Day: _____ Date: _____

Name: SHEHR YAR KHAN
Roll No: 205

Subject: Professional Practice
Submit to: Sir Hamza

Q1 Discuss the importance of ethics in all computing profession...?

The importance of Ethics in the computing profession is given as. The computing profession are very important as technology which is impacting society, businesses, and invidual exponentially.
Computing professional are the people who creale and manage system that collect, process and communicate sensitive data. These professional are required to adhere to the principle of integrity, fairness and accontibility. If the

Day: _____ Date: _____

concept of ethics is neglect the technologies progress then may destructive, cause exploits or lead to the misuse of sensitive data.
For example, data privacy is main concern of ethics. Computing professional should defend the user data against breaches or unauthorized access, by all means, complying with regulation like GDPR

1. Privacy vs Profit

A social media company, for example maybe under to make their revenue higher by sharing user data with advertisment. The overarching question of how to bring this balance into beings is an ethical issue in most, if not all organization.

2. Bias in AI Algorithm

Engineer involved

Day: Date:

in staffing may find artificial intelligence gather or racial biases in their program Ethical evaluation is needed in order to make decision about deploying such program.

3. Harmful Software:

Software engineer may be required to design program as the instrument of dictatorship for authorized regimes to monitor and control the public and cause harm to citizen

Q2 Compare and contrast deontological and consequentialist approaches to ethical decision...?

The Deontological school of thought, for its part, chooses to concentrate on the correct course towards the formulation of principles or the following of the rules. In this case, a

Day _____ Date: _____

computing technology which involve the kind of action that can be interpreted as violation of invidual privacy or the implementations of illegal policies remain unethical. Software developer who might be able to generate a system for for an authoriation regime but whose project would also bring financial gain to the compang if the privacy right of the people are violated at the same time may be one who reject this idea.

Consequentialism, however, says that the best action is the one with the best outcome. It is the duty to produce the highest good or to prevent the highest harm. A tech student, for instance, might defend the utilization of a biased AI algorithm just because it allow quick recurimont decisions

Day: Date:

Comparison:

-> Deontology is based on the rule which is duty focused while Consequentialism is the most important issue which is the well being of the people.

-> Deontology has benefit of being fair while consequentialism is the driving force of innovation and adaptability

-> An integrated strategy of these two framework would facilitate ethical decision in computing

Q3 Describe the typical structure of software house and the role within ... ?

Typical Structure of Software House

usually software production structure can be always subdivided into several guide, which even though they have specific tasks.

1. Project manager:

while handling

Day: _____ Date: _____

the entire project, the PM make sure that it is finished before the due data, costs are kept within limits, and the product is according to the customer' requirement.

2. Software Developer/Engineer:

These engineer who creat the software actually write the code. They might be great in front-end (user interface (UI) / user experience UX developer) (design or back-end (server side process) but it is also possible they are full-stack developers

3. UI/UX Designers:

They, being in charge of creating the UI and also the UX are therefore responsible for creating the software.

4. Quality Assurance (QA) Testers:

The quality assurance testers check out if the software actually work properly, by their test,

Day: _____ Date: _____

They point out the bug and also ensure that the product is up to snuff.

5. System Administrators

These guys control the hardware, upload them and follow the CI/CD proccdures.

Interaction during a project

Various roles in a software house work flawlessly together throughout the process. The PM handles communication and sets the main goal. Developers pen the code, while UI/UX work with them to make it user friendly.

Q.4 How do finance and accounting principles apply to IT organization?

Application of Finance & Accounting Principles in a Company

Finanance and accounting principles are the main ingredients of the operating of an organization

Day: Date:

1. Budgeting:

Budgeting is a process of planning to distribute the financial resources to various departments, projects, or activities, within the organization. The finance team prepare budget to see that the funds are properly distributed and spent within the limit of the company's financial capacity.

2. Cost Estimation

Cost estimation is an integral part of financial planning and is employed to predict the costs that would be involved in the various activities, projects or products. It will be the estimation of cost that will be incurred to carry out the different business operation, projects or products.

Day: _____ Date: _____

3. Financial Reporting:

Financial reporting involve making statement such as income statements, balance sheet and cash flow statement to monitor and demonstrate the organization's financial position. These reports are the basis for the internal management of the company and also for meeting the statuory and regulatory requirements. The correct financial statement submitted to the management are instrumental in determining the company's profitability, liquidity and overall financial situation.

Q 5 Discuss the key component of computer contracts, including licensing agreement and service level agreements (SLAs)?

Licenses:

A software licenses is

Day: Date:

a formal agreement that is signed between the software developer (or company) and the user (invidual or organization). It is an Agreement of the software that the software is used under to the users. The software used condition are strictly explained, and the user right's to run, use the software in an own way, or modify/transfer the software are described.

Agreements:

software agreement are the main tool that determines the term and condition of the software use, purchase, or development in contracts between parties. These agreements are specific to the nature of the project.

i. End-User License Agreements:

Define the usage framework that the end

Day: _____ Date: _____

user uses the software under.

ii) Development Agreement.

Lists the duties and function of the parties that create custome software, such as delevering, time. and payment products.

iii) Maintenance Agreement:

Describe the procedure for current softwar suppor, updates etc.

iv) Service-Level Agrement

It is a contract service provider and custome use to ensure that the servic level expected is delivering during the contract term

Main feature of SLA include:

i) Service description:

Elucidate the service offered (e.g the maximum possible uptime, support etc)

Day: _____ Date: _____

ii. Performence Matric:

specifically identifies the performence outcome that the service provider has to achieve, like the time of response

iii) Penelities:

List the penelities or the remedies (service credit or discount) in case the provider of service fails to meet upon service level.

iv) Support & Maintanence:

List the support responses time and procedure for problem in addition to the availibility of support.

The combination of these forms the protocol through which the provider and the customer mutually agree to the clear specifications