

Architect 101

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IBM
Fast Start
2021



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Please have your camera on when in session, if possible.



Focus and do not work on other tasks while in session.



Please participate in your session and ask questions. We encourage interactivity.

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The Top 5 Secrets of IT Architecture

“Design is a plan for arranging elements in such a way as best to accomplish a particular purpose.”

Charles Eames

The Information Machine, 1964

Why bother with Architecture?

It's a design process which ensures you deliver something that is workable, efficient, meets it's needs and can adapt to the future

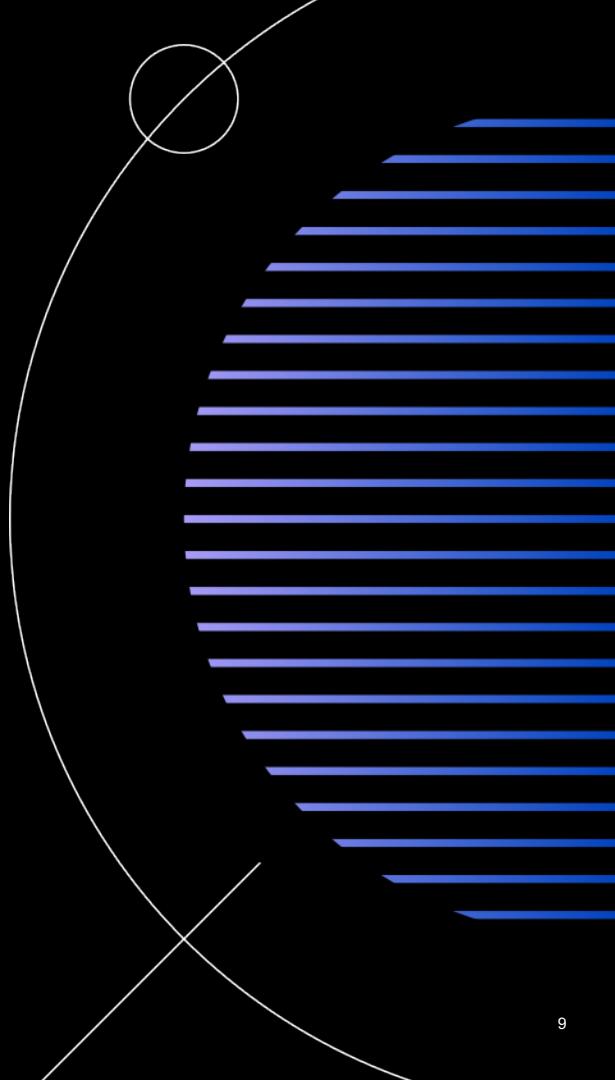


What happens when you don't?

Disasters can happen.....



**A well architected IT system is far more likely
to meet requirements and delight your
customer.**



So, what are the Top 5 secrets of creating a good architecture?

