Job descriptions do not include every duty that an individual in a position performs. They are intended to be representative and characteristic of the duties required and the level of work performed. Depending upon the size of the department or unit and its functional activities, incumbents who fall into this category may perform all of the duties listed below or, in the case of large departments or units, may be assigned to designated specialized functions.

JD #:	**JD00035**	Pay Grade:	**9**
JD Title:	**Application Developer**	JD FTE Hours:	**35**
Job Family:	**IT**		

General Description

The Application Developer is responsible for programming and developing applications software that meet specified client and business requirements. Provide input into the planning of the work packages based on expertise and understanding of the current applications and systems and the impact that they will have on the current production environment.

Representative Duties & Responsibilities

- Develop and install new and modified University administrative applications systems using project management and application life cycle best practices.
- Complete the technical design, detailed specifications, programming system components, and system and integration testing for new applications.
- Contribute to project management documents for tracking project steps and process flow.
- Document the logical flow of processes and data in reports and flowcharts.
- Coordinate various tasks, resources, and people required to carry out problem solutions including the identification and sequencing of database administrator functions, and setting security authorizations.
- Create project plans which include task lists, test plans, client training plans, and analysis and documentation of project implications on other functional areas.
- Write and document business requirements for small to medium projects.
- Define, develop, and perform application testing procedures.
- Adapt techniques and interpret or modify procedures to achieve objectives where any changes are within the agreed project scope and deliverables.
- Gather information from customers to determine business, auditing, and system requirements.
- Facilitate meetings with customers and interpret, assess, and evaluate customer business requirements in order to establish project scope and design criteria for systems.
- Write complex programs using various computing and scripting languages.
- Debug computer program code.
- Develop and modify interfaces for existing applications and systems while maintaining the integrity of data and processes.
- Develop components for new multi-faceted computer systems and revise existing systems comprised of numerous application components.
- Work with and understand complex data models and databases for the most effective and efficient organization of data based on processing requirements.
- Contribute to the review, development, and modification of best practices and technical solutions.
- Communicate project, issue, and system status to project leads and managers.
- Perform load and stress testing to anticipate the impact of application usage on the production service environment.
- Complete calculations used to estimate various capacity requirements such as database size.
- Search and gather information from a variety of sources including computer applications, internet, and legislative documentation and consolidate relevant information to complete environmental scans.
- Develop time and cost estimates for project assignments.
- Work cooperatively with others to effectively determine information and understand business requirements of a complex nature.
- Deliver presentations to team members as it relates to project work.

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Representative Duties & Responsibilities

- Exchange technical information with colleagues during the application development process.
- Explain and exchange technical concepts and information to clients in a non-technical manner to ensure that the customer comprehends the issue.
- Provide advice to customers on alternative and recommended approaches to computing system solutions for meeting their business requirements.
- Provide production service implementation training to clients.
- Provide expertise and working knowledge of application components such as internet, intranet, mainframe, personal computer, and database structures.
- Interpret complicated technical program specification documents, translate, and develop into application code.
- Prepare and review operations documentation, training materials, and timelines.
- Provide Level III post implementation support to users regarding technical issues.
- Take ownership of technical issues by identifying underlying problems, analyzing potential solutions and implementing system resolutions, including workarounds.
- Apply and enforce department change control policies and procedures.
- Participate in all phases of testing including, but not limited to, system, integration, acceptance, regression, and performance.
- Manage defects identified during all phases of a project.
- Resolve problems in the test, production implementation, and post-implementation phases in coordination with other technical and business groups.
- Communicate testing results to others.
- Maintain information technology process flow, methodology, and control documentation.
- Update and maintain knowledge of application components such as, internet, intranet, personal computer, and database structures.
- Remain current with relevant development and project methodologies.
- Remain current with frequent updates and changes to technology.
- Work with project leads and managers to prioritize and schedule issues resolution.
- Remain current with security policies and procedures and work with System Administrators to implement security changes.
- Facilitate effective dialog between technical staff.
- Read and understand complex Business Process Diagrams and develop basic (Level II) models.
- Read and understand a complex project plan and develop simple project plans.
- Understand the different levels of testing and develop simple use cases and test scripts.
- Follow a test script and document defects.
- Acquire and maintain a basic understanding of Business Intelligence and Data Warehousing principles.
- Develop simple queries using basic Business Intelligence tools.
- Provide recommendations to supervisor.
- Perform a range of varied work activities in a variety of structured environments.
- Understand and use appropriate methods, tools, and applications to complete work tasks.
- Demonstrate a rational and organized approach to work and identify development opportunities.
- Plan, schedule, and monitor own work within short time horizons.
- Absorb technical information when it is presented systematically and apply it effectively.
- Organize time, work and resources to accomplish objectives in the most effective and efficient way.
- Use measurement methods to monitor progress toward goal attainment, tenaciously working to meet or exceed those goals, while deriving satisfaction from the process of goal achievement and continuous improvement.
- Ensure that the internal and external customer perspective is a driving force behind decisions and activities.
- Follow service practices that meet customers' and University needs.
- Interact with others in a way that gives them confidence in one's intentions and those of the University.
- Work collaboratively with others to achieve departmental and institutional goals. Actively participate as a member of a team to move the team toward the completion of goals.

