Job Description

This form summarises the purpose of the job and lists its key tasks. It is not a definitive list of all the tasks to be undertaken as those can be varied from time to time at the discretion of the School, in consultation with the postholder.

Job title: Integration Specialist (Developer)

Department/Division: DTS

Accountable to: Head of Data and Development

Job Summary

The Integration Specialist (Developer) will take a lead on the analysis, design, technical development, and deployment of data and application integration processes for services provided to the LSE by the Data and Technology Services division. Working as part of the Integration team and the wider Solutions and Partnering Group, the role will be involved across all aspects of service delivery including project work and continuous service improvement.

The role requires broad knowledge and experience in data and process integration in an enterprise database environment, with a focus on development and support of ETL (extract-transform-load) packages, as well as data preparation and transformation. In addition to providing solutions for integrating COTS (customised off the shelf), SaaS (software as a service) and bespoke business applications. This role plays a lead role in supporting existing integrations and bespoke applications, but also the transformation of data management and application development towards an integration platform and cloud development platforms.

The post holder will be expected to play an active part in promoting the School's use of data by involvement in the Data Standards Group and communities of practice, and will work in close collaboration with colleagues in DTS and the business-led technology teams across the LSE.

DTS is supporting the LSE 2030 strategy through programmes of transformation and change covering integration, data standards, identity management, and the removal of legacy applications and technical debt, all within an objective to make greater use of Cloud services. The Integration Specialist will be a key role in progressing the work of these programmes.

Duties and Responsibilities

Service Delivery

- Design and develop integration packages, ETL processes, data preparation workflows, and related technical solutions, to meet agreed requirements and using current tools, e.g. Oracle PL/SQL, MS SQL Server, Anypoint Platform, Cloudhub but also through developing knowledge of tools new to LSE (Salesforce, Mulesoft etc.) This will involve an environment comprising multiple and varied database technologies, including Cloud services.
- Identify, define, and resolve issues and problems in a complex and changing technical environment.
- Collaborate with DTS colleagues, and external partners or suppliers when required, to manage and resolve incidents, and fulfil service requests, making use of IT Service Management processes and tools.
- Work with the Data Analyst, Data Architect, and system owners to identify issues with data quality, and contribute to the development of data and integration platforms for an API/Middleware approach to data management.
- Work closely with the Technology Operations and Cyber Security teams to ensure that data is accessed and processed securely and in accordance with LSE policies, and in a manner that does not have a negative impact on the performance or integrity of the School's infrastructure and systems.
- Work closely with analysts to understand and incorporate business requirements (both functional and non-functional) into the overall solution
- Lead or participate in workshops and data discovery exercises to explore and identify requirements and uses for data and integration solutions.
- Identify relevant problems and risks and ensure that these are raised and recorded, taking the initiative to identify potential solutions or mitigations where appropriate.
- Plan, prioritise, and manage own workload to enable the realistic allocation of resources and to ensure that objectives are met, including contributing to the maintenance of the team operational programme of work.
- Prepare documentation, using appropriate tools and formats, to cover the solutions and processes developed and supported by the Integration team, including data models and flow diagrams, to support service transition, training, and ongoing support and improvement.
- Contribute to the definition and implementation of technical aspects of the solution (integrations), and guarantee code quality through appropriate testing (Unit, MUnit) and bug fixing
- Identify and document innovative development techniques and reusable pieces of code, and support the testing team in performing their tests, by way of code deployment and configuration
- Understand and follow the DTS Change Management and Release processes for deployment of solutions, and transition of services from development to production.

Projects

- Participate in multiple cross-functional project teams, working with project managers from DTS.
- Contribute to the analysis and development of requirements and specifications for integration work.
- Estimate the resources and effort required for successful project delivery.
- Develop and coordinate appropriate functional and user acceptance test plans.
- Engage with use of tools and methods for managing project work and communication e.g. GitLab, MS Teams, Shortcut, stand-ups, retrospectives.

- Act as technical lead on team-level projects, where possible.
- Assist with the recruitment and management of project-specific contractors.
- Where required oversee work of contract resources within the integration team

Collaboration

- Build effective working relationships with colleagues in DTS and the business-led technology teams across the LSE.
- Assist in vendor relationship management by maintaining relationships with external suppliers, consultants, and sector partners.
- Actively contribute to DTS and the wider School through membership of appropriate working groups and communities of practice, in particular the Data Standards Group and Developer Community of Practice.
- Liaise with Business Partners and contacts in other departments to develop and maintain an awareness of projects and activities across the School that require and/or impact on the delivery of integration and data solutions.
- Provide technical assistance to the Strategy and Architecture team in the development and implementation of an enterprise data architecture.
- Build and maintain a broad and deep subject matter expertise for data and integration, and apply this to the investigation and resolution of issues, the identification of opportunities for continuous service improvement, and the evaluation of new and alternative tools and methods.
- Research and advise the Integrations team on new or existing products within the commercial marketplace to meet identified needs, and raise awareness of new and emerging technical and operational standards that have relevance to DTS.
- Prepare and deliver presentations to both technical and non-technical audiences in order to demonstrate the functionality and value of integration technologies, and to promote the use of data.
- Establish the technical authority to provide guidance to colleagues on the recommended and appropriate use of integration approaches and methods.
- Share knowledge and experience with peers in and outside of the academic community by attending and contributing to relevant events and conferences.
- Act as a mentor/coach to other members of the Integration team, sharing experience and providing help and support, particularly when attempting to solve complex problems or when colleagues are absent.

Flexibility
To deliver services effectively, a degree of flexibility may be required in the duties performed in order to meet the exigencies of service. Job roles may also naturally develop over time and ongoing substantial changes to a role will be discussed between line managers and their staff, with job descriptions updated as and when appropriate.
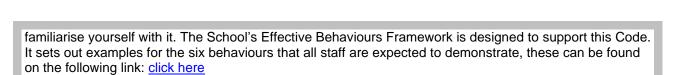
Equity, Diversity and Inclusion (EDI)
LSE is committed to building a diverse, equitable and truly inclusive university. All posts (and post holders) will seek to ensure diversity and inclusion, while opposing all forms of unlawful and unfair discrimination on the grounds of age, disability, gender identity, marriage and civil partnership, pregnancy and maternity, race, nationality, ethnic or national origin, religion or belief, sex and sexual orientation, or social and economic background.

Ethics Code
Posts (and post holders) are assumed to have a responsibility to act in accordance with the School's Ethics Code and to promote the principles and values that the Code enshrines. The Ethics Code clearly states that the whole LSE community, including all staff, students, and governors of LSE, are expected to act in accordance with the principles which are set out in the Code. As such you are required to read and

familiarise yourself with it. The School's Effective Behaviours Framework is designed to support this Code. It sets out examples for the six behaviours that all staff are expected to demonstrate, these can be found on the following link: click here

Environmental Sustainability
The post holder is required to minimise environmental impact in the performance of the role, and actively contribute to the delivery of the LSE Environmental Policy.