

BLENDING PRODUCT THINKING WITH ARCHITECTURE

Joel Tosi

Slides: <https://www.dojoandco.com/speaking>

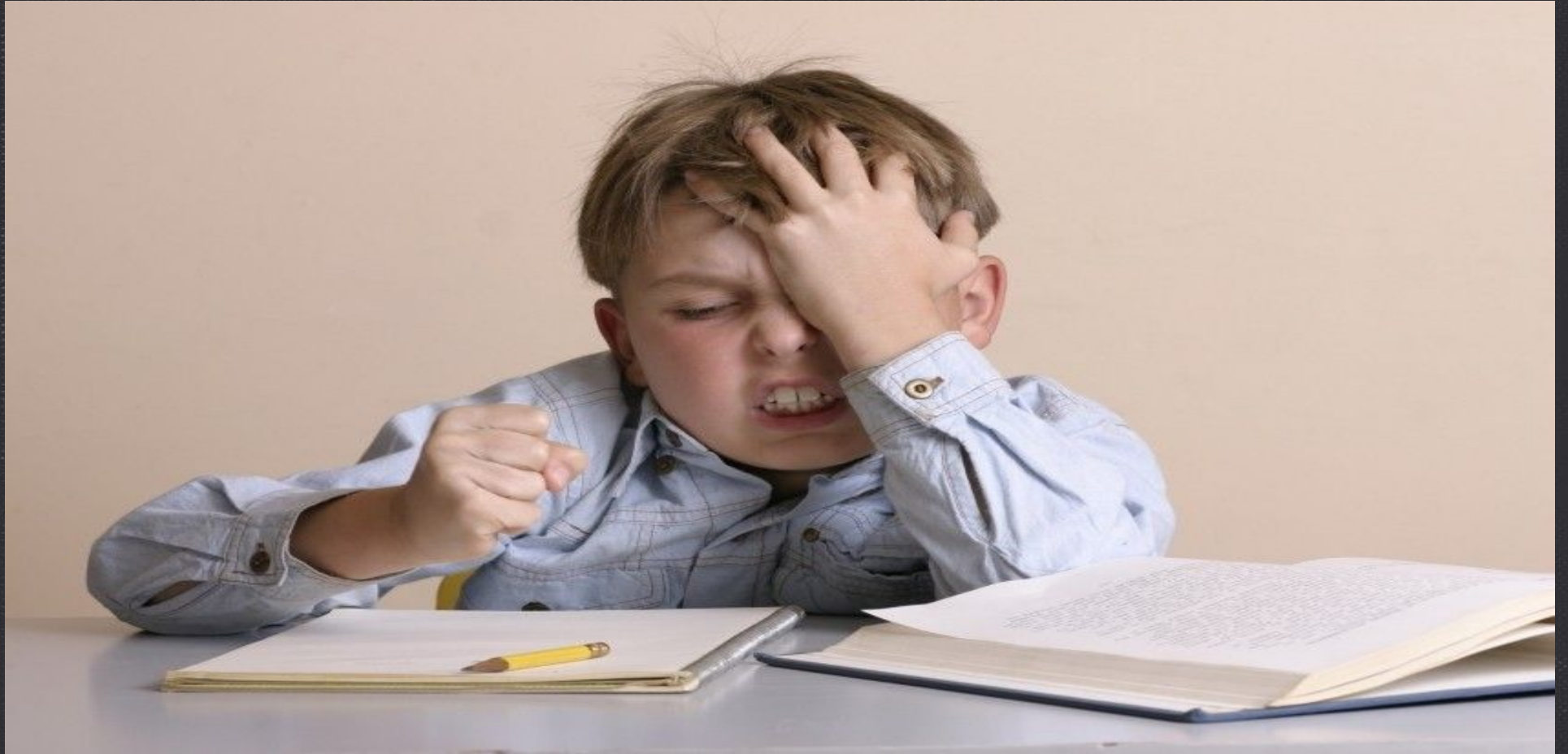


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MY PERSPECTIVE



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EXPECTED OUTCOMES

Simple Visuals You Can Use Now

Less 'What Architecture' and More 'When'

Leverage Product Context to Ground Decisions

Ideas on Documenting Decisions

CONTEXT & THE WIKI



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**BEHIND EVERY ARCHITECTURE DECISION
IS A PRODUCT ASSUMPTION**

WHAT IS THE PROBLEM?

