**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: SATISH A/L PRAKASHAM | |
| CU Student ID Number: P22014510 | |
| Semester: 1 | |
| Session:  **August 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:  **6th September 2022** | Due Date:  **Task 1: 30 September 2022, by 11.59pm.**  **Task 2: 18 November 2022, by 11.59pm**  **Task 3: 18 November 2022, by 11.59pm.**  **Task 4: 18 November 2022, by 11.59pm.**  **Task 5: 18 November 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): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

**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 |  |

# **Task 5 – Discuss the ethical issue related to the software (20 marks)**

Discuss and do a critical analysis of your software in this areas, privacy concerns, intellectual property rights and effects on the society.

Output – A report in Word format, uploaded to GitHub. Please include the coverpage (both Section A and Section B)

Due – Week 13 of the semester. 18 November 2022, by 11.59pm

***Task 5***

***Copyright Act 1997***

Since the Internet has become so popular and technology has advanced so quickly in the past ten years, anyone can now access practically anything, including other people's personal information. The Internet is now used for much more than just connecting people and doing research but it has evolved into a platform where many people may store information and promote themselves and their businesses.

The Copyright Act is the first act implemented under this system. This legislation gives people the ability to legally protect their original ideas or creative works, sometimes referred to as their intellectual property. For instance, if a person discovers that one of their works, such as a work of art or an article, is being duplicated, they may file a lawsuit since they are the rightful owner of the copyright to the work or article. If the creator takes legal action, they may be granted damages for any improper use of their work. The Copyright Act safeguards numerous types of works, including movies, computer programme, and many more.

When the user is creating an in the Student Buddy Application, there is a terms and condition page where the users can view the terms and condition applied in the system. This proves that the Student Buddy Application is a copyrighted application. Terms and condition are included in the application to protect the user and the application itself. If there is no need to protect the users of the application and the application, there will be no need to copyright the application in the first place. Upon making the application copyrighted, INTI Penang has all the rights in the system. The users of the application will be protected under the given terms and condition.

If the application is not registered by INTI for copyright claims, there could be a possibility where the design and interface of the application copied and be sold to a third party. This could make INTI Penang and the application developers lose their rights for the application. If the third party registers for copyright claims, they could potentially sue INTI Penang for using the application.

***Personal Data Protection ACT 2010***

Personal Data Protection Act is the second act that will be implemented in this system. Personal Data Protection Act can be also known as PDPA. The PDPA guards against the misuse of personal information. Any information gathered or processed in conjunction with a business transaction by any automated equipment, such as an application that can identify a person, is referred to as personal data. The information mentioned above includes names, addresses, credit card or passport numbers, email addresses, phone numbers, and banking information. Without the data subject's consent, data users are not permitted to acquire or handle that person's personal information under the PDPA. Additionally, the Act forbids data users from providing or exposing their data to any third party without the authorization of the data subjects. Users of data must tell data subjects about the reason for data collection, the types of third parties who may have access to the data, and the options available to them regarding the use of the data.

Whenever a new user registers for the Student Buddy Application. Their details will be stored in the database. The details will be protected under the Personal Data Protection ACT 2010. The Student Buddy Application will be a authorized application by INTI Penang. Hence, the data given by user will be secure.

If the application is not authorized, the data given by the users will be unsecured and there could be a potential risk of data leakage. When there is a leakage of data of the users, the data of the users can fall into wrong hands where the data could be sold which could potentially end in a scam.

***Identity Theft and Assumption Deterrence ACT***

Identity theft and assumption deterrence act will be the third act that will be implemented in this system. Identity theft and identity fraud are phrases used to describe any forms of criminal activity in which a person unlawfully obtains and makes use of another person's personal information through fraud or deception. This could be done for various reasoning such as for self benefits or even economic gains.

There is a verification process in this system that can help to prevent identity theft. The verification process will be done when the user registers their email address in the application. The email that will be used to create a account in this application will be a student email. Whereas the student email is a verified email for a student. Hence there will be only one student who has access to the specific email address. An account can be created by using just one email address and it requires a verification. So there is minimal chances of a duplicate account unless the email address itself is stolen. If the thief decides to create a duplicate account that is already registered in the application. It will show that the email is already been used. If the thief decides to create a new account under a new student email. It will require a verification.

If the identity of a user is stolen. The identity can be used for personal gains. Whereby the thief can act as the person the identity stole from and can potentially fool people for their gains. This can be for economic gains where as the thief asks for money from others pretending as the user.

***Ethical implementation***

Ethics is one of the main thing that need to be implemented in the Student Buddy Application. Ethics are based on cultural mores that is set by the society for the people to follow. Ethics are also relatively fixed moral values.

As a well interpreted system, ethics are included in the terms and condition in this application. Such as, the user can't do anything unlawful, misleading, or

fraudulent or for an illegal or unauthorized. For example, the user should not use this application as a platform where the user can share inappropriate pictures. This conduct can be legal if the person shares with a concern but its morally wrong in the society. The ethics should be implemented in the chat room where the users will be chatting with another user. Ethics such as respecting boundaries, using appropriate words when chatting and being respectful.

If such ethics are not implemented, there would be a bad effect in the society. Whereas being disrespectful and being rude is a norm. Such things should not be a norm in the society. The college environment will be healthy and happy if everyone follow the moral ethics. Through Student Buddy Application, the students are not only able to find buddies for the students to be friends with but also to learn valuable knowledge from one another.