

Professional Practices Major Assignment

Marks (20)

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Task 01

Softtech is a multinational company known for developing quality software products. For the past one year, the company is facing a problem for not generating enough yearly revenue. The main reason is that resources to carry out the task of developing products are not being managed properly which resulted delays in product completion. For this purpose, the company wants to hire a person who will be responsible for overcoming this loss, the company is facing. Which type of person the company should hire? Justify your answer with valid reason.

Answer: Organizations require framework clients at various levels, some might be essential clients, some might be power clients, managers and some might be carefully IT clients. At the point when it comes to frameworks usage venture administrators in the product business need to be versed in all the various kinds of clients with explicit frameworks, and the sorts of client get to rights and authorizations for each. This can extend from complex to incredibly confused relying upon the framework. A few organizations use client explicit models or job based models. There is a reasonable measure of specialized information that is required to guarantee frameworks execution ventures go easily and client level necessities are appropriately and completely routed to guarantee inner controls are followed effectively.

Task 02

Blue Tech is a software company which is known for developing embedded system. Lately the company has formed a software team which will be working on a complex system. The team will

be mainly responsible for development of the system. However, in order to carry out the development activities smoothly, services of a person are required who will be managing those activities, so that the resulting system may meet the user requirements within the allocated budget and time.

Carefully read the above-mentioned scenario and answer who will be responsible to carry out this task? Also justify your answer with valid reason(s).

Answer: A person who have a well experienced in embedded system who know all about the complex embedded system well experienced to manage the resources who can administrate the teammates. Some businesses utilize user-specific models or role-based models. There is a fair amount of technical knowledge that is required to ensure systems implementation projects go smoothly and user level requirements are properly and fully addressed to ensure internal controls are followed correctly.

Task 03

Organizations around the world always strive to achieve the highest standards of Integrity and actions to conduct their business in a responsible and ethical way. For this purpose, IEEE has defined principles of code of ethics for these organizations to achieve this environment.

Identify in which principle of code of ethics does the following cases fall:

Software engineers should develop software for the organization that must be of quality and meet professional standards set by the organization.

ANS: Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.

Employees need to perform their professional responsibilities.

ANS: The principles driving the professional responsibilities of faculty and staff encompass major areas traditionally found and reflecting best practices in higher education.

- 1. Observe and follow all duly established local, state and federal laws;**
- 2. Respect the rights, opinions, privacy, and property of individuals, groups, the University, and the neighboring community;**
- 3. Refrain from actions that deny other members of the University community their rights as described or provided for in policies of the University;**
- 4. Be knowledgeable of and follow all published University policies;**

A software engineer should always be open-minded and supportive of his colleagues.

**ANS: Software engineers shall be fair to and supportive of their colleagues. In particular, software engineers shall, as appropriate:
Encourage colleagues to adhere to this Code.**

Assist colleagues in professional development.

Credit fully the work of others and refrain from taking undue credit.

Review the work of others in an objective, candid, and properly-documented way.

Give a fair hearing to the opinions, concerns, or complaints of a colleague.

Software engineers need to maintain integrity and independence in their professional judgment

ANS: Principle 4: JUDGMENT

Temper all technical judgments by the need to support and maintain human values.

Only endorse documents either prepared under their supervision or within their areas of competence and with which they are in agreement.

Software Engineers shall act in a manner that is in the best interest of their client and employer.

ANS: Principle 2: CLIENT AND EMPLOYER

Provide service in their areas of competence, being honest and forthright about any limitations of their experience and education.

Not knowingly use software that is obtained or retained either illegally or unethically.

Task 04

John, an American businessman wants to start a home appliances manufacturing unit in Pakistan and contacts with an employment agency to hire the best engineers from the home appliance industry. John provides the complete guidelines about required skills of engineers and insisted to prefer, who have professional knowledge and aware the ethics knowledge stated by engineering council. Write in detail about the ethics knowledge an engineer must have with professional skills.

Answer: the engineer should know all about the ACM codes. Should have a well experienced working for high level company. The engineer should follow all the rules that's are the defined by ACM

There are several other ethical issues that engineers may face. Some have to do with technical practice, but many others have to do with broader considerations of business conduct. These include:

- **Relationships with clients, consultants, competitors, and contractors**
- **Ensuring legal compliance by clients, client's contractors, and others**
- **Conflict of interest**
- **Bribery and kickbacks, which also may include:**
 - **Gifts, meals, services, and entertainment**
- **Treatment of confidential or proprietary information**
- **Consideration of the employer's assets**
- **Outside employment/activities**

Some engineering societies are addressing environmental protection as a stand-alone question of ethics.

The field of business ethics often overlaps and informs ethical decision making for engineers.