Islamic Fundamentals in Software Engineering

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Islamic Fundamentals related to the product

"What leads to Unlawful is unlawful"
e.g. products serving gambling.

Best possible form of product

■ "Allah likes if one performs a task, he has to perform it perfectly"

إن الله يحب إذا عمل أحدكم عملاً أن يتقنه

Perfect understanding

People allocation according to knowledge

" The best one whom you hire is the strong and honest "
" Get help for any job from the among the specialized people of best piety."

Mid–path in spending

" **Don't make your hand tied to your
neck nor to extend it wide open lest
you would be blamed and regretful**"

وَلاَ تَجْعَلْ يَدَكَ مَغْلُولَةً إِلَى عُنُقِكَ وَلاَ تَبْسُطْهَا كُلَّ الْبَسْطِ فَتَقْعُدَ مَلُومًا مَّحْسُورًا (الإسراء ٢٩)

Good documentation

Least publicity of internal matters

" **Get help upon performing your tasks by secrecy**"
" **Don't Spy on one another**"

Issues related to cultural, other religions, legal rules and laws should be respected.

"**Don't revile those which they call besides Allah lest they revile aggressively and unknowingly
Allah**"

Talk in understandable language

"**If a person talks to people with a language which they don't understand**, **then some of them
may go astray**"

Do not hide deficiencies

" **The one who cheats is not from us**"

Follow the industrial standards

"What is decided by the well known practice, it is accepted by the Sharia"

Islamic Fundamentals related to Public

Hiding danger is prohibited

" The one who cheats is not from us (i.e. not from Muslims)
" The religion is to give advice to Allah, him messenger, and to the Muslims"

Safety of human being is given the top priority
Signatures of all contracts, agreements, debts, and any legal documents.

Respect the differences among human kind and diversity in abilities, cultures, languages, traditions

» " **They shall remain different save those whom Allah pities. It was for this difference that He created them**"

Interest of public should be given the priority over personal interest,

"Interest of the society comes before the interests of individuals"

Knowledge of public nature should not be hidden from public for personal interests.

" **The one who hide knowledge** , **in the hereafter will come with a bridle made of fire**"

Truth is above everything.

Islamic Fundamentals related to Judgment

Respect of justice

Bribery is prohibited
" **Don't lay hands on each other's money unrightfully**, **nor should you give money to the judges in order to sinfully and knowingly lay hands on a portion of other people's money**".

■ No gifts acceptance

- Recording of events, contracts, agreements, specifications etc
- Be just in paying every party its legal right.
- Never act as a judge and a member of parties at the same time

As a witness disclose the truth and what you know even if it is against your interest

"If you say anything by testimony, you should be fair, even if the one whom you testify for is a near relative"

Respect human being very much.

" We have honored the children of Adam."

Islamic Fundamentals towards client and employer:

As a client or employer, perform duties in a faithful manner

One should provide his services only in areas of competence.

Using properties of others is only legal if they only give authorization

" The property of your brother is illegal to you, except with his consent"

- Keeping private information known during the proceeding of work in confidence.
- Not hiding knowledge for cheating purpose or causing wrong decisions.
- Informing client or employer in case there is any danger to their properties
- Safeguarding the interests of the client or employer in an honest way
- Don't represent any interest adverse to the employer's without his specific consent

Islamic Fundamentals in Management:

Managing persons is a responsibility

"Every one is a guide and responsible upon those whom he guide"

Employee should be well informed about matters to let them perform their duties properly

Assigning work only after taking into account appropriate contributions of education and experience

" Allah imposes nothing on soul which is not within the limit of its capacity"

Be just among employee and be just in rewards, promotions, incentives as well as punishments.

"If you judge between people you shall judge with justice"

» Respecting all contractual agreements related to intellectual property and those related to employee rights.

» Assigning the proper person to the right job

Islamic Fundamentals of Profession:

Respect of reputation

Insure that subcontractors, employee etc respect similar principles of honesty

Support organizations holding good ethics of practice

Try to rectify any breaking of ethical rules

Taking actions to report, correct and hold responsibilities for any errors or mistakes. Full truth in dealings.

Obeying any contract or agreement governing behavior or work

Promoting professional behavior to the progress of the science of the profession.

Islamic Fundamentals related to Colleagues:

Assisting colleagues in developing their profession

"Be good to parents, to your relatives, the orphans, the poverty–stricken, the near neighbor , the far neighbor, the road companion, the wayfarer.."

- Giving credit to authors, inventions, copyright and all work of colleagues and others.
- Reviewing work of others in a just and objective way.
- Acceptance of advice of other colleagues.
- Don't interfere with professional career and affairs of other colleagues.
- Seek help from other professionals in their areas of specialization

Islamic Fundamentals towards own self :

- Encouraging seeking knowledge from cradle to the grave.
- Improving the ability in techniques, safety measures, reliability, quality etc, related to the profession.
- Improving the writing, listening and speaking ability
- Paying attention to documentation of own work as it is an important part of projects.
- Improving knowledge in matters related to laws, regulations, standards

Trying to deal with others in same way one likes to be dealt with.

" Like to others what you like for yourself"

Conclusions

Some of the Islamic Fundamentals related to software are presented here. Many of them agree with man made

ethical principles . However there are some which are more advanced to the latter. It is the duty of Muslim specialists to explain that and to present these principles in a proper way.