

POST TITLE: Software Developer

BAND: 5

HOURS: 37½ hours per week

ACCOUNTABLE TO: Head of Informatics Programme

LOCATION: Mamhilad

1. JOB SUMMARY

- Reporting to Software Development Manager, the post holder will be part of a team that supports the IT infrastructure of Aneurin Bevan Health Board, which comprises over 100 sites, including hospitals, clinics and associated support and administration services.
- The post holder will be required to function effectively in a busy, customer focussed and technically challenging environment within the Informatics Division.
- The post holder will work as part of the Software Development team within the Informatics Division, to undertake the technical tasks required in providing a comprehensive application software development service for the Health Board and other NHS organisations.
- The post holder will be involved in the full software development project life cycle, at levels appropriate to the grade, to cover:
 - Liaising with customers to define the application requirements
 - Designing applications software and producing functional specifications
 - Database design
 - Producing technical specifications
 - · Developing software code
 - Producing test plans and test data that map back to the application requirements
 - Debugging the software, ensuring that it meets the quality standards and performs as specified
 - Implementing and deploying applications
 - Producing technical documentation to assist in the maintenance of the application
 - Producing operational procedure for the Informatics Division support staff
 - Producing user documentation to enable the customers to use the application
 - Providing training on the use of the application to the Informatics Division staff and customers
- The post holder will also undertake any of the above software development tasks required in providing a maintenance and support service for the applications developed.
- Team members are empowered to provide a level of service that will ensure fulfillment of the terms and conditions of the Service Level Agreement for the support of the applications between the Informatics Division and its customers.
- The applications developed by the team support the work of hundreds of users in the Health Board. Any issues reported on business critical systems must be responded to immediately, ensuring that the appropriate Informatics Division and Health Board staff are kept informed of progress.

- The post holder will assist in researching and contributing to the overall software development standards, technical development tools and procedures for the team.
- The post holder will need to develop and maintain strong working relationships with:

Informatics Division staff at all levels Health Board staff at all levels Other NHS organisations Third Party Suppliers

2. MAIN RESPONSIBILITIES

Communication

- Interaction with customers and the Informatics Division staff at all levels will be required.
- Complex technical information will be received and communicated. This information may be from technical reference material, from third party suppliers or from other teams within the Informatics Division.
- Complex technical information will also be provided to other technical staff.
- To assist Health Board staff in the use of IT hardware and software.
- To provide IT support to staff at all levels in the Health Board, organisations covered by Service Level Agreements and staff members of other NHS organisations.
- To actively participate in team meetings.
- Communicate effectively with customers by telephone and in person.
- Receive and record problems from users, gather prescribed information and escalate according to given procedures.

Technical Responsibility

- To be involved in the full software development lifecycle encompassing the design, development and implementation of computer systems and application software for the Health Board, other NHS organisations or third parties.
- To obtain and analyse customer information to identify system requirements for small projects.
- To undertake the complete design and functional specification of small applications, and assist in the design and functional specification of larger, complex systems.
- To undertake the technical specification of small applications, and assist in the technical specification of larger, complex systems.
- To assist in detailed database design and then to transform data models to appropriate physical database design.
- To contribute to the project plans and quality plans of a development project.
- Advanced technical software coding skills and specialist knowledge will be required to develop the applications.
- To ensure that the application software development adheres to the software development standards, including the software version control procedures.
- To develop test plans and test data to ensure required functionality, accuracy and quality has been met on own development work.
- To ensure that the integrity of the test environment is maintained.
- To analyse, investigate and resolve complex technical issues/problems, and to assist in providing appropriate solutions. This will require an analytical approach and advanced problem solving skills.
- To respond to and document the resolution/outcome for issues raised in the Quality Assurance process for the overall validation of the applications.
- To undertake the planning, implementation and upgrade of small applications, and assist in the planning, implementation and upgrade of larger, complex systems.