WHAT IS ARCHITECTURE?

Web

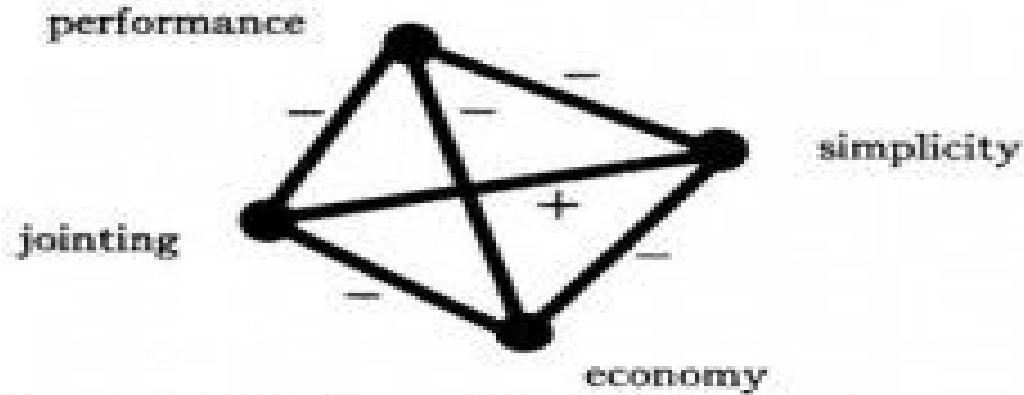
API

Logic / Calculations

Fast Data

Slow Data

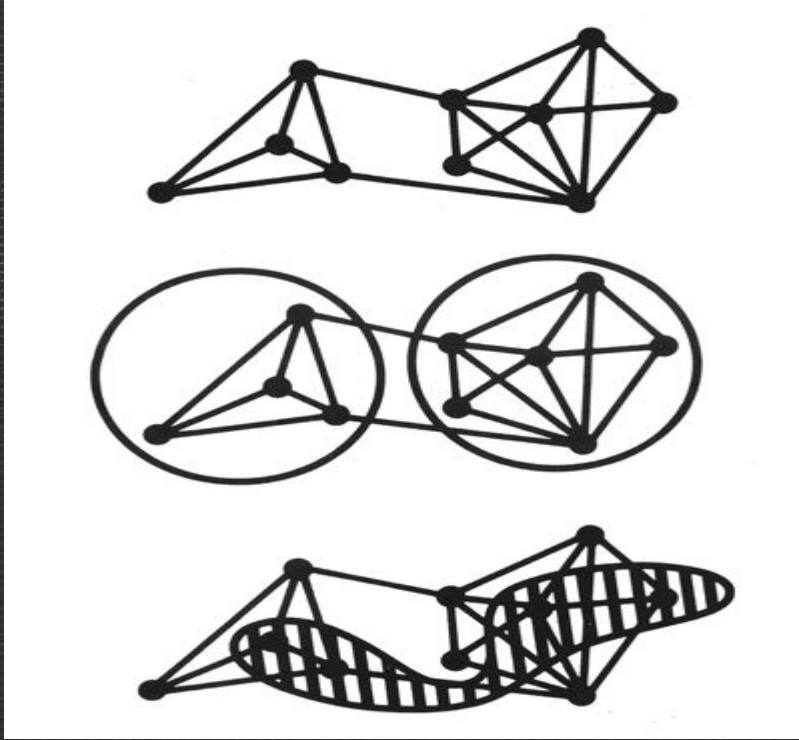
WHAT IS ARCHITECTURE?



This is a typical design problem; it has requirements which have to be met; and there are interactions between the requirements, which makes the requirements hard to meet. This problem is simple to solve. It falls easily within the compass of a single man's intuition. But what about a more complicated problem?