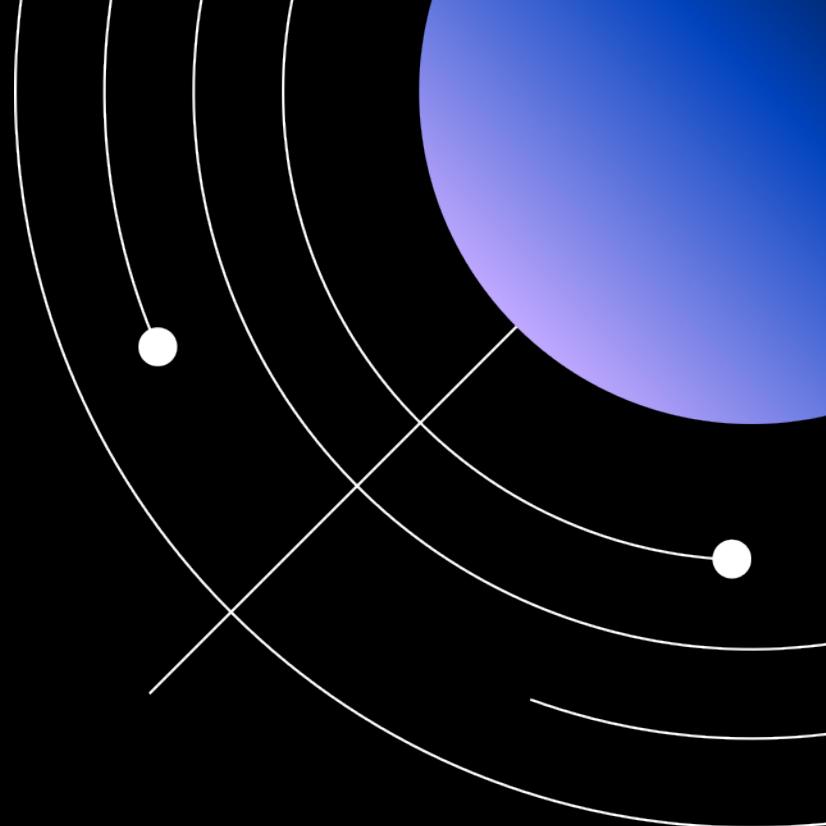
Requirements

Decisions

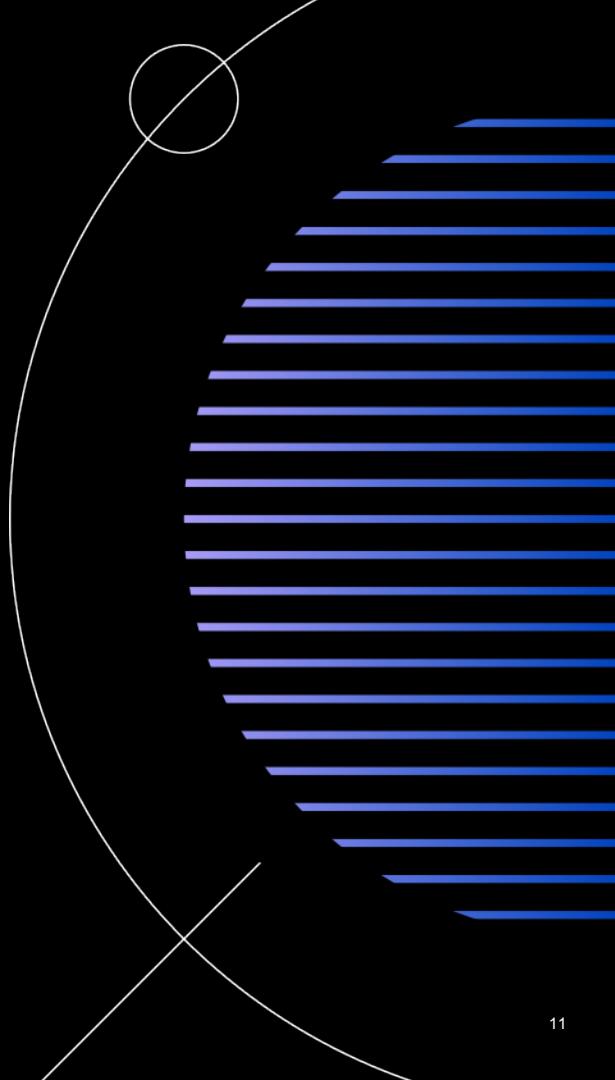
Diagrams

Knowledge

Network



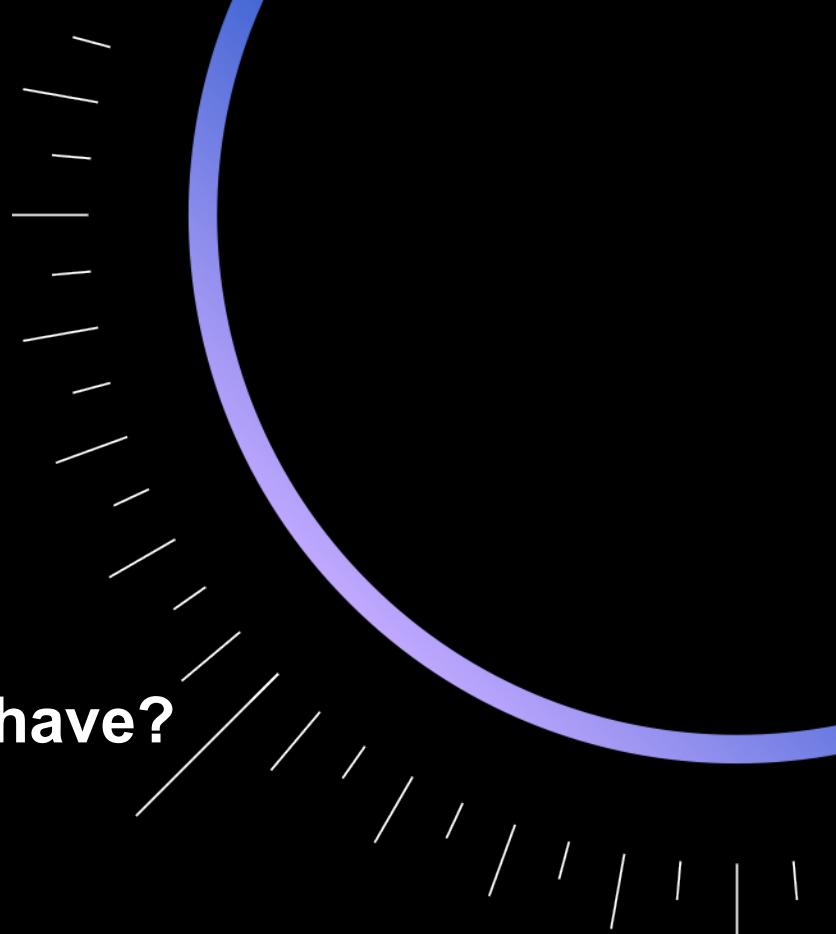
If you don't know
what's required,
how are you going
to get it 'right'?



Functional

What must the system do?

(e.g. Input and record customer information)



Non-functional

What properties must the system have?