- To produce accurate technical documentation to assist the team in problem solving and in the maintenance of the applications.
- To produce accurate technical operational procedures to enable the Informatics Division staff to provide operational support for the application
- To produce user documentation to enable the customers to use the application
- To provide training on the use of the application to the Informatics Division staff and customers
- To be proactive in the resolution of customer issues, and to respond promptly to those issues.
- To diagnose and respond to user problems, in conjunction with the Informatics Division staff and third party suppliers.
- To ensure that work undertaken does not adversely impact on the availability of business critical systems.
- To maintain and support applications developed by the Informatics Division or supplied by a third party supplier.
- To ensure faults and requests are logged and updated in a detailed, accurate and timely manner on the Informatics Division/National call logging system.
- To ensure the time spent on tasks is logged in an accurate and timely manner.
- To assist in research and development into new technologies and systems that may be used within the Health Board, converting large amounts of information to concise overviews and presenting to technical and non-technical colleagues.

Key Security Tasks

- Assist in maintaining the Inventory of Assets
- To escalate any IT Security incidents that they may become aware of.
- To provide advice on equipment location and security.
- To escalate any IT related security weaknesses that they may become aware of.
- To respond to/escalate incidents involving malicious software or activity.
- Log all work via the Informatics Division/National call logging system.
- Protect data in transport from unauthorised access, loss, damage or destruction.
- Maintain complete software code safety and manage releases using the software version control procedures and processes, in order to protect the Health Board's installed and developing applications.

Policies and Procedures

- To ensure the accuracy of the information that is delivered to users via the systems developed within the department is accurate. This information may be clinical and the validity of the information displayed is therefore critical.
- To assist in the definition of software development standards.
- To provide and maintain full application documentation, covering technical documentation, operational procedures and user manuals.
- To ensure that scheduled work is completed within time-scale, to the agreed quality standards and in line with the departmental procedures.
- To familiarise oneself with and comply with Health Board, Informatics Division and Software Development team policies and procedures.
- Adhere to the Informatics Division procedures and its Quality Control system.
- Adhere to Health Board policies relating to dignity at work and equal opportunities.
- Adhere strictly to all policies and practices relating to health and safety at work, security and confidentiality.
- Acknowledge the importance of health records and the statutory restrictions placed on the use of personal information.
- Act responsibly at all times to preserve the integrity and confidentiality of Health Board Systems and/or Health Board or patient data. Act promptly to identify, record, report, and resolve or escalate instances where these might be compromised.

Human Resource Management

- To demonstrate the post activities to new or less experienced staff.
- To provide IM&T training to customers as required in pursuance of the role of the post.
- Provide advice and guidance to more junior staff when required.
- Contribute to the training, monitoring and mentoring of more junior staff as required.
- · Maintain good relations with work colleagues and members of the Health Board

Financial Management

- Act to avoid or reduce waste in the use of Health Board resources wherever possible.
- Treat Health Board assets and equipment with care with a view to extending life and avoiding waste.
- Ensure the integrity of the asset database, updating and correcting entries when inaccuracies and omissions are encountered.

Level of Delegated Authority

- To assist in the assessment of the security impact and implications of incidents and events that you become aware of.
- To escalate support issues as appropriate within the Informatics Division.
- To be able to act independently within the departmental guidelines or where supervision is available for reference.
- To decide when it is necessary to refer to an Informatics Division manager.

3 Personal Responsibilities

Directorate & Departmental Management Conduct

- As a member of the Informatics Division, contribute to a seamless response to the needs of the Health Board and its Directors, maintaining a professional approach and leading by example at all times.
- Promote the department and the Division at all times.

