

The University of Manchester

Job Description

Job title:	Software Developer
Reports to:	Senior Software Developer (Management)
Organisation unit:	University of Manchester Library: Research and Digital Horizons
Date:	January 2021
HERA:	MAPPS-UML-R&DH-DD-E (411, Grade 6)

Overall purpose of the job:

To work closely with colleagues in the Digital Library Applications Development Team to develop, test and maintain robust applications and services in support of the strategic objectives of The University of Manchester Library

To liaise with different departments across the Library in order to gather user requirements, receive feedback on developments and to implement and support changes following an appropriate development methodology

Key responsibilities:

- To contribute to an environment that values and celebrates the diverse nature of the University of Manchester's population and to take positive steps to achieve equality in the workplace and to both meet and exceed our obligations under equality legislation
- To develop software applications to support the delivery of Library services using a proven development methodology
- To work with end users to identify and resolve problems and issues with applications
- To translate requirements into robust applications ensuring they are delivered to defined timescales
- To create test plans and carry out appropriate testing of developed software
- To ensure all software is documented and version control maintained. Including: bugs fixed, emergency releases, minor changes and major changes etc
- To ensure developed services comply with necessary standards including data integrity, accessibility and security
- To carry out training for new systems and applications as appropriate
- To investigate the use and adoption of new technologies, languages and methodologies
- To liaise with external suppliers where necessary

- To be responsible for compliance with and the embedding of University policies, procedures and requirements - in particular those relating to health and safety; equality, diversity and inclusion; and information governance
- Such other duties as may reasonably be associated with the grade and a role of this nature
- To work at any Library site as required
- To be flexible in relation to hours of work as may be reasonably requested from time to time
- To wear supplied Library branded clothing during defined promotional activities and special events
- To understand the specific context within which the role operates and how it relates to the wider University goals and business processes, in order to facilitate informed decision making
- To ensure the working environment reflects the University's and Library's values

Person Specification

Essential knowledge, skills and experience:

- Either a relevant Honours degree plus appropriate practical experience in a similar or related role(s) **OR** significant vocational experience, demonstrating development through the acquisition of appropriate professional and specialist knowledge and involvement in a series of progressively more demanding relevant work/roles
- Ability to work effectively within a team
- Excellent communication, presentation and interpersonal skills
- Knowledge of user requirement gathering techniques
- Knowledge of developing systems using a proven 'life cycle' methodology, in particular agile development
- Extensive technical expertise in Java-related software frameworks and technologies
- Proven expertise of MEAN-stack development (MongoDB, Express, Angular, Node)
- Appropriate knowledge and expertise in web technologies – HTML5, CSS, Javascript, XML, XSLT, JSON etc
- Knowledge and experience of using RESTful web services
- Solid grasp of the principles of relational database technologies and experience of relational database development
- Knowledge of project management methods and techniques and proven ability to deliver projects to agreed specifications and deadlines
- Knowledge of usability and accessibility issues governing the use of web-based systems e.g. WCAG

Desirable knowledge, skills and experience:

- Knowledge and experience of Java frameworks e.g. Spring
- Experience in developing mobile applications using frameworks such as PhoneGap, Apache Cordova
- Knowledge and experience of using Typescript
- Knowledge and experience of Microsoft .Net Technologies
- Ability to maintain software versioning using Git

- Ability to use and design complex datatypes and algorithms
- Knowledge and experience of using Artificial Intelligence/Deep Learning