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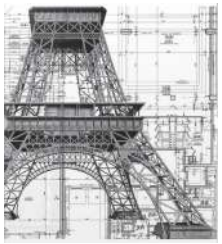
Facilitating Desirable Business Change

Solution Architecture



Duration

3 days

Online Delivery

Daily live sessions with lecturer via Zoom.

Access to course content and session recordings via Ruzuku.

Solution Architecture

Solution Architecture is the incredibly vital and challenging discipline of fully understanding user and enterprise requirements and designing and realising effective solutions which leverage the latest technology, delight users and are still reliable, robust, scalable and maintainable.

The role is complicated by heightened user expectations, rapidly changing technology, ever expanding application use cases and demands for security, compatibility and interoperability.

Audience and Benefits

The course is designed for solution architects, senior application developers, application architects and integration architects who are, or who will become, actively involved in specifying, modelling, analysing, designing and integrating application systems used in businesses.

Those concerned with public applications (e.g. the websites, portals, web services, mobile apps and applications) exposed outside your traditional user base will also benefit.

Effectively use many new options in application design including web, mobile, cloud, APIs, containers, serverless, AI, open source and more

Understand the data storage options available beyond relational database, including document, NOSQL, semantic and graph stores

Understand the context, challenges, opportunities, risks and strategic options of an enterprise's use of technology and applications

Integrate your solutions effectively at the application, enterprise landscape and ecosystem level

Create applications which meet business and non-functional requirements, eliminate technical debt, facilitate agility and leverage appropriate technologies and delivery methods

Create applications that deliver a great user experience, are reliable, scalable and maintainable

Course Orientation

It is a skills course rather than a methodology course, designed to expose participants to leading techniques and ways of presenting models and results of analyses.

There are now many courses addressing Enterprise Architecture from a methodology point of view (e.g. Open Group TOGAF® or Zachman).

There are also courses that address specific vendor applications such as SAP, Oracle, Microsoft, etc. The former lack detail on how to model applications and solution architectures, how to analyse the resulting models and strategies to achieve better solutions, integration and quality. The latter are too specific and do not address the

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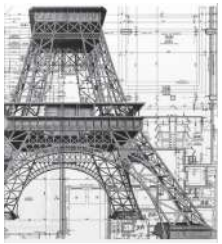

broader issues of interfaces, interoperation and integration.

Why Inspired?

Delegates will benefit from the expertise of the course leader and his team at Inspired. The course draws on our 30+ years experience in business and academia as well as industry best practice to deliver a valuable set of tools to equip solution architects.

Unique content shared

- Composite applications using components, APIs, services and multiple technologies
- New technology impact: Internet of Things (IOT), Mobile and Wearables, Cloud and Virtual, Big Data, Semantic Technologies, AI
- Digital Disruption and the role of applications
- Maturity and Industry Reference Models
- Requirements definition
- Use of patterns
- Interface and integration options
- Technology choice criteria

Course Overview

Moving from high level business requirements and possibilities, through logical applications and down to physical applications and components, the course covers the levels of application modelling and management required to fully understand solutions from an enterprise, business, application, data, user, technology, performance and security perspective.

It discusses existing and emerging technologies to help the architect leverage application investment to strategic advantage, from high volume transaction processing, to decision support, from secure private data to distributed mobile applications. It provides an introduction to SaaS and cloud based applications. Finally, the principles, options and use cases for AI and machine learning are explored.

Examples and selected short videos stimulate delegates to think beyond the norm and out of the box. We will connect delegates to sources of information for ongoing enrichment as well.

Case study work in small teams allows delegates to perform analysis and devise architectures and strategies. Teams compete and learn from each other before experiencing another facet of the challenge.

The course stresses holistic consideration and the interplay of many factors that affect the outcome of architecture, modelling and design decisions.

Typical Coverage

Detailed coverage of solution architecture, including:

- Changing Context & Expectations
    - Technology Capabilities
    - User Expectations
    - Extended Value Chains
    - Multi-sourcing & Services
    - Internet of Things
    - Mobile and Wearables
    - Cloud & Virtual
    - Big Data
    - Semantic technologies
    - Digital Disruption
    - AI and ML
    - Analytics & Visualisation
- Application Architecture
    - Reference Models
    - Principles

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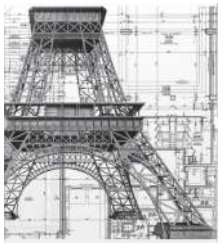

- Requirements
  - Business Goals
  - Constraints
  - Stakeholders
  - Scope
  - Functionality
  - Data and Information
  - Process and Workflow
  - Interfaces and Services
  - Non-Functional Requirements
  - Security and Privacy
  - Performance
- Logical Solution
  - Patterns
  - Components & Containers
  - Types of Technology
  - Interfaces
  - Services
  - Process
  - Responsibility
  - Data Model
  - Sourcing
  - Resources
  - Skills
  - Infrastructure
- Physical Solution
  - Language
  - Technical Components
  - Framework
  - Database
  - Interfaces
  - Platforms/Services
  - Directories, Registries
  - Testing
  - Distribution
  - Training
  - Documentation

Platform

To support learning, we use the Ruzuku course delivery platform. This allows us to provide course overviews, online enrolment and payment, online course structure and progress tracking, forums for student collaboration, recorded session videos and support materials such as white papers, readings, example models and video clips.

We make use of Zoom for live lectures with rich student interaction via video, audio, screen sharing, break-away rooms and chat facilities. Students will need a PC / Mac / high end tablet and a reliable Internet connection to participate. Lectures are recorded for catch up and review.

We will share examples in our enterprise level enterprise modelling and knowledge management platform: Enterprise Value Architect (EVA) to demonstrate what an integrated tooling environment can achieve. Of course, techniques can also be supported by other competent toolsets.

Provided Materials

Delegates will be provided with high quality notes and links to media and references to pursue further investigation.

Location, Costs and Dates

This course is currently offered internationally for remote delivery at times convenient for Europe, Middle East and Africa. Please see our schedule on the website for dates and pricing for your region.