Continuing Professional Development

- Develop a personal development plan annually as part of the Individual Performance Review process.
- Keep skills up to date and relevant in order to carry out appropriate tasks in the areas
 of information and desktop applications.
- Use available resources to keep abreast of Health Informatics & Technology topics (Intranet, internet, reading materials, conferences etc)
- Ensure continuation of personal development including leadership skills, through appropriate formal and informal training as and when necessary.
- Keep up to date with legislation in relation to data protection, Caldicott principles, and confidentiality, Human Rights Act, Freedom of Information Act etc and the latest policies.
- Maintain registration of professional organisation, for example, UKCHIP

Health and Safety

Perform duties in a manner which will ensure the Health and Safety of all persons who may be affected by your acts of omission at work and co-operate within the Health Board to ensure that statutory and safety regulations are adhered to.

Confidentiality

The handling of information within the Health Board must be treated as confidential and disciplinary action will be taken in the event of a breach of confidentiality.

Data Protection

You are reminded of your duties and responsibilities as an employee under the Data Protection act of 1998, that you must ensure that personal data is not negligently or unlawfully handled or disclosed to unauthorised persons.

Information Security

Employees are required to comply with the requirements of the Health Board's IT Security Policy and standards to ensure that any information held on both manual and computer records are kept confidential and secure.

Other Duties

This job description describes the role in broad terms. The post-holder may be required to undertake any other relevant duties as required by the Assistant Director – Informatics.

Aneurin Bevan Health Board Informatics Programme Software Developer Person Specification

| | ESSENTIAL CRITERIA | DESIRABLE CRITERIA | METHOD OF ASSESSMENT |
|---------------|---|--|---|
| QUALIFICATION | Degree level, or equivalent qualification or relevant experience ECDL Certification, or equivalent qualification or relevant experience | Possessing a recognised IT Qualification | Application Form Certificates |
| EXPERIENCE | Relevant experience of using NHS Wales systems and applications Exposure to any the following languages VB.Net C#.Net ASP.net Java Python C++ (Or any other OOP language) Exposure to a relational database application such as: ORACLE SQL Server Access MySQL | Exposure to XML, XSLT Experience in the use of source code storage system Experience in the use of a call logging system Experience within a broad and complex corporate IT operational environment Experience of the software development project lifecycle – analysis, design, development, testing and implementation Experience of dealing with customers either face to face or over the phone Experience of supporting clinical applications | Application Form Interview References |

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|-----------|---|--|---|
| SKILLS | Excellent communication and interpersonal skills, verbal and written Able to deal effectively with staff at all levels in the organisation Able to interpret functional and technical specifications into working software solutions Able to explain complex technical concepts in plain terms Excellent analytical and problem solving skills Attention to detail, and a methodical approach to solving difficult and complex tasks Ability to complete complex technical tasks in the development of computer software Work in a high pressure environment, meeting tight deadlines and service delivery targets Able to read MS Project plans to identify tasks and deadlines Able to follow procedures Excellent organisational skills with the ability to mutli-task across multiple projects Excellent computing/keyboard skills | Able to deal effectively with customers and third party suppliers Ability to speak Welsh | Application Form Interview References |
| KNOWLEDGE | Experience of working in an NHS/Healthcare or Public Sector environment Evidence of experience with Windows PC and server operating systems Continuous updating with current technology within the IT industry Understands the Data Protection Act and its implications for the holding of patient information NHS Information flows / services | Knowledge of configuration management and version control software Formally trained in software development skills Knowledge of at least one system design methodology e.g. SSADM, UML Experience of Applications or Web Development | Application Form Interview References Technical Test |

| PERSONAL ATTRIBUTES | Able to work as part of a Team Able to work under own initiative and prioritise tasks Able to work under pressure Self motivated and enthusiastic, with the ability to work unsupervised Thorough approach to completing the task in hand Willing to share information Flexible in approach to work and adaptable Good time keeping Proactive outlook in the resolution of customer issues Analytical approach to tasks Able to develop and maintain highly complex technical applications | | Application Form Interview References |
|---------------------|--|------------------------------------|--|
| OTHER | | Ability to be independently mobile | Application Form Interview Document Check |