, he highlighted the strong demand for cybersecurity governance in the security industry, and KICT's ability to produce graduates in this field is commendable.

Up until now, Nexagate has employed five KICT students as permanent staff members. Additionally, two KICT graduates are currently participating as graduate trainees after successfully completing their internships, and six BIT students are currently undergoing IAP at Nexagate.



Chief of Security Risk Consulting, Mr. Benyazwar Mohmd (4th from right), company supervisors, and BIT IAP students after the students' presentation



BIT IAP students and BIT alumni working at Nexagate. (1 BCS and 1 BIT alumni are not in picture). A total of 12 KICT alumni out of 100 total number of employees

3rd International Conference on Creative Communication and Innovative Technology (ICCIT) 2024 & International Interdisciplinary Conference on Research & Opportunities (IICRO)

















































ISO 9001:2015 & ISO 37001:2016 Internal Audit 2024

14th - 15th August 2024















Activity KICT Ibadah Camp 2024



KICT Takrim Day 2024



KICT Takrim Day 2024





KICT Gotong - Royong No.3/2024 & Teambuilding





















Talk/Seminar



August



September









Publications (Submission in TRep for August 2024)

- 1.Low, Wai Sing and Chow, Li Sze and Solihin, Mahmud Iwan and Handayani, Dini Oktarina Dwi (2024) <u>Diagnosis of COVID-19 on chest X-ray (CXR) images using CNN with transfer learning and integrated stacking ensemble learning.</u> In: 4th Innovative Manufacturing, Mechatronics & Materials Forum 2023 (iM3F 2023), 7th 8th August 2023, Pekan, Pahang, Malaysia.
- 2. Mohammed, Siti Asma and Ahmad Nasaruddin, Nor Asyikin and Ruzaidi, Nur Airin Faqihah (2024) <u>NavigateMe: an inbuilding navigation application</u>. International Journal on Perceptive and Cognitive Computing, 10 (2). pp. 17-22. E-ISSN 2462-229X
- 3. Mohd Nasharuddin, Muhammad Zafran Syahmi and Abubakar, Adamu (2024) <u>Analyzing threat level of the backdoor attack method for an organization's operation.</u> International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 51-59. E-ISSN e-ISSN: 2462-229X
- 4.S., Suharsiwi and Solehudin, Rd. Heri and Budiarti, Erna and Zakaria, Noor Azura and Rohmah, Siti (2024) <u>Maritirukan Aku Bisa: android application for learning social skills of children with social emotional barriers.</u> Research and Development in Education (RaDEn), 4 (1). pp. 76-84. ISSN 2809-0284 E-ISSN 2809-3216
- 5. Seh Wali, Siti Syara Aiman and Nordin, Azlin (2024) <u>Design and development of a requirements conformance tool (RCT).</u>
 International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 74-79. E-ISSN 2462-229X
- 6. Wan Ibrahim, Wan Aiman and Ahmad Khalil, Ahmad Nazrin and Abubakar, Adamu (2024) <u>Design and development of cybersecurity suite.</u> International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 104-112. E-ISSN 2462-229X
- 7. Zakaria, Noor Azura and Tajuddin, Nur Syazwana and Mohd Supian, Nur Faraayuni Sufea (2024) <u>AutistiCare: a one-stop centre for parents with Autism Spectrum Disorder children in Perlis.</u> International Journal on Perceptive and Cognitive Computing (IJPCC), 10 (2). pp. 113-117. E-ISSN 2462-229X
- 8. Che Azemin, Mohd Zulfaezal and Mohd Tamrin, Mohd Izzuddin and Yusof @ Alias, Firdaus and Salam, Adzura (2024) <u>High-resolution retinal vascular imaging and analysis system.</u> International Journal of Allied Health Sciences, 8 (Suppl. 3). p. 46. ISSN N/A E-ISSN 2600-8491
- 9. Mahbub, Hafsa and Tarnim Ranak, Lazeena and Islam, Muntaha and Ahmad Dahlan, Abdul Rahman (2024) <u>A conceptual ecothrift secondhand business model: promotes circular economy and wealth creation, and nurturing B40 thrift-preneurs.</u> Journal of Information Systems and Digital Technologies, 6 (1). pp. 1-23. E-ISSN 2682-8790
- 10.Md Sharizam, Muhammad Abdul Hayei Karbaschi and Norman, Muhammad Farhan Hanif and Rostam, Muhamad Ashraf and Ab Hamid, Mohd Ramadan and Abu Seman, Muhamad Sadry and Romli, Rahiwan Nazar and Mohd Shukri, Nor Azwani (2024) <u>Development & evaluation of an animated video on healthy weight gain and energy intake during pregnancy for stunting prevention.</u> International Journal of Allied Health Sciences, 8 (2). pp. 3067-3078. E-ISSN 2600-8491
- 11. Mohamed Sofiadin, Aidrina (2024) Threats of Extended Reality (XR) applications to teaching and learning: instructors' perspectives. In: 25th International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2024), 4th 7th June 2024, Perth, Australia.
- 12. Mohd Aini, Suraya Nabilah and Roslam, Siti Nur Idah and Nazuki, Nur Nadiah and Mohamad Helmi, Nur Fathnin Ilhami and Ahmad Dahlan, Abdul Rahman (2024) <u>'Sadaqahnow' project business model: trusted fundraising mobile application for enhancing the well-being of local & global communities.</u> Journal of Information Systems and Digital Technologies, 6 (1). pp. 54-73. E-ISSN 2682-8790
- 13. Safuan, Nurfadzlina and Sugafta, Rafa Elean and Ros Liza, Nadirah and Ahmad Dahlan, Abdul Rahman (2024) <u>A conceptual business model for housecleaning master debu: eco-friendly enhancement, sertu services, B40 clean-prenuer nurturing and community places care.</u> Journal of Information Systems and Digital Technologies, 6 (1). pp. 81-104. E-ISSN 2682-8790
- 14. Shompa, Zohora Azmin and Mohd Mohadis, Hazwani (2024) <u>Designing persuasive sustainable waste management application for urban community in Malaysia: understanding end-user perspectives.</u> Journal of Advanced Research in Applied Sciences and Engineering Technology, 50 (1). pp. 47-65. E-ISSN 2462-1943
- 15. Zainuddin, Siti Nur Hidayah and Mohd Marzuki, Aida Najihah and Awang, Mazidah Aiman and Mohd Zaki, Aina Zahira and Ahmad Dahlan, Abdul Rahman (2024) <u>A conceptual thrift-tee business model: fostering a sustainable and affordable online bazaar for B40 community while nurturing B40 thrift-preneurs.</u> Journal of Information Systems and Digital Technologies, 6 (1). pp. 105-127. E-ISSN 2682-8790

