System Development Policy

Policy Statement
System development should be done properly according to international standards to serve business needs. Proper security requirements must be met by the developed systems.

Reason for Policy/Purpose
The purpose of the System Development Policy is to manage system development activities in AUC to have a more controlled outcome that performs its goal efficiently, effectively and securely.

Who Approved This Policy
Wessam Maher, Principal Campus Information Security Officer

Who Needs to Know This Policy
AUC Faculty and Staff
**Web Address for this Policy**

https://www.aucegypt.edu/about/university-policies

**Contacts**

Responsible University Official: Wessam Anwar
Responsible University Office: Information Security Office
If you have any questions on the policy, you may send an e-mail to infosec@aucegypt.edu

**Policy/Procedures**

1. System development should be done by right trained caliber in order to ensure best quality of the delivered outcome
2. A data owner should be declared and assigned to own the collected, published or processed data in the system to be developed.
3. System development includes all digital development activities like software development, application development, mobile application development, workflows development, website development…etc.
4. International standards and processes should be followed by the developers’ teams, like CMMI, OWASP…etc.
5. Source code should be securely saved and kept with a proper versioning, description and documentation
6. Development should be done on a testing environment; another staging environment should be used for near life systems. No direct changes or development is allowed on production.
7. A proper design and requirements specifications must be documented.
8. A proper stakeholder’s acceptance and sign off should be done by the of development phase.
9. A proper assessment for current alternatives, consolidation options should be considered.
10. Developers shouldn’t operate or maintain the developed system. It should be handed over to application administrators with proper day to day running manuals.
11. Proper security segregation must be done between front ends, middle layers and back ends
12. Developed systems have to pass by security assessment to evaluate its readiness to go live.
13. Communications between systems should be secure by design.
14. Proper vulnerability and patch management should be performed for any developed system.
15. System regular assessment should be done to tackle the system usability, effectiveness and efficiency in order to decide whether it should retire, be replaced or be kept in production.
16. No untrusted source codes, functions, libraries or APIs are allowed to be used in system development.
17. Proper quality assurance and stress testing should be performed as needed.
18. Before granting system development actions, an assessment must be done by the proper management in order to compare whether a ready-made option would be
19. Proper security hardening guides should be followed for all system components.
20. Proper logging capabilities should be designed and enabled to integrate with AUC information security event management solution. Logging capabilities options and features should be discussed and approved by data owners and information security.
21. A proper business continuity/disaster recovery plan should be in place before the system goes live.
22. Proper secure access control and roles segregation should be developed as needed. Information Security should be involved from the design part.
23. Proper authentication should be done when needed. Information Security should be involved with regards to the authentication need and mechanisms.
24. All developed systems information and ownership should be kept in a proper inventory.
25. All related processes and development activities must be documented and saved for future reference.
26. An application administrator and system administrator should be assigned to every developed system.

Any user found to have violated this policy (or part thereof) may be subject to disciplinary action, up to and including termination of employment or dismissal from the University.

Related Information

AUC Data Governance Policy
Information Security Policy
Electronic Mail Email Policy
Acceptable Use Policy
Peer to Peer Sharing Policy

History/Revision Dates

Origination Date: April 2018
Last Amended Date: April 2018
Next Review Date: April 2020