© Notes on the Synthesis of Form – Christopher Alexander

WHAT IS ARCHITECTURE?



Reflection of System Dependencies

Optimal decomposition / Grouping

Biased simplification - mereotopology

**ARCHITECTURE IS ABOUT
FIT WITHIN CONTEXT**

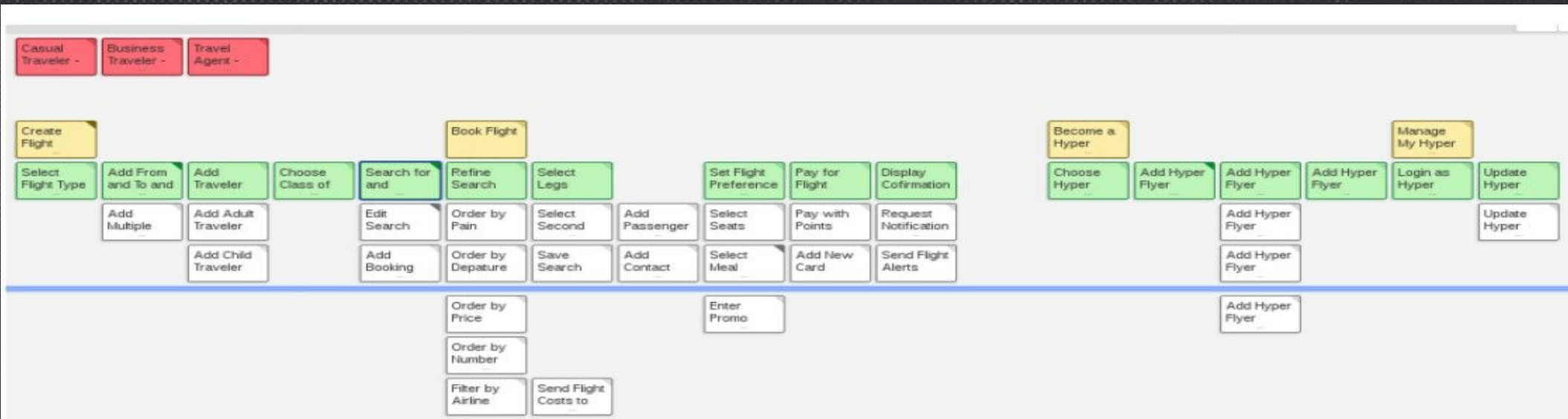
USING PRODUCT TO GROUND ARCHITECTURE

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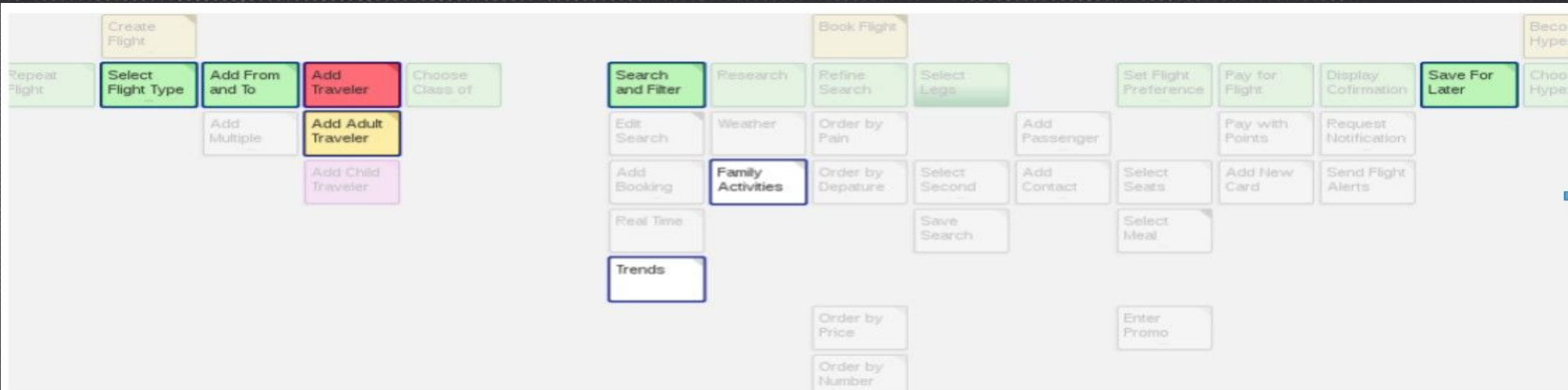
YOU ARE ALL CERTIFIED



