**INTI International College Penang School of Engineering and Technology**

**3+0 Bachelor of Science (Hons) in Computer Science, in collaboration with Coventry University, UK**

**3+0 Bachelor of Science (Hons) in Computing, in collaboration with Coventry University, UK**

**Coursework cover sheet**

**Section A - To be completed by the student**

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| Full Name: Chan Kok Han | |
| CU Student ID Number: P21013717 | |
| Semester: 3 | |
| Session:  **April 2022** | |
| Lecturer:  **Nadhrah Abdul Hadi (nadhrah.abdulhadi@newinti.edu.my)** | |
| Module Code and Title:  **4067CEM Software Design** | |
| Assignment No. / Title:  **Continuous Assessment** | % of Module Mark:  **50** |
| Hand out Date:  **22nd April 2022** | Due Date:  **Task 1: 13 May 2022, by 11.59pm**  **Task 2: 1 July 2022, by 11.59pm**  **Task 3: 17 June 2022, by 11.59pm.**  **Task 4: 17 June 2022, by 11.59pm.**  **Task 5: 17 June 2022, by 11.59pm.** |
| Penalties: No late work will be accepted. If you are unable to submit coursework on time due to extenuating circumstances, you may be eligible for an extension. Please consult the lecturer. | |
| Declaration: I/we the undersigned confirm that I/we have read and agree to abide by the University regulations on plagiarism and cheating and Faculty coursework policies and procedures. I/we confirm that this piece of work is my/our own. I/we consent to appropriate storage of our work for plagiarism checking.  Signature(s): Han | |

**Section B - To be completed by the module leader**

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| Intended learning outcomes assessed by this work:  1. Understand and apply appropriate concepts, tools and techniques to each stage of the software development  2. Understand and apply design patterns to software components in developing new software  3. Demonstrate an understanding of project planning and working to agreed deadlines, along with professional, interpersonal skills and effective communication required for software production  5. Demonstrate an awareness of, and ability to apply, social, professional, legal and ethical standards as documented in relevant laws and professional codes of conduct such as that of the Malaysian National Computer Confederation. | | |
| Marking scheme | Max | Mark |
| 1. User Story Mapping 2. Setting up a GitHub Repository 3. Creating a Class diagram and design pattern selection 4. Creating a Prototype User Interface and Usability Testing 5. Discuss the ethical issue related to the software | 20  10  30  20  20 |  |
| Total | 100 |  |

# The ethical issue related to the software

# Users can visit the website of the College Events System for Students developed for college and students. Laws exist to protect this system from attackers and scammers. However, there are open issues concerning privacy, intellectual property rights, and effects on the society.

**1. Privacy concerns**

This system uses cookies created by the website to collect users' and visitors' information such as user visit duration, pages, user views, email notifications, names, email addresses, contact numbers, and passwords. It can be used to improve the experience of student and identify eligible users.

Information can be gathered using signups and registration. College can identify user accounts and aggregate them based on their history for administrative activity. Users may use personal information when navigating the system for authenticity. The data must be passed to a third party. As such, the site may disseminate, collect and transmit to third parties, such as colleges, and share user data with partners.

Social media-wise, the website has a clickable Facebook icon, and students can use social media because they like the navigability and appealing interface and can feel valued at the event, communicate with friends, and learn more materials.

Confidentiality is to prevent and process confidential and non-confidential information and the privacy policy complies with the rights of users and colleges. It also helps to ensure personal privacy, freedom of data processing, and fair and lawful data processing. Personal data is only used for positive reasons. The data must be true, complete, and up-to-date, and not stored for longer than necessary.

The PDPA (Personal Data Protection Act 2010) was enacted in Malaysia on 15 November 2013 to protect user data related to the use of commercial transactions. The act applies to individuals and organisations that process personal data for commercial purposes. While operating the system, users and visitors should be transparent about their actions. This system implements the principles of disclosure, security, retention, and access. The disclosure principle is not to disclose user details without the user's consent. The security principle takes steps to protect your details from illegal, misuse, or accidental disclosure. The retention principle is that we may not store or process personal information for long time unless necessary. The Access principle allows users to access and edit their data.

**2. Intellectual property rights**

These are laws that give creators the right to protect their creations for a specific time. The software design for the website is a decorated prototype under the literary works of Copyright Law. Malaysia’s intellectual property system is managed by the MyIPO (Malaysia Intellectual Property Corporation) and includes patents, trademarks, industrial designs, copyrights, geographical indications, and integrated circuit layout designs.

For sound recordings and computer-generated works, one can know someone copied the website, lent the work to the public, made website adaptations, and stole the website ideas. These rights protect the original website work like image, design, interface, and so on, and these protect and preserve the features and functions of the website capabilities.

For example, a domain name is registered with the domain names .com, .org, or .gov, and there is an online mailing address associated with the name. In this way, we can track the location of the user’s website. These domains require the software to be available on the website for users to view.

Another example is a trademark used by businesses to protect the visual image of a brand. If a brand has a trusted brand and don’t have to worry about a company that doesn’t have a trademark, customers can feel safe.

In the case of software, it is not named because the words and images are identical trademarks, but the name and logo of the software may be included. The design should be unique and personal and some features should work beyond the graphics to give the user a sense of accomplishments. Functional requirements for the definition of intellectual property and computer programmes in section 172(n) of intellectual property.

**3. Effects on the society**

Advances in information technology and web design are extremely important in today’s society. These provide insight for people, organisations, individuals, and society. However, it does raise some issues regarding social and legal issues related to the protection of privacy, intellectual property rights, and social implications. A negative impact can harm society and organisations if people misuse the concept of information technology.

More important information needs to be protected and stored in order to gain the trust of users, and computer’s ethics must be known and used in the website’s systems. The system adopts the Malaysian National Computer Confederation (MNCC) code of ethics, which has six principles: Integrity, Confidentiality, Impartiality, Responsibility, Competence and Professionalism, and Relationship to ensure community and society trust and confidence.

Implemented the ACM/IEEE-CS Software Engineering code to make software analysis, specification, design, development, testing, and maintenance a beneficial and respected profession to ensure a positive effect on society. For example, act in the best interest of our customers, regardless of the public interest, to ensure that our products and related changes meet the highest professional standards and the integrity of professional judgment. Ensure that an ethical approach to software development and maintenance promotes independence and enhances professional integrity and reputation for the public good.

College Events System for Students is a timely one-stop system that helps colleges to manage and organise events well and professionally. The college can use the system to plan, manage and produce the sole objective of delivering social impact for students effectively and efficiently. Colleges can promote events through social media, and students can easily search, register, and attend events, and make a positive and meaningful impact in their lives by participating in them.

In addition, the system helps colleges professionally plan, implement, and report events; provide all the information in one place, and ensure business success. The college can keep track of all organised events, save time, save costs, increase engagement, improve data collection, and better connect with students. College makes students aware of campus events so that students get to know the date and relevant information of the events. Students can schedule and pre-register for the event.