(e.g. Be available for use 99.99% of the year)

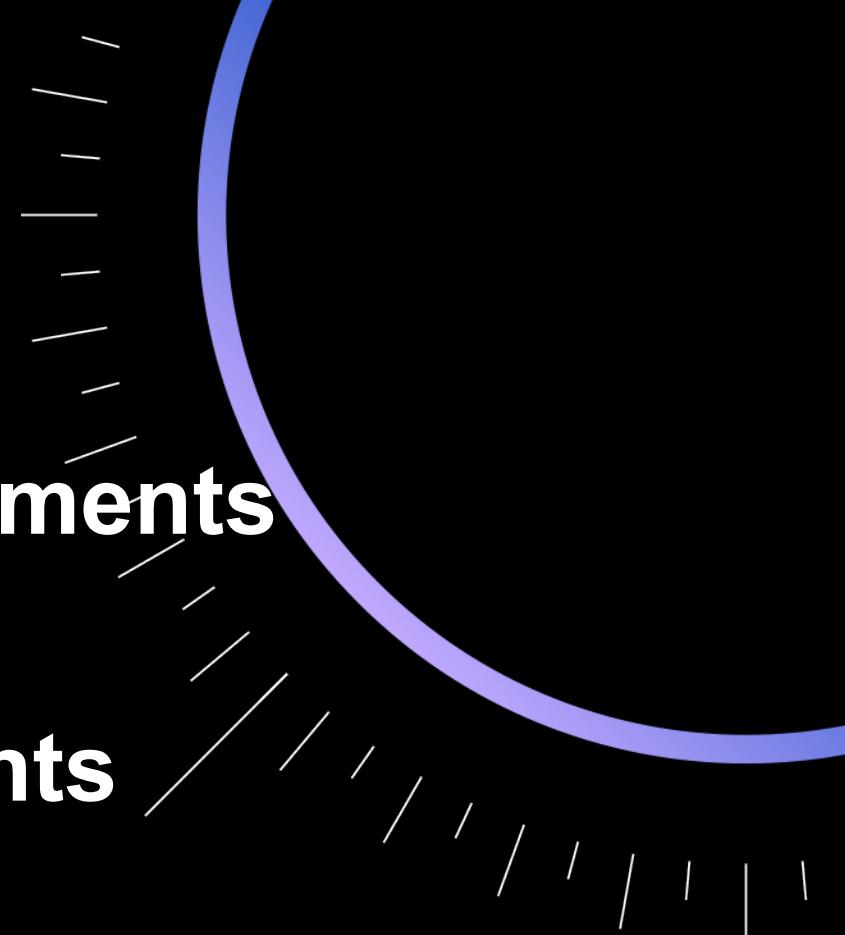
Oh, don't forget about constraints.....

Talk to your customer

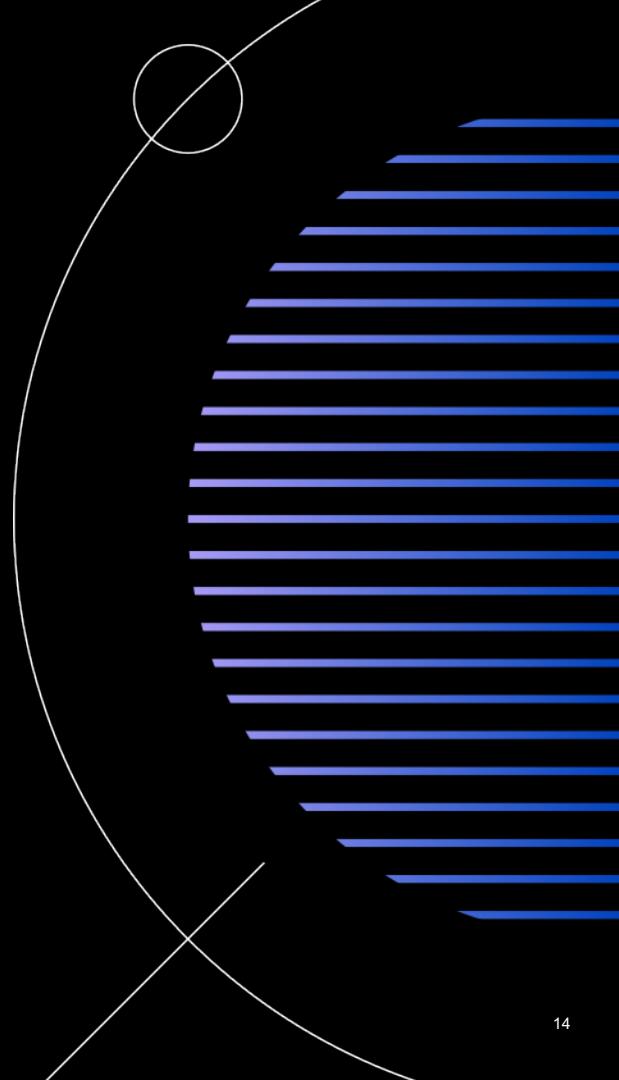
Document the Requirements

AGREE the requirements

(this avoids scope/project creep)



