Garlit, James S. December 12, 2023
BSIT 4-2

Duties of each job position before, during, and after every system deployment

# **Software Engineer/Programmer**

- Before: Design, develop, test, and debug software components and applications according to the specifications and requirements. Use version control tools to manage code changes and collaborate with other developers. Document the software design and code for future reference and maintenance.
- During: Deploy the software to the target environment using automated tools and scripts. Monitor the deployment process and troubleshoot any issues that arise. Perform post-deployment testing and verification to ensure the software is functioning as expected. Report any bugs or defects to the quality assurance team and fix them as soon as possible.
- After: Provide technical support and maintenance for the deployed software. Implement any changes or enhancements requested by the customers or stakeholders. Optimize the software performance and security. Keep the software documentation up to date.

### **Quality Assurance Analyst**

- Before: Review the software requirements and specifications and provide feedback to the developers. Define the test cases and scenarios based on the software functionality and quality standards. Prepare the test data and test environment for the testing process.
- During: Execute the test cases and scenarios and record the test results. Identify, report, and track
  any software defects or issues. Validate the software fixes and retest the software until it meets
  the quality criteria. Communicate the test status and progress to the project manager and
  stakeholders.
- After: Conduct the final acceptance testing and sign off the software release. Document the test
  results and findings for future reference and improvement. Provide feedback and suggestions to
  the developers and project manager on how to improve the software quality and testing process.

### **Business Analyst**

- Before: Gather and analyze the business needs and requirements from the customers and stakeholders. Translate the requirements into functional and non-functional specifications for the software development team. Validate the specifications with the customers and stakeholders and obtain their approval.
- During: Monitor the software development and deployment process and ensure it aligns with the specifications and expectations. Communicate any changes or issues to the customers and stakeholders and manage their expectations. Facilitate the communication and collaboration between the development team and the customers and stakeholders.
- After: Evaluate the software outcomes and benefits and compare them with the original requirements and objectives. Measure the customer satisfaction and feedback and report them to the project manager and stakeholders. Identify any gaps or opportunities for improvement and propose solutions or recommendations.

#### **Database Administrator**

- Before: Design, create, and maintain the database schema and structure according to the software requirements and specifications. Implement the database security policies and procedures to protect the data integrity and confidentiality. Backup and restore the database regularly and ensure the data availability and reliability.
- During: Deploy the database to the target environment using automated tools and scripts. Monitor the database performance and activity and troubleshoot any issues that arise. Perform post-deployment testing and verification to ensure the database is functioning as expected. Report any bugs or defects to the quality assurance team and fix them as soon as possible.
- After: Provide technical support and maintenance for the deployed database. Implement any changes or enhancements requested by the customers or stakeholders. Optimize the database performance and security. Keep the database documentation up to date.

## **System Administrator**

- Before: Configure, install, and maintain the hardware and software components of the system
  infrastructure according to the software requirements and specifications. Implement the system
  security policies and procedures to protect the system integrity and confidentiality. Backup and
  restore the system regularly and ensure the system availability and reliability.
- During: Deploy the system to the target environment using automated tools and scripts. Monitor the system performance and activity and troubleshoot any issues that arise. Perform post-deployment testing and verification to ensure the system is functioning as expected. Report any bugs or defects to the quality assurance team and fix them as soon as possible.
- After: Provide technical support and maintenance for the deployed system. Implement any
  changes or enhancements requested by the customers or stakeholders. Optimize the system
  performance and security. Keep the system documentation up to date.

# **Project Manager**

- Before: Plan, initiate, and manage the software project according to the project scope, schedule, budget, and quality standards. Assign the roles and responsibilities to the project team members and stakeholders. Define the project deliverables and milestones and track the project progress and status.
- During: Coordinate and oversee the software development and deployment process and ensure
  it meets the project objectives and expectations. Communicate any changes or issues to the
  project team members and stakeholders and manage their expectations. Resolve any conflicts or
  problems that arise during the project.
- After: Close the software project and deliver the final product to the customers and stakeholders.
   Evaluate the project outcomes and benefits and compare them with the original project objectives and goals. Measure the project performance and feedback and report them to the senior management and stakeholders. Identify any lessons learned or best practices and share them with the project team members and stakeholders.

# **Cloud Engineer**

- Before: Design, develop, and implement the cloud architecture and solutions according to the software requirements and specifications. Select the appropriate cloud services and platforms for the software deployment and operation. Implement the cloud security policies and procedures to protect the cloud resources and data.
- During: Deploy the software to the cloud environment using automated tools and scripts. Monitor the cloud performance and activity and troubleshoot any issues that arise. Perform post-deployment testing and verification to ensure the software is functioning as expected. Report any bugs or defects to the quality assurance team and fix them as soon as possible.
- After: Provide technical support and maintenance for the deployed software in the cloud. Implement any changes or enhancements requested by the customers or stakeholders. Optimize the cloud performance and security. Keep the cloud documentation up to date.

#### References:

- <a href="https://www.itsm-docs.com/blogs/release-management/release-and-deployment-management-raci-matrix-template">https://www.itsm-docs.com/blogs/release-management/release-and-deployment-management-raci-matrix-template</a>
- https://docs.solace.com/Cloud/Deployment-Considerations/deployment-rolesresponsibilities.htm