

PERSONNEL COMMITTEE

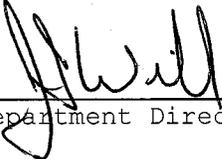
14-0180R

RESOLUTION APPROVING PROPOSED AMENDMENTS TO THE SPECIFICATIONS FOR THE EXISTING CIVIL SERVICE CLASSIFICATION OF PROGRAMMER ANALYST.

CITY PROPOSAL:

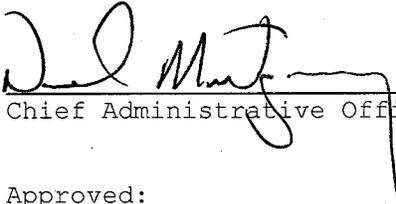
RESOLVED, that the proposed amendments to the specifications for the existing civil service classification of programmer analyst, which were approved by the civil service board on April 1, 2014, and which are filed with the city clerk as Public Document No. _____, are approved. This classification shall remain subject to the city's collective bargaining agreement with its basic unit employees and compensated at Pay Ranges 133-136, \$4,062 to \$5,425 per month.

Approved:



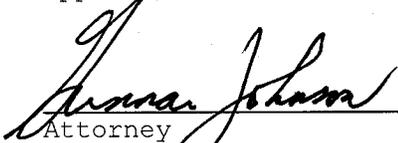
Department Director

Approved for presentation to council:



Chief Administrative Officer

Approved as to form:



Attorney

Approved:



Auditor

HR MS:ao 4/3/2014

STATEMENT OF PURPOSE: This existing classification was revised to update the language regarding the technical aspects of the position, add distinguishing factors from the senior programmer analyst, lower the minimum qualifications, and format into our new format. There is no change in the rate of pay, which is Ranges 133-136, \$4,062 to \$5,425 per month.

PROGRAMMER ANALYST

SUMMARY/PURPOSE

To coordinate, define, plan, design, develop, maintain and oversee assigned Application and/or Website Development solutions in the support of the achievement of business requirements. This includes setting standards and guidelines, designing, writing, coding, testing, and analyzing software programs and applications. The Programmer Analyst will also oversee, participate in, and assist programming staff in the research, design, documentation, and modification of software solutions throughout the production life cycle.

DISTINGUISHING FEATURES OF THE CLASS

Employees at this level are distinguished from the Senior Programmer Analyst by the level of responsibilities and duties performed. The Programmer Analyst will be assisting with similar duties as the Senior Programmer Analyst though the Programmer Analyst will have less discretion.

ESSENTIAL DUTIES AND RESPONSIBILITIES (other duties may be assigned)

1. Participate in the research of emerging application and/or web development software products, languages, and standards in support of procurement and development efforts.
2. Participate in the preparation of long-term planning for application and/or website development, including standards and guidelines for programming languages, tools, and content based on business goals, input from stakeholders, common data management, and regulatory requirements.
3. Assist in collaboration with colleagues and stakeholders in the development and initiation of new application and/or website offerings and applications.
4. Evaluate project requirements to establish data information flow, operational procedures, and program structures.
5. Develop and document all aspects of the end user experience required to implement an application and/or website development solution.
6. Design and develop file structures to satisfy program requirements.
7. Design and write software logic in the appropriate programming language or through the use of development tools to create new or modify existing applications or website development solutions.
8. Develop and utilize test scenarios to validate program logic.
9. Prepare and maintain written documentation of overall systems, site structure, programs, and procedures.
10. Assist in the analysis of available options, both local and external, for relevancy, usability, and functionality to satisfy new data management and/or regulatory requirements.
11. Assist in the development of step-by-step implementation plans for new application and/or website development solutions, as well as solution modification efforts.
12. Provide development plans and schedules to supervisor and project teams.
13. Report achievements and development complications to supervisor and project teams.
14. Confer with managers and project teams as needed for project coordination.
15. Assist in training of user personnel in the use of new or enhanced application and/or web development solutions.
16. Assist in the design and knowledge transfer of standard techniques and programs to support common application and web development system requirements.
17. Maintain current knowledge of design and analysis standards, coding methods and operating requirements.
18. Design, run, and monitor application and/or website development solution performance tests on new and existing programs for the purposes of correcting errors, isolating areas for improvement, and general debugging.
19. Collaborate with colleagues to ensure appropriate hardware and software environments are in place for any application and/or website development solution.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. Graduation from an accredited technical or college university with a degree in a computer information systems related program, plus one year of verifiable experience in application development, web development, system analysis, system design, or system integration and implementation; or
 - B. Three years of full-time, verifiable experience in application and/or web development, system analysis, design, integration and implementation; or
 - C. A combination of verifiable education and experience equaling three years which demonstrates possession of the knowledge, skills and abilities listed below.