Take ‘Architectural Decisions’ – and document them



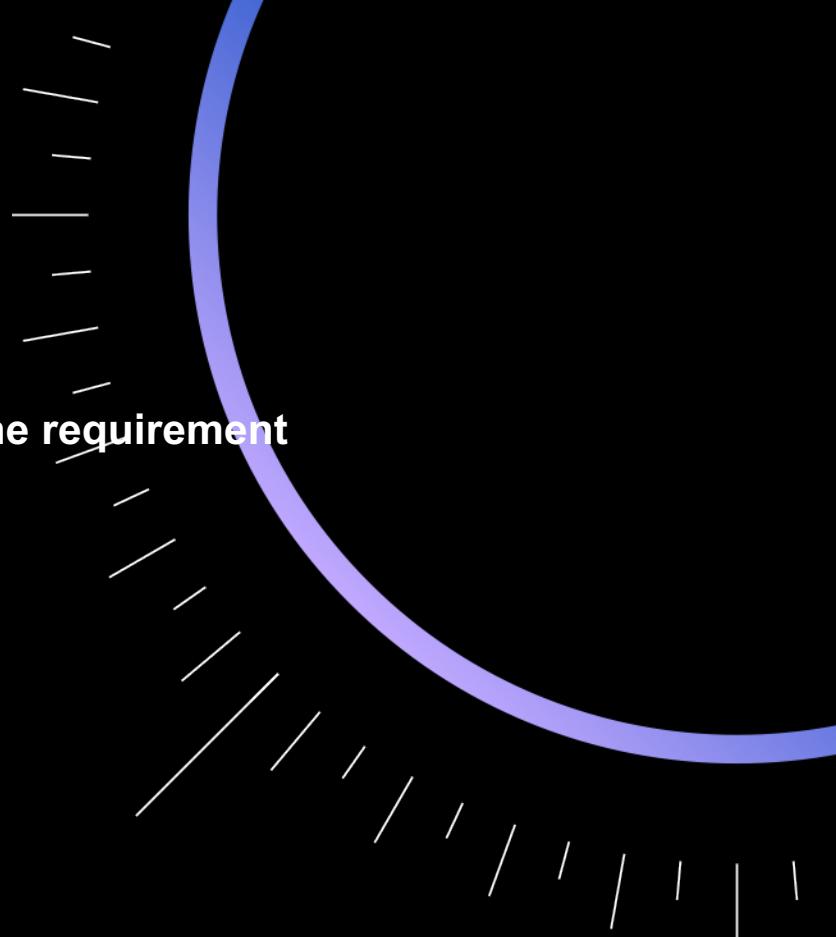
Decisions

Simple Architectural Decision example:

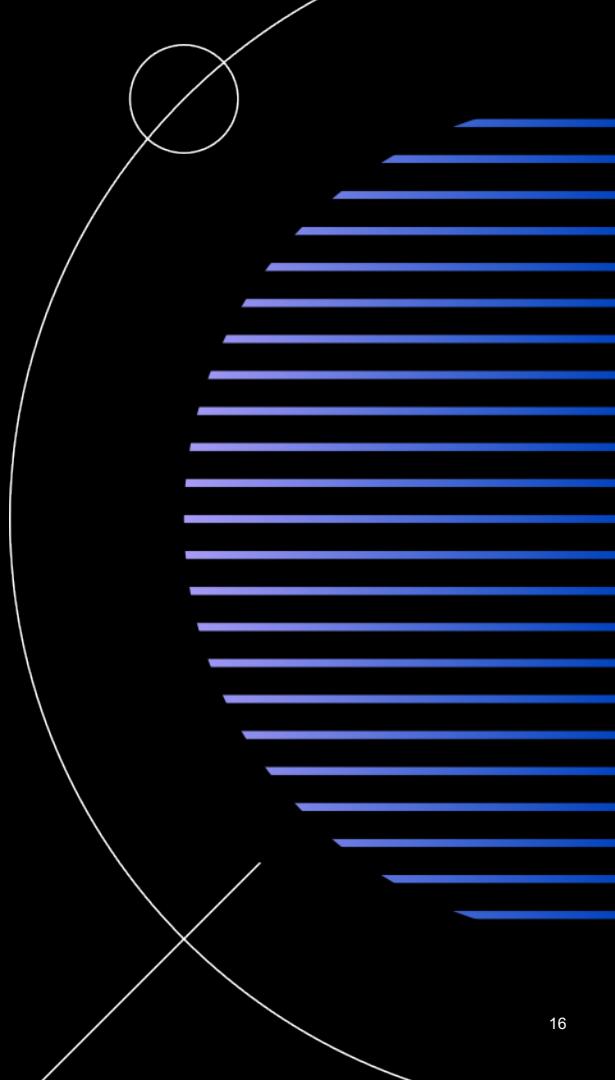
The solution will be built using

**The reason for selecting was because it met the requirement
to..... and.....**

..... Was considered and rejected because.....