Copyright

Title:

Academic Accreditation management system

Inventor and co-inventor:

1. Asst. Prof. Dr. Aidrina Binti Mohamed Sofiadin

Title:

Nusantara: Gamification for Gender Dysphoria Rehabilitation Plan

Inventor and co-inventor:

- 1. Asst. Prof. Dr. Suhaila Binti Samsuri
- 2. Prof. Dr. Samsul Bin Draman
- 3. Muhammad Firdaus Bin Shahrum
- 4. Faishal Agil Bin Mohd Arief

Title:

Central Bank Backed Digital Currencies Datasets the Factor CBDC to be Introduce

Inventor and co-inventor:

- 1. Asst. Prof. Dr. Norzariyah Binti Yahya
- 2. Assoc. Prof. Ts. Dr. Normi Sham Bt Awang Abu Bakar

Title:

AutistiCare: A Digital Intervention Platform for Autism Spectrum Disorder Management

Inventor and co-inventor:

- 1. Asst. Prof. Dr. Noor Azura Binti Zakaria
- 2. Asst. Prof. Dr. Asma Binti Mohammed
- 3. Assoc. Prof. Dr. Aishah Hanim Binti Abd Karim
- 4. Asst. Prof. Dr. Muna Azuddin
- 5. Nur Syazwana Tajuddin
- 6. Nur Faraayuni Sufea Mohd Supian

Title:

Investigating the Relationship between Social Media Usage Duration and Academic Success Among Muslim Students Using Data Science Processes

Inventor and co-inventor:

- 1. Asst. Prof. Dr. Raini Binti Hassan
- 2. Ahmed Ramadhan Ali Hassan

Title:

Calibrating Hand Gesture Recognition for Stroke Rehabilitation Internet-of-Things (RIOT) using MediaPipe in Smart Healthcare Systems

Inventor and co-inventor:

- 1. Asst. Prof. Dr. Ts. Ahmad Anwar Bin Zainuddin
- 2. Nurul Hanis Mohd Dhuzuki
- 3. Asst. Prof. Dr. Asmarani Ahmad Puzi