ALL THE POSSIBILITIES



FAMILY TRAVELING



BUSINESS TRAVELER

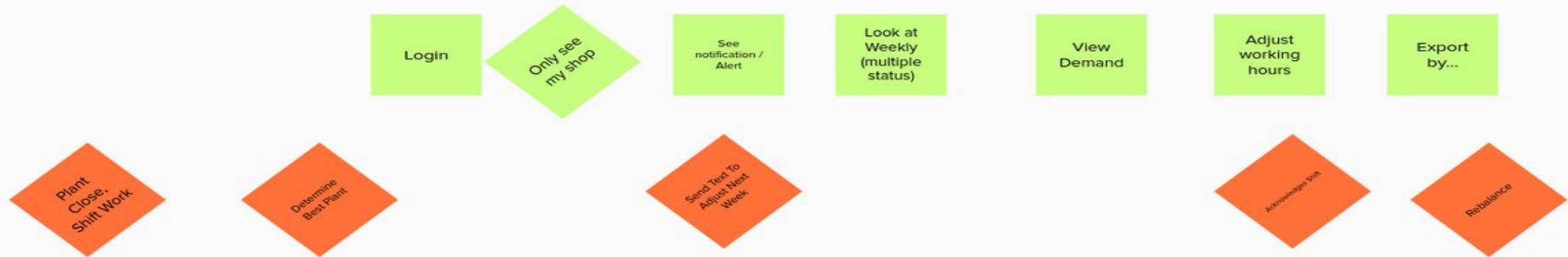


ADVENTURER

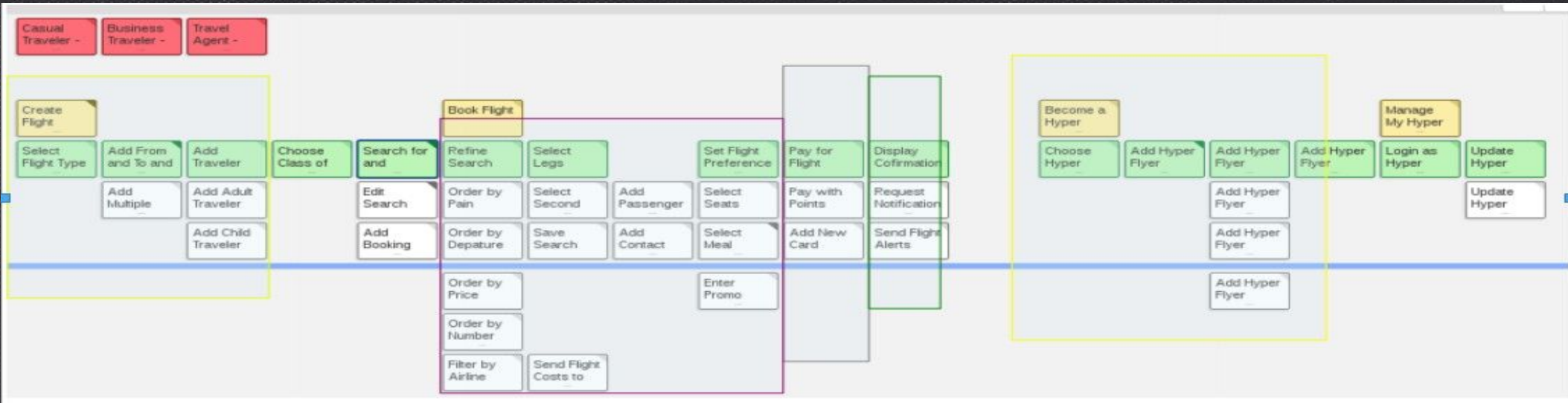


HANDLING EVENTS

