1. Job Details

Job title: **Senior Systems Designer 021G**

School/Support Department: **Management Information Services**

Unit (if applicable): **Development Team, part of Development Services Group**

Line manager: **Development Team Manager**

2. Job Purpose

To design, develop and implement IT systems to enhance the business and academic activities of the University. As a lead developer within project teams the post holder has responsibility for the systems analysis, design and technical architecture of the proposed solution and for ensuring successful development to produce an effective IT service. The 2 post holders each support the Development Team Manager providing line management and technical leadership for one of 2 teams of Analyst Developers and Senior Analyst Developers.

3. Main Responsibilities

1. Design and develop IT solutions which most effectively meet the requirements of the customer, create detailed technical specifications for programs and systems for use by Analyst Developers and Senior Analyst Developers, together with supporting estimation techniques and policies.  

2. Provide line management and technical leadership for a team of Analyst Developers and Senior Analyst Developers to ensure that staff have the support, motivation and skills to deliver required levels of performance.

3. Direct and guide staff in order to enhance effectiveness of project teams and ensure the quality and timeliness of project deliverables.

4. Apply understanding in one or more IT specialist areas to the solution of University business or computing problems disseminating knowledge and best practice in that area to colleagues both in MIS and externally.

5. Lead the development of technical standards or business processes for use by the team or the department as a whole to promote the quality, effectiveness and value for money of MIS delivered IT solutions.

4. Planning and Organising

- Producing technical specifications which provide the basis for development work undertaken by the team.
- Lead developer on projects co-ordinating and overseeing the technical work of the project team.
• Leadership and management of a team of Analyst Developers and Senior Analyst Developers including: estimation skills, appraisals, goal-setting, training, coaching/mentoring and resolution of issues.
• Managing personal workload of development tasks within agreed timescales to ensure project deadlines are met liaising with the Project Manager, line manager, colleagues and customers as required to advise on progress.
• Set up and management of internal technology groups to promote knowledge transfer and best practice within the team and MIS.
• Some duties may be urgent and reactive, e.g. providing technical assistance to solve immediate project/service issues.
• Providing IT consultancy, analytical and design input for key university wide initiatives requiring detailed understanding of technology options and likely business impacts. Recent and current examples of this work include: the Visitor Registration System and Identity Management System, MyEd, EASE/Cosign and University Web Site developments.

5. Problem Solving

 o Analysing requirements and designing IT solutions, often using new and innovative techniques, to solve complex business and technical problems typically working under pressure to meet business deadlines.
 o Resolving personal or professional issues raised by team members.
 o Identifying ways to successfully communicate technical information to customers so that specifications can be clearly understood and verified before development starts.
 o Responding to changing requirement specifications from customers advising Project Managers of likely impact on workload and deadlines.
 o Contributing to projects in a range of different areas in accordance with established project methodology, standards and guidelines, e.g. analysing test feedback and resolving design issues.
 o Providing specialist technical input and consultancy to resolve technically complex or critical support issues when required, both within MIS and the University.

6. Decision Making

 o Determine the most effective architecture and design of computer systems which best meet the requirements of the customer.
 o Resolve technical issues which have been referred by Analyst Developers, Senior Analyst Developers or other members of the project team.
 o Participation in recruitment selection panels for MIS and responsibility for organising and recruiting placement students from Napier University on an annual basis.
 o Providing time estimates for technical tasks to assist with project planning as part of agreed estimation process
 o Selecting the most appropriate programming method to solve a problem according to the agreed specifications and standards – this decision may be made by the individual but is constrained by previously agreed standards and specifications.
 o Identifying issues or problems which may jeopardise project deadlines or compromise the solution required by the customer and highlighting these issues or concerns to the Project Manager and/or line manager.

7. Key Contacts/Relationships

 o Working closely with staff from across the University, both technical and customers, who are involved in new software projects.
 o As lead developer providing primary contact point for Project Manager and customers for discussion and resolution of technical concerns.
External suppliers to review software and hardware, organise training courses,
software evaluations etc.

Attending at various internal and external committees, conferences and groups, e.g. UoE Information Services Disability Advisory Group, UK Cold Fusion Group, JA-SIG conference, in order to enhance knowledge and awareness of University and technology requirements whilst increasing public profile of MIS and the University.

8. Knowledge, Skills and Experience Needed for the Job

- A degree, or equivalent qualification, preferably in a computer related subject.
- At least 5 years experience of software development with at least two years’ experience working in a systems analyst or design role.
- Strong software development skills and expertise in technologies such as Java, Cold Fusion and PL/SQL and an ability to provide technical leadership.
- Experience or knowledge in other specialist areas such as business analysis, University business processes, project management and database/systems administration.
- Proven ability to manage a diverse team of highly skilled staff requires technical and personal credibility, maturity and excellent negotiating skills.
- Excellent analytical and problem solving skills
- Knowledge of relevant legislation, e.g. Web Accessibility
- Ability to learn new technologies apply these effectively in within a variety of business contexts.
- Effective communication and interpersonal skills are needed for liaison with others at all levels.
- Strong customer focus and team working skills.
- Maturity and confidence to work under pressure to deliver effective and high quality solutions.

9. Dimensions

- Line manager for 5/6 Analyst Developers and Senior Analyst Developers within the Development team.
- Co-ordination of development activities for up to 3 colleagues in project team.
- Resource provision to the majority of MIS projects – typically 60+ projects per annum.
- Contribute towards successful project delivery to 26000 MIS customers (3000 staff, 3000 visitors, 20000 students)
- Providing technology advice and information to 50+ staff across MIS.

10. Job Context and any other relevant information