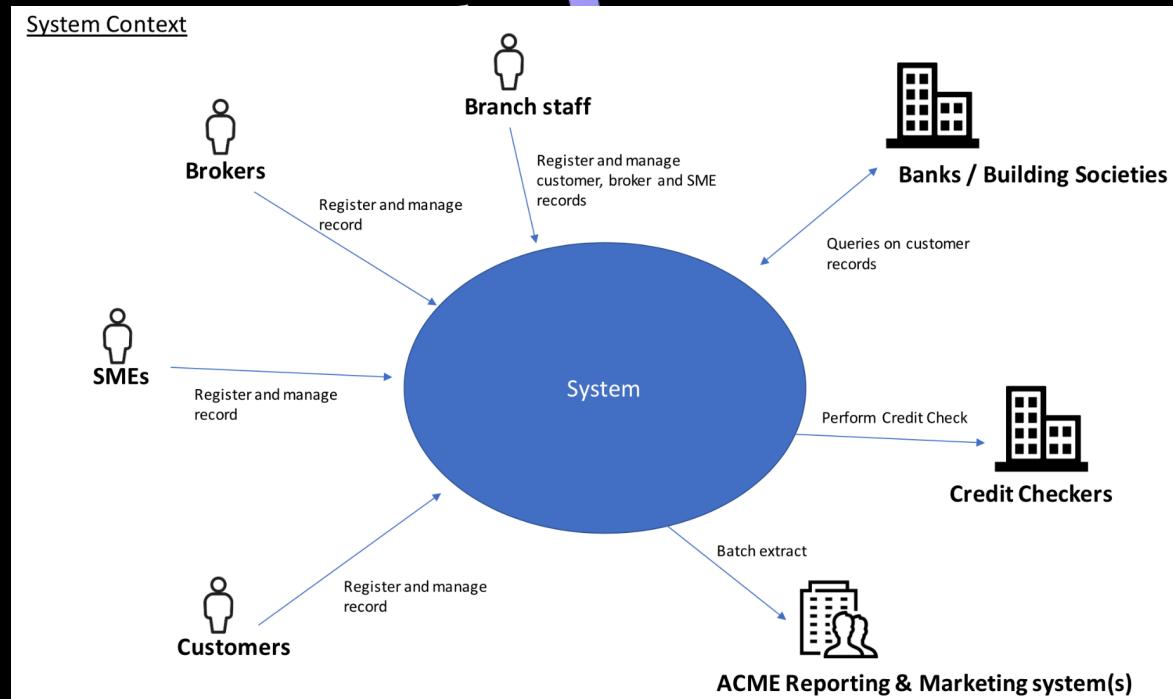


A simple diagram saves
1,000 words.....



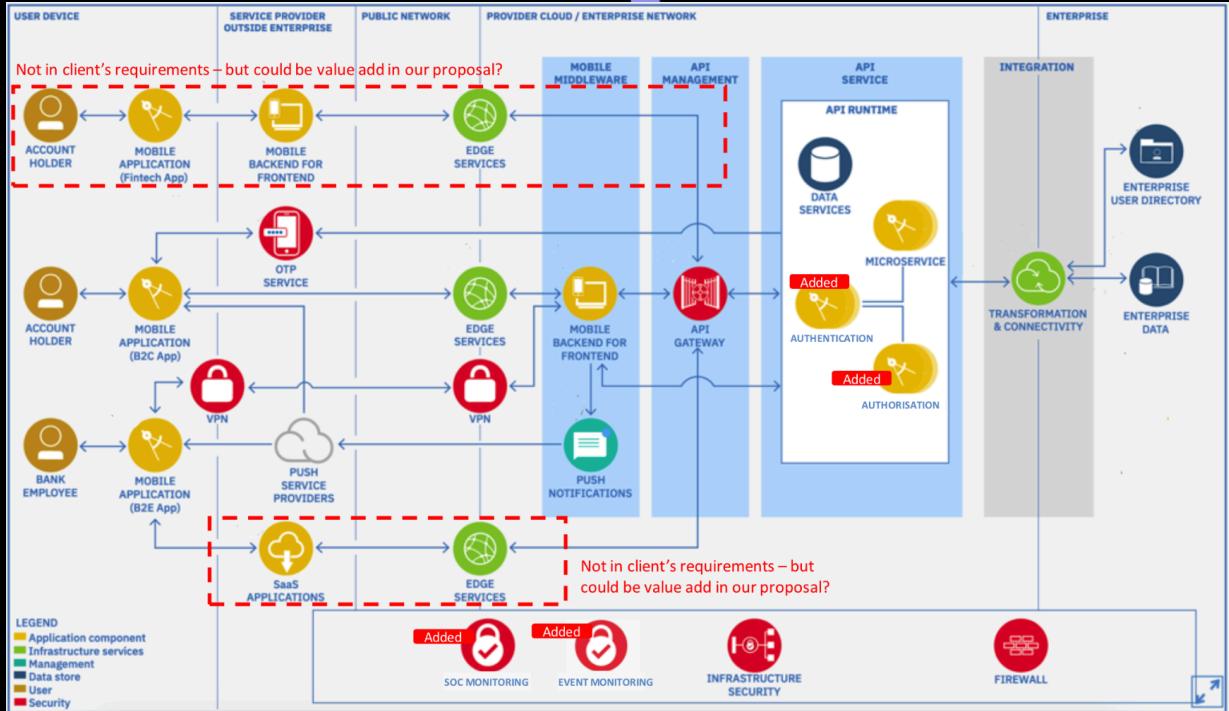
Diagrams

System Context – how does the proposed system sit, what does it need to interact with?



