## JOB DESCRIPTION

#### TO BE COMPLETED AND RETURNED BY:

IF COMPLETING ELECTRONICALLY, PLEASE NOTE THAT ARIAL FONT 10 MUST BE USED

**SECTION 1: HEADINGS** 

JOB TITLE: SYSTEMS DEVELOPER

**LOCATION: IT DEPARTMENT** 

REPORTS TO: IT SYSTEMS MANAGER

DATE: MARCH 2014

## SECTION 2 JOB PURPOSE

(Briefly state your job's overall objectives. "To .....")

To develop, integrate, maintain and support College software applications and databases across a range of platforms and environments.

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#### SECTION 4 DIMENSIONS

(Describe the information which helps in understanding the context and scale of your job)

MEMBERSHIP MANAGEMENT SYSTEM – Carry out software development and maintenance to enhance the main College membership management system application (DOX)

EVENT MANAGEMENT SYSTEM – Carry out software development and maintenance to enhance the main College event and room booking system (Diary)

OTHER DATABASE APPLICATIONS – Provide software development and support for all main College databases and database applications

NEW APPLICATIONS – Identify and document requirements, complete software development then test and implement new applications for use on desktop and/or mobile devices

#### SECTION 5 Main Responsibilities

(Describe the important end results you are expected to achieve)

To carry out software development, application updates and database maintenance with a number of bespoke and off-the-shelf software applications that are used to support business activities related to College Fellows and Members and other commercial services including but not limited to:

- DOX Membership Management System [SQLAnyWhere database / Delphi]
- DIARY Events Management System [SQLAnyWhere database / Delphi]
- Website integration with multiple systems (in conjunction with the Webmaster) [MySQL database]
- Online Enrolment System integration with DOX [Microsoft SQL Server database / PHP]
- C Series Direct Debit System integration with DOX [Microsoft SQL Server database]
- Online Events Booking System [MySQL database]

Additionally provide technical support for these systems including troubleshooting application or database problems in conjunction with the IT Systems Manager and external developers and providing general technical support where required.

Document user requirements then further developing existing applications by identifying areas for modification through functional analysis. Create application specifications for internal and external development purposes where required. Carry out software testing and fault finding.

Implement and test suitable application security that is appropriate to the way the application will be used and accessed as well as the data it contains

Assist with integration of existing applications and databases.

Creation of technical specifications, test plans and user documentation.

Assist with implementation and testing of disaster recovery and business continuity arrangements for key business applications.

To assist staff with hardware or software difficulties to minimise down time or disruption of their work relating to key IT services including local area network, e-mail system, back-up/recovery systems and anti-spam/anti-virus applications.

## **SECTION 6 PLANNING AND ORGANISING**

(Describe the requirement for planning and organising in your job)

The IT team creates an annual Operational Plan that will include the main software development projects however it can be expected that there will be additional detailed planning and organising tasks that the post holder will carry out before commencing these projects and in response to unplanned projects that get approval.

Assessing work as it comes in to determine how urgent it is. Some things are time-sensitive and have to be done straight away or done at certain times.

Urgent problems affecting software applications have to be dealt with re-actively and a current task may have to be stopped in order to deal with the more time-sensitive task.

Work will be scheduled in discussion with the IT Systems Manager on a monthly basis.

#### **SECTION 7 DECISION MAKING**

(Describe the responsibility of your job in decision-making)

The postholder will be responsible for providing professional advice and implementing the most appropriate technical solutions, as agreed with the IT Systems Manager. Once project decisions have been taken, the postholder will be expected to work with minimal supervision.

Advising on the most appropriate development solutions based upon analysis of operational needs.

Determining the best methods to implement software changes or enhancements to existing or new applications (including resolving problems and improving performance)

In the I.T. Systems Manager's absence decisions about restarting applications or servers may have to be taken at short notice and advice provided re when to engage external consultants.

## SECTION 8 INTERNAL AND EXTERNAL RELATIONSHIPS

(Identify the most significant internal and external relationships that you have in your job)

#### Internal Relationships:

The post holder will work very closely with the IT Systems Manager and Webmaster

Working closely with selected staff and Heads of Department to take forward specific software development projects

This job will require contact with most College staff and some Officebearers, over time, as the main business applications are widely used by staff

#### **External Relationships:**

Suppliers of our main software applications

## SECTION 9 KNOWLEDGE, SKILLS AND EXPERIENCE NEEDED

(What kind of knowledge, skills and experience are necessary to enable satisfactory performance in your job)

IT degree level qualification

Strong knowledge of IT systems and software development involving both commercial and open source software development tools

Experience of developing complex applications with specific development skills – Developing Windows applications (essential), PHP (desirable), Delphi (desirable)

Some knowledge of architecture and design tools and methodologies

Knowledge of database structures and reporting systems with specific database skills – MYSQL, MSSQL, MySQLAnyWhere

Understanding of project management methodologies

Relevant experience of supporting and developing business applications

Good skills in the use of HTML and Cascading Style Sheets, PHP, web standards, accessibility and JavaScript are required to assist Webmaster with maintain of College hosted websites.

A moderate understanding of Linux and Apache, and good knowledge of MySQL, PHP, SQL Anywhere and DNS is required to support applications that integrate with websites hosted within the College server infrastructure

Broad awareness of networking, servers, desktop operating systems and Internet technologies

Understanding of business analysis methodologies and some experience of carrying out analysis of user and business requirements as part of software development projects

Ability to assist with set up computers, replace faulty equipment or install new hardware components where required

Ability to deal with competing priorities and to work flexibly

Good communication and documentation skills

#### SECTION 10 JOB CONTEXT AND SPECIAL FEATURES

(Identify aspects of the context and any special features which you believe impact significantly on your job)

The RCPE currently has a small in-house IT Team responsible for managing the network, websites, telephone system, server infrastructure, Internet access and providing IT support to staff. The RCPE has begun restructuring its IT service so that a greater degree of routine and advanced systems and network support is carried out in-house. Major changes to the ICT infrastructure are underway to ensure the reliability, performance and sustainability of the services provided in the future. The department is nearing completion of a sweeping series of upgrades and replacement of systems that include network monitoring, server virtualisation, replacement backup software/hardware, additional Internet resilience, new telephone system, new website content management system, e-learning system upgrades, Novell to Microsoft networking migration, systems integration, roll out of new Cisco network, extended coverage and reconfiguration of the College wireless network, firewall replacement, a move from GroupWise to Exchange for email and a replacement mobile solution for the existing Blackberry based service.

The delivery of these improved services and continued technical development and integration of the RCPE ICT infrastructure requires an effective in-house IT team that work closely together. Members of the team require a good cross section of skills and must be prepared to assist with the work of their colleagues where required. At times there can be a great deal of pressure to cope with complex requests within a tight time scale, therefore there is a need to be flexible with work flow.

#### SECTION 11 VERIFICATION

We are satisfied that the contents of this questionnaire conveys an accurate description of this post				
,	Job Holder:		DATE:	
L	INE MANAGER:		DATE:	