



INFORMATION TECHNOLOGY ANALYST I / II

Office: Information Technology
Status: Exempt – General Unit
Grade: 10A / 10B

ORGANIZATIONAL RELATIONSHIPS

Reports to: Director of Applications, Director of Operations or IT Manager
Supervises: No

DEFINITION

Performs professional duties related to the analysis, development, maintenance and administration of computer hardware and software systems to meet business needs. Incumbents may perform any of the following functions: analyzes, designs, monitors and administers servers and related platforms; designs, maintains, configures and monitors network and/or telecommunications infrastructures and related system components; consults with departmental customers to identify and analyze business functions that can be improved by the implementation of new hardware and/or software solutions; designs and develops custom applications and/or enhances/modifies existing applications; performs professional-level systems maintenance and customer support duties; and performs other related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Information Technology Analyst I

This is the entry level class in the Information Technology Analyst series. Positions in this class are typically distinguished from the Information Technology Analyst II by the performance of less than the full range of duties assigned to the series.

Information Technology Analyst II

This is the journey-level class in the Information Technology Analyst series. Positions in this class are distinguished from the Information Technology Analyst I by the performance of the full ranges of duties. Positions in this class are flexibly staffed and are normally filled by advancement from the entry level.

MAJOR DUTIES & RESPONSIBILITIES – Duties may include, but are not limited to the following

Incumbents assigned to the Information Technology Analyst I classification initially perform the following duties in a learning and/or on-the-job training capacity.

1. Evaluates customer technical needs and recommends solutions; plans, determines requirements, designs, builds, customizes, tests, implements, maintains and/or enhances a variety of hardware

and software systems, integrating State Bar network infrastructure and/or other systems; considers protocols, acceptable system security risk, and other related elements.

2. Provides professional customer support for system-related software and/or hardware issues, needs, or requirements. Interacts with clients to analyze system requirements; recommends technology solutions to improve operations.
3. Determines and develops cost benefit analyses related to recommended technical solutions; evaluates risk options; ensures project compliance with State Bar procedures or protocols, budgetary constraints and staff/resource utilization.
4. Is responsible for the coordination and completion of projects that are limited in scope and/or specific to area of assignment; develops and monitors project budgets and resources; interfaces with clients to define project scope and review project activities, recommendations and outcomes; coordinates the use of project resources based on project requirements; designs and implements project testing and quality assurance processes. Project-related duties may include:
 - a. Determining and developing cost benefit analyses for project justifications; developing projected budgets and resources needed to conduct the work; evaluating risk concerns and options; providing technical input into the development of specifications for "requests for proposals" pertaining to external services; reviewing vendor submissions and providing recommendations on vendor selection;
 - b. Monitoring vendor performance to ensure compliance with State Bar specifications; ensuring project compliance with Court procedures or protocols, budgetary constraints and staff/resource utilization;
 - c. Serving as the primary client interface on assigned projects; reviewing recommendations with clients and receiving approval to proceed; reviewing final outcomes with the client and obtaining their sign off that all work has been conducted in accordance with client requirements;
 - d. Coordinating the activities of contract personnel and/or vendors, consistent with project plans; identifies and resolves obstacles to progress;
 - e. Designing and directing project testing and quality assurance processes for assigned projects.
5. Coordinates information technology activities of State Bar department(s) and/or vendors consistent with project plans; identifies and resolves obstacles to progress, prepares for and manages delivery and installation.
6. Prepares technical documentations, procedural plans, reports, correspondence and other documents; participates on committees and task forces; attends meetings, conferences and training sessions.
7. Builds and maintains positive and professional working relationships with co-workers, other State Bar employees, vendors, and the public using principles of good customer services.
8. Exercises technical or functional supervision over technical staff. Exercises functional supervision over other professional staff on a project basis.
9. Provides technical and functional supervision of contractors/vendors.

10. Provides after hours technology support as assigned.

11. Performs other related duties as assigned.

Applications

12. Interacts with clients to analyze their business requirements and recommends technology solutions; identifies and maps business processes; gathers user requirements.

13. Writes applications and/or system requirement and design specifications, designs application and/or system flow diagrams, schematics, file structures, reports, forms and menus; prepares a definition of the problem, the desired output, and performance requirements.

14. Writes computer programs and/or scripting based on established specifications using various computer languages. Writes, revises, and maintains computer code for applications development, enhancement, or modification.

15. Designs, develops and maintains websites, including the design of website navigation and application frameworks and creates database connections.

16. Performs various system quality assurance activities; tests, troubleshoots and debugs system issues using appropriate technology; prepares and executes testing plans to validate functionality and resolve issues.

17. Conducts training pertaining to the use of new applications or systems for users and/or other information technology staff.

18. Provides professional systems support to users of particular applications.

Database

19. Performs database management and administration tasks; troubleshoots and resolves database problems; monitors and tunes database applications; verifies the integrity of data within the database.

20. Ensures maximum database capacity and database protection, manages data and file space allocation, monitors and administers database security. Creates and tests database backups; performs backup and recovery tasks.

21. Designs and modifies database structures, tables, and files; implements design using established techniques.

22. Performs database queries and data analysis processes. Installs, configures, and administers database related reporting tools or Web software required for State Bar applications.

23. Develops and maintains standards, procedures, and methodologies for effective operation, access and data integrity of State Bar database systems.