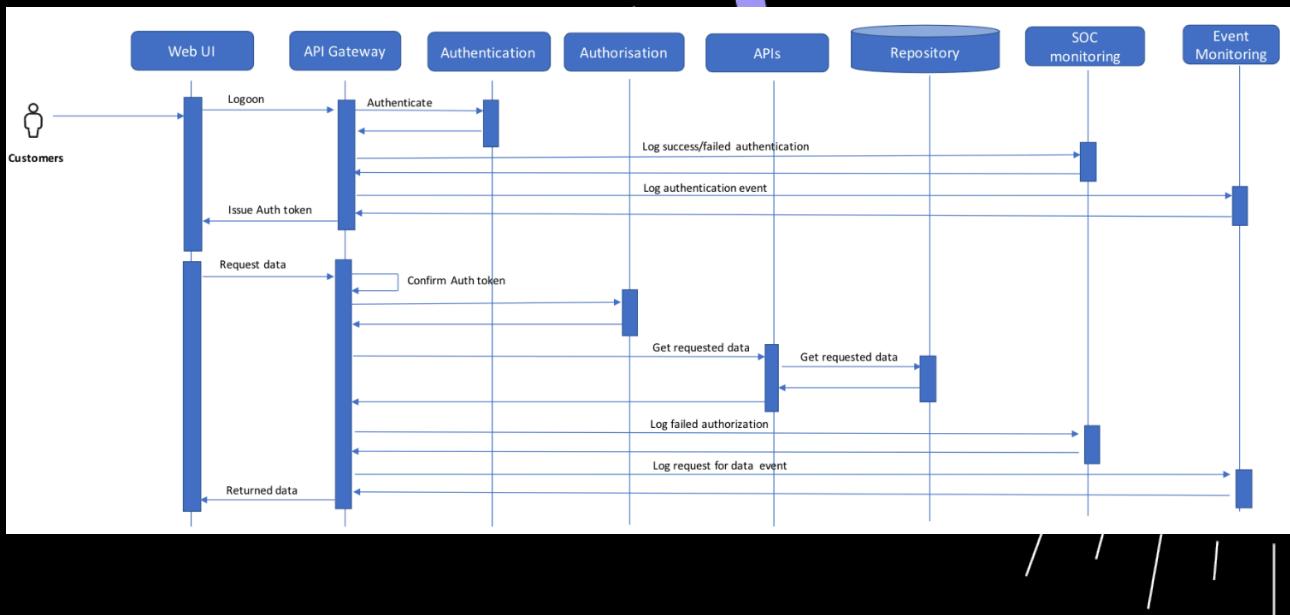
Diagrams

Component – what are the different components and how do they connect together?