2. Knowledge Requirements
 - A. Technically fluent in programming languages including but not limited to Visual Basic .Net, ASP .Net, HTML, HTML5, C#, C++, PHP, Perl, Java, or JavaScript.
 - B. Knowledge of creating production level website development solutions using development environments such as Visual Studio .Net, Dreamweaver, or ColdFusion.
 - C. Knowledge of developing website solutions utilizing content management solutions such as Umbraco, WordPress, Joomla!, or Drupal.
 - D. Knowledge of relational database platforms preferably utilizing Microsoft SQL.
 - E. In-depth, hands on knowledge and experience in or with application and/or website development.
 - F. Working knowledge of analytical and statistical methods and their use in application and/or web development solutions.
 - G. Knowledge of database and file management techniques.
 - H. Knowledge of operational procedures required for development and maintenance of production software.

3. Skill Requirements
 - A. Skill in communicating logically and accurately in oral and written forms.
 - B. Skill in evaluating and analyzing projects in a broad perspective.
 - C. Skill at working both independently and in team oriented collaborative environments.
 - D. Skill in writing documents specifying recommendations, plans, schedules, milestones, and achievements of a project.

4. Ability Requirements
 - A. Ability to conduct independent research for the development of project specifications, and recommend improved or new systems to meet user requirements.
 - B. Ability to conduct information gathering and problem solving meetings with users and programming staff.
 - C. Ability to interpret user requirements in order to define and develop written system specifications.
 - D. Ability to establish and maintain effective working relationships with supervisors, employees, colleagues and end users.
 - E. Ability to organize, schedule, coordinate and delegate work.
 - F. Ability to function as a programmer/analyst and participate in analysis, design and programming activities.

5. Physical Ability Requirements
- A. Ability to frequently sit, type, talk, and hear.
 - B. Ability to work at a computer for extended periods.
 - C. Ability to attend work on a regular basis.

HR: MS	Union: Basic	EEOC: Technician	CSB: 20140401	Class No: 3212
WC: 8810	Pay: 133-136	EEOF: Admin/Finance	CC:	Resolution:

PROGRAMMER ANALYST

SUMMARY/PURPOSE:

To design and develop computerized business support systems using programming analysis, design, development, and testing techniques.

FUNCTIONAL AREAS:

1. Design and develop computerized business support systems.

* A. To coordinate, define, plan, design, develop, maintain and oversee assigned Application and/or Website Development solutions in the support of the achievement of business requirements. This includes setting standards and guidelines, designing, writing, coding, testing, and analyzing software programs and applications. The Programmer Analyst will also oversee, participate in, and assist programming staff in the research, design, documentation, and modification of software solutions throughout the production life cycle.

DISTINGUISHING FEATURES OF THE CLASS:

Employees at this level are distinguished from the Senior Programmer Analyst by the level of responsibilities and duties performed. The Programmer Analyst will be assisting with similar duties as the Senior Programmer Analyst though the Programmer Analyst will have less discretion.

ESSENTIAL DUTIES AND RESPONSIBILITIES (other duties may be assigned):

1. Participate in the research of emerging application and/or web development software products, languages, and standards in support of procurement and development efforts.
2. Participate in the preparation of long-term planning for application and/or website development, including standards and guidelines for programming languages, tools, and content based on business goals, input from stakeholders, common data management, and regulatory requirements.
3. Assist in collaboration with colleagues and stakeholders in the development and initiation of new application and/or website offerings and applications.
4. Evaluate project requirements to establish data information flow, operational procedures, and program structures.
 - * B. Specify in detail the forms, screens, reports, programs and equipment document all aspects of the end user experience required to implement a data processing system.
5. * C. Prepare detailed design specifications in the form of structure charts, diagrams an application and narrative for technical analysis and coordination of programming efforts/or website development solution.
6. D. Design and develop file structures to satisfy program requirements.
7. * E. Perform the coding of programs Design and write software logic in the appropriate program programming language or through the use of development tools to create new or modify existing applications or website development solutions.

- * ~~_____ F. _____ Develop operational and user procedures in appropriate job control language.~~
- 8. ~~_____ G. _____ Develop and utilize test scenarios to validate program logic.~~
- 9. * ~~_____ H. _____ Prepare and improvemaintain written documentation of overall systems, site structure, programs, and procedures.~~
- ~~_____ I. _____ Assist in the analysis of available options, both local and external data processing systems for applicability, for relevancy, usability, and design criteria.~~
- 10. ~~2. _____ Plan functionality to satisfy new data management and report on assigned application development tasks/or regulatory requirements.~~
- ~~_____ A. _____ Schedule the analysis, design and implementation of assigned programs.~~
- 11. ~~_____ B. _____ Develop a Assist in the development of step-by-step implementation planplans for new programs application and/or website development solutions, as well as solution modification efforts.~~
- 12. ~~_____ C. _____ Provide development plans and schedules to other staff and supervisor and project teams.~~
- 13. ~~_____ D. _____ Report achievements and development problems complications to supervisor and end user project teams.~~
- 14. * ~~_____ E. _____ Confer with managers or staff and project teams as needed for project coordination.~~
- 3. ~~Analyze and modify existing programs.~~
- * ~~_____ A. _____ Analyze production programs requiring modifications.~~
- * ~~_____ B. _____ Design and implement program logic to accomplish specified changes and/or improve software logic and maintainability.~~
- ~~_____ C. _____ Test modified program logic.~~
- ~~_____ D. _____ Revise program documentation.~~
- 4. ~~Provide technical guidance for programming efforts and perform supporting development duties when requested.~~
- ~~_____ A. _____ Assist in training programmers in techniques and standard procedures.~~
- ~~_____ B. _____ Distribute work assignments between self and programmers involved in project.~~
- 15. ~~_____ C. _____ Train of user personnel in the use of new data processing systems or changes to existing systems or enhanced application and/or web development solutions.~~
- ~~_____ D. _____ Provide technical inputs for hardware and software changes within the department.~~
- 16. ~~_____ E. _____ Assist in the design and knowledge transfer of standard techniques and programs to support common data processing application and web development system requirements.~~
- 17. ~~_____ F. _____ Maintain current knowledge of design and analysis standards, coding methods and operating requirements.~~
- 18. ~~Design, run, and monitor application and/or website development solution performance tests on new and existing programs for the purposes of correcting errors, isolating areas for improvement, and general debugging.~~
- 19. ~~Collaborate with colleagues to ensure appropriate hardware and software environments are in place for any application and/or website development solution.~~