System/Server/Platform Analysis

- 24. Builds, installs, configures, maintains and administers server platforms and operating system components for mainframe, microcomputer and/or client server systems.
- 25. Maintains telephone servers; call manager, voicemail, call center, and paging systems.
- 26. Designs and administers active directory, exchange, e-mail, backup and related systems. Adds users, computers and servers to active directory domain.
- 27. Assists with the development and integration of new tools for compliance with business unit requirement.
- 28. Performs system administration installing, updating, maintaining and administering various operating systems on various platforms, maintains the integrity of network structures and support routines, provides system administration services.
- 29. Obtains new and upgraded systems from vendors and utilizes tools; tests and installs critical upgrades and security patches; serves as main client interface on all aspects of projects; reviews recommendations with clients and receives approval to proceed; reviews final outcomes with clients to obtain sign off that all work has been conducted in accordance with client requirements.
- 30. Tests and installs critical upgrades and security patches; develops and tests backup and restoration procedures.
- 31. Designs, administers and makes provisions for storage area network (SAN); monitors performance and utilization of SAN.

Network and Telecommunications Analysis/Administration

- 32. Administers a departmental Local Area Network (LAN); monitors and adds users; installs and configures software; coordinates connectivity with the State Bar Wide Area Network (WAN).
- 33. Designs, configures and installs network infrastructure, including wireless equipment, hubs, switches, cabling, servers, and peripherals.
- 34. Investigates, analyzes and resolves server, telecommunications and/or network problems; troubleshoots failures, implements solutions.
- 35. Evaluates and implements network upgrades; test hardware and software to ensure optimal functionality.
- 36. Designs, implements and maintains telecommunications systems, including, but not limited to, telephone systems, radio network, and the audio/video systems for State Bar departments.
- 37. Analyzes business needs and prepares design specifications, recommendations, and solutions for telecommunications technology.

KNOWLEDGE & SKILLS

Knowledge of:

- General operations, services, concepts, terms and activities common to a comprehensive, state-of-the-art information systems program.
- Principals, methods and techniques used in designing, developing, testing and implementing computer hardware and software systems.
- Data processing techniques, including the types of hardware and software currently used to process data with different levels of complexity.
- Structured analysis and database concepts.
- Computer hardware and software systems similar to those being used by the State Bar.
- Tools and equipment used in testing the functionality of computer applications.
- Principles and practices of troubleshooting computer hardware, software and network problems.
- Principles and practices of customer service.
- Methods and techniques of developing and presenting technical documentation and training materials.
- Principles and practices of record keeping,
- Modern office procedures, methods and equipment.
- Common information security issues, threats, vulnerabilities, and attacks.

Application

- Information system development lifecycle and design principles using flowcharting techniques and prototype development tools.
- Basic principles and practices of business operations and work flow analysis.
- Various programming and scripting languages.

Database

- Database architecture and administration.
- Database design methods and techniques.
- Techniques for defining logical relationships among data, processes or events.

System/Server/Platform Analysis

- Server platforms and operating system components for midrange, microcomputer and/or client server systems.
- Techniques and practices used in managing, designing, implementing, maintaining and operating information processing systems.

Network and Telecommunications Analysis/Administration

- General operational characteristics, configuration and set up of local and wide area network and communication systems, equipment and devices, including telephone and radio equipment.
- Networking principals and methodologies.

- General operational characteristics, configuration and set up of communication systems, equipment and devices.
- The functionality of firewalls, switches, routers and peripherals and how they interact within the network infrastructure.

ESSENTIAL ELEMENTS / ABILITY TO

- Gather, analyze and evaluate data and information in order to reason logically, draw valid conclusions, take appropriate actions and/or make appropriate recommendations.
- Learn to research, design, implement and maintain various hardware and software technology solutions, including new technology, in order to improve State Bar processes or services.
- Communicate technical information to a wide variety of users.
- Learn, interpret and explain pertinent State Bar and department policies and procedures.
- Recognize that changes made on a local level can affect services and equipment at the system wide level and take appropriate precautions.
- Plan, organize, prioritize and process work to ensure that deadlines are met.
- Learn and utilize specialized terminology if needed by the specific assignment.
- Interpret and apply technical information pertaining to computer and network systems.
- Adapt quickly to changes in policies, procedures, assignments and work locations.
- Communicate effectively, both orally and in writing.
- Establish and maintain effective working relationships with those encountered during the course of the work.
- Learn to prepare and maintain documentation for procedures, processes, and tables related to area of assignment.
- Learn to identify and resolve system performance and security issues that risk business continuity.
- Read, comprehend, and retain technical information on computer products and systems.

Application

- Learn to conduct business process and needs analysis and propose technology solutions.
- Learn to develop information system designs, flow charts, report layouts and screen designs.
- Learn to code in a variety of programming languages in order to design software applications.
- Learn to read and interpret source code from the State Bar's commonly used programming languages; develop a working knowledge of new programming languages.
- Troubleshoot and repair a variety of application issues using appropriate program testing methods and tools.

Database

- Troubleshoot database related problems.
- Learn to ensure maximum database availability and that data integrity is maintained.
- Learn to design and maintain active directory, exchange, e-mail, backup and related systems.

System/Server/Platform Analysis

- Learn to analyze, build, install, configure, maintain and administer server platforms and operating system components for mainframe, microcomputer and/or client server systems.
- Learn to design and maintain active directory, exchange, e-mail, backup and related systems.

Network and Telecommunications Analysis/Administration

- Learn to monitor and analyze server and network performance and security and provide recommendations for improved server and/or network performance and security.
- Learn to plan, design, install and document new network segments and connections.
- Learn to analyze business needs and prepare design specifications, recommendations, and solutions for telecommunications technology.
- Learn to design, implement and maintain telecommunication system and projects.

MINIMUM QUALIFICATIONS

Education

Equivalent to the completion of a Bachelor's degree from an accredited college or university with major coursework in computer science, information technology or a closely related field. Possession of one or more approved information technology certificates and/or completion of other approved technology-related training may substitute for some or all of the required education.

Experience

Two years of full time, progressively responsible experience in the analysis and troubleshooting of computer applications and operations is desirable.