Supervision

- Provide direction to others in how to carry out work tasks.

Qualifications

- Bachelor's degree in Computer Science or related field.
- Requires 3 years of relevant experience.

Effort

Physical Effort:
- A typical work day consists of up to 2 hours of low physical effort for activities such as:
  - Intermittent periods of keyboarding to develop technical solutions, troubleshoot, and correspond with colleagues and clients.

- A typical work day consists of greater than 3.5 hours of moderate physical effort for activities such as:
  - Keyboarding for a prolonged period of time when writing computer code.

- Elements of high physical effort are not a regular feature of this job.

Mental Effort:
- A typical work day occasionally requires routine mental effort for activities such as:
  - Processing routine documents, correspondence, and forms.

- A typical work day consists of greater than 3.5 hours of moderate mental effort for activities such as:
  - Writing complex programs using various computing and scripting languages.
  - Debugging computer program code as required.
  - Interpreting complicated technical program specification documents, translating, and developing into application code.
  - Defining, developing, and performing application testing procedures.
  - Exchanging technical information with customers and colleagues during the application development process.

- A typical work day occasionally requires high mental effort for activities such as:
  - Facilitating meetings with project stakeholders.

Working Conditions

Physical Environment:
- No adverse physical elements are inherent to this position.

Psychological Environment:
- Occasionally interacts with individuals who may be rude or upset.
- Frequently deals with multiple projects and simultaneous deadlines.

Health & Safety:
- Periods of prolonged keyboarding when writing code and programming.

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Job Description Rating Sheet

(For Positions in CAW Local 555, Unit 1)

JD #:	**JD00035**	Pay Grade:	**9**
JD Title:	**Application Developer**	Total Points:	**590**
Job Family:	**IT**		

Factor	Subfactor	Level Rating	Points
Skill	1. Applied Reasoning and Analytical Skills	**5.0**	105
	2. Breadth of Knowledge	**2.0**	13
	3. Adaptation to Change/Updating of Learning	**2.5**	17
	4. Interpersonal Skill	**3.0**	39
	5. Education and Experience	**E3**	100
	6. Dexterity and Coordination	**3.0**	21
Effort	7. Physical Effort	**3.0**	18
	8. Mental Effort	**3.0**	55
Responsibility	9. Planning and Coordination	**3.5**	55
	10. Responsibility for Others	**2.0**	33
	11. Accountability for Decisions Actions Affecting People, Assets, and Information	**4.0**	93
Working Conditions	12. Physical Environment	**1.0**	3
	13. Psychological Environment	**2.0**	10
	14. Health and Safety	**3.0**	28