JOB REQUIREMENTS:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

1. Education and Experience Requirements:

- A. ~~†~~ ~~A.~~ ~~Completion of a data processing vocational training program~~ Graduation from an accredited technical or college university with specific courses a degree in a computer information systems related program, plus one year of verifiable experience in application design and development including documentation and four (4), web development, system analysis, system design, or system integration and implementation; or
- B. Three years of full-time, verifiable programmer work experience to include design in application and/or web development of data processing using an applicable programming language, system analysis, design, integration and implementation; or
- ~~† B. College degree in Computer Science, Data Processing, or Information Systems, plus two (2) years of experience in computer systems design and development using an applicable programming language; or~~
- C. ~~†~~ ~~C.~~ ~~A combination of verifiable education and experience equaling six (6) three years which demonstrates possession of the knowledge, skills and abilities listed below.~~

2. Knowledge Requirements:

- A. ~~†~~ ~~A.~~ ~~Technically fluent in programming languages including but not limited to Visual Basic .Net, ASP .Net, HTML, HTML5, C#, C++, PHP, Perl, Java, or JavaScript.~~
- B. Knowledge of the principles and techniques of application creating production level website development solutions using development environments such as Visual Studio .Net, Dreamweaver, or ColdFusion.
- C. ~~†~~ ~~B.~~ ~~Knowledge of developing website solutions utilizing content management solutions such as Umbraco, WordPress, Joomla!, or Drupal.~~
- D. Knowledge of data mining relational database platforms preferably utilizing Microsoft SQL.
- E. In-depth, hands on knowledge and experience in or with application and/or website development.
- F. Working knowledge of analytical and statistical methods and their use in application, and/or web development solutions.
- G. ~~†~~ ~~C.~~ ~~Knowledge of data database and file management techniques.~~
- H. ~~†~~ ~~D.~~ ~~Knowledge of operational procedures required for development and maintenance of applications production software.~~

Skills

- ~~† A. Skill in the operation of computers and related data processing equipment.~~

3. ~~†~~ B. Skill Requirements:

- A. Skill for communicating logically and accurately in oral and written forms.
- B. Skill in evaluating and analyzing projects in a broad perspective.
- C. Skill at working both independently and in team oriented collaborative environments.
- D. Skill in writing design specification documents specifying recommendations, plans, schedules, milestones, and achievements of a project.
- † C. ~~Skill in creating production level software modules using programming languages such as Visual Basic .Net, ASP .Net, PHP, Perl, or Java.~~
- † D. ~~Skill in creating production level web based applications using development environments such as Visual Studio .Net, Dreamweaver, or ColdFusion.~~

4. Abilities Requirements:

- A. ~~†~~ A. Ability to conduct independent research for analysis and design specificationthe development of project specifications, and recommend improved methods and procedures based on findingsor new systems to meet user requirements.
- B. ~~†~~ B. AbilityAbility to conduct information gathering and problem solving meetings with users and programming staff.
- C. Ability to interpret user requirements in order to define and develop written system specifications.
- † C. ~~Ability to communicate through diagrams, writing and speaking.~~
- D. ~~†~~ D. Ability to establish and maintain effective working relationships with supervisors, employees, colleagues and end users.
- Ability to participate and cooperate as a member of a development team.
- E. ~~†~~ E. Ability to direct theorganize, schedule, coordinate and delegate work of programming staff regarding software development tasks.
- F. ~~†~~ F. Ability to function as a programmer/analyst and participate in analysis, design and programming activities.
- † G.

5. Physical Abilities Requirements:

- A. Ability to frequently sit, type, talk, and hear.
- B. Ability to work at a computer for extended periods.
- C. Ability to attend work on a regular basis.

* ~~Essential functions of the job.~~
 † ~~Job requirements necessary on the first day of employment.~~

Genlst: MS	Class:	Union: Basic	Pay: 433	CSB:
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CC: 20070129	Res: 07-0053R	EEOC: Technician	EEOF:	WC: _____
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