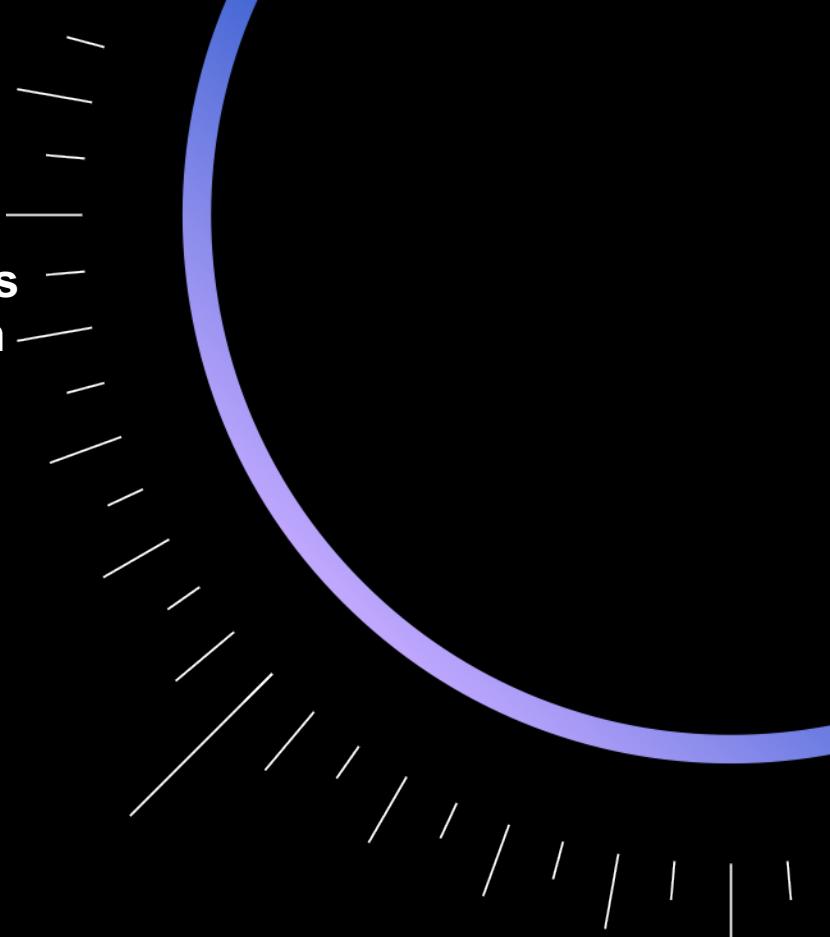
Diagrams

System interaction – how do requests get handled by the system?

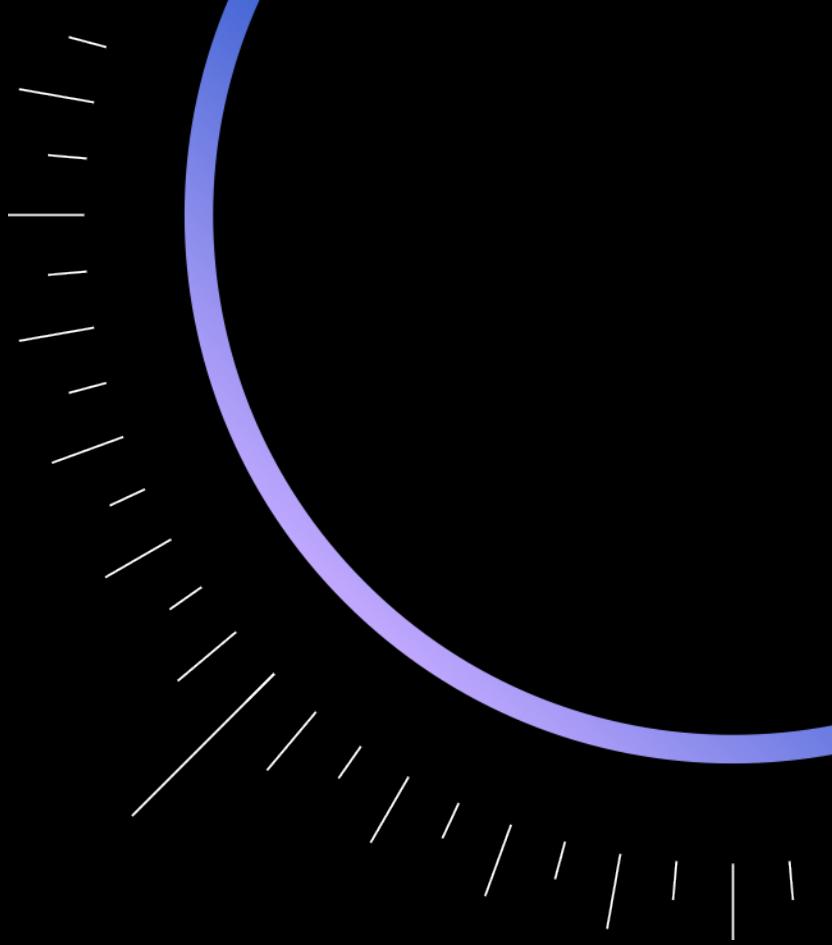


Diagrams

Use diagrams to explain how your solution fits together as well as a means of documentation

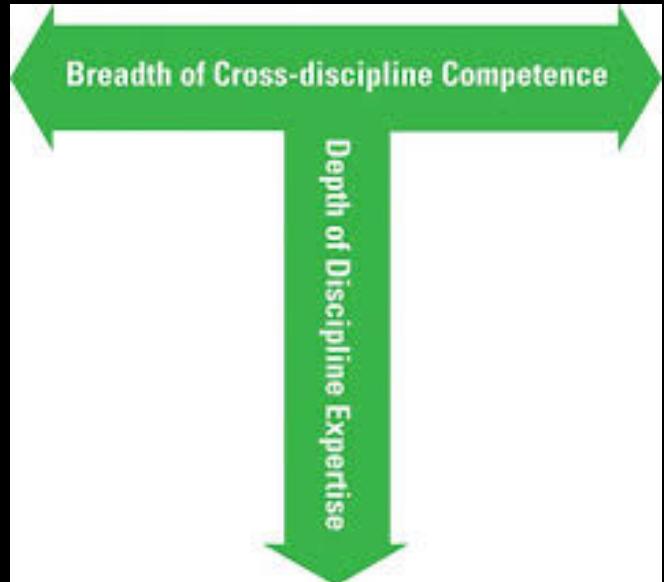


Pause

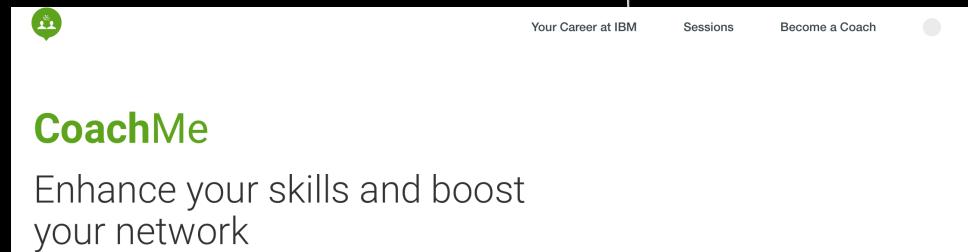


Knowledge

Become I shaped,
then T shaped... and
then kind of Square
shaped.....



Use your Network (and repeat)



So, what are the Top 5 secrets of creating a good architecture?

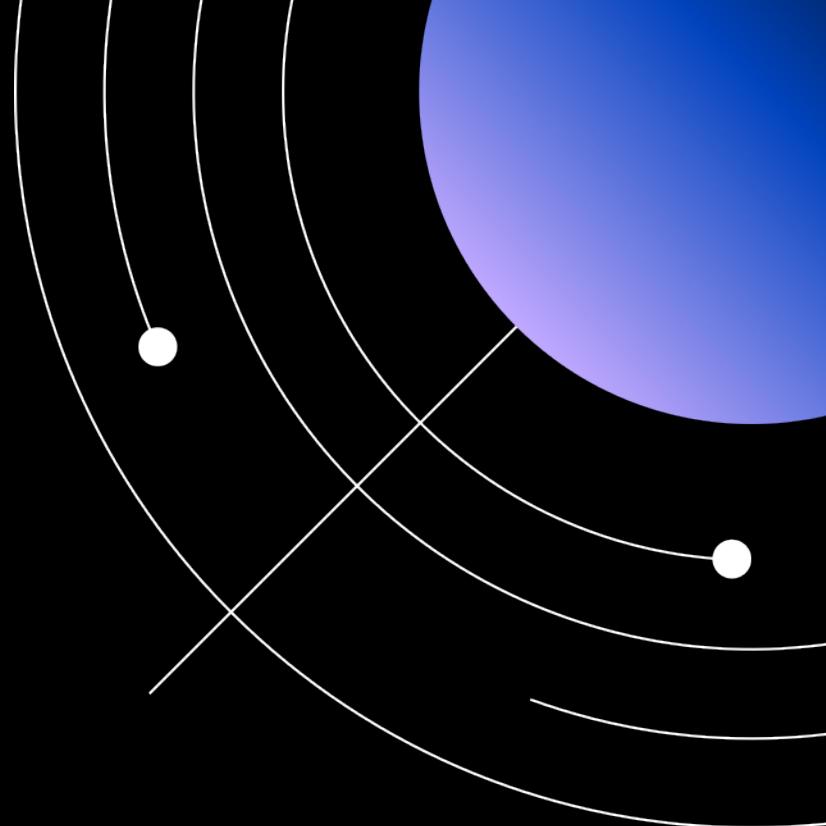
Requirements

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Diagrams

Knowledge

Network



A fantastic “further learning” resource

Bite-Sized Architectural Thinking

There are many people in IBM who would like to develop their architecture skills. Others would like a brief overview of what Architects do. This series of short videos provides some introductory education to explain the basics of Architectural Thinking. It is appropriate for people who are new to IT Architecture as well as those who would appreciate a refresher. This learning plan provides a basic grounding in the IBM architecture method so that you can understand the techniques and terminology. If you would like to go on to become an IBM Architect then the primary course is Architectural Thinking.

<https://ibm.biz/Bdf4cm>

The image displays a grid of 10 video thumbnails, each representing a different topic in the 'Bite-Sized Architectural Thinking' series. The thumbnails are arranged in two rows of five. Each thumbnail includes a small video camera icon, the title, a preview image, and a duration indicator.

- Introduction**: Preview image shows a word cloud with words like 'quality', 'design', 'software', 'architecture', 'systems', etc. Duration: 1 Minutes.
- My first Architect Role**: Preview image shows a woman in a professional setting. Duration: 15 Minutes.
- What is Architecture?**: Preview image shows a network diagram. Duration: 15 Minutes.
- Requirements Gathering**: Preview image shows a hand writing on a document surrounded by icons. Duration: 15 Minutes.
- Non-Functional Requirements**: Preview image shows four stylized figures with speech bubbles. Duration: 10 Minutes.
- Architecture Overview Diagram**: Preview image shows a complex flowchart or diagram. Duration: 5 Minutes.
- Architectural Decisions**: Preview image shows a person standing next to a large blue cloud. Duration: 20 Minutes.
- Architectural Thinking, Design Thinking and Agile**: Preview image shows a Venn diagram with 'HOW', 'WHY', and 'WHAT' overlapping, with the text 'ARCHITECTURE THINKING' nearby. Duration: 15 Minutes.
- My First Architect Role - Part II**: Preview image shows a group of people in a meeting. Duration: 10 Minutes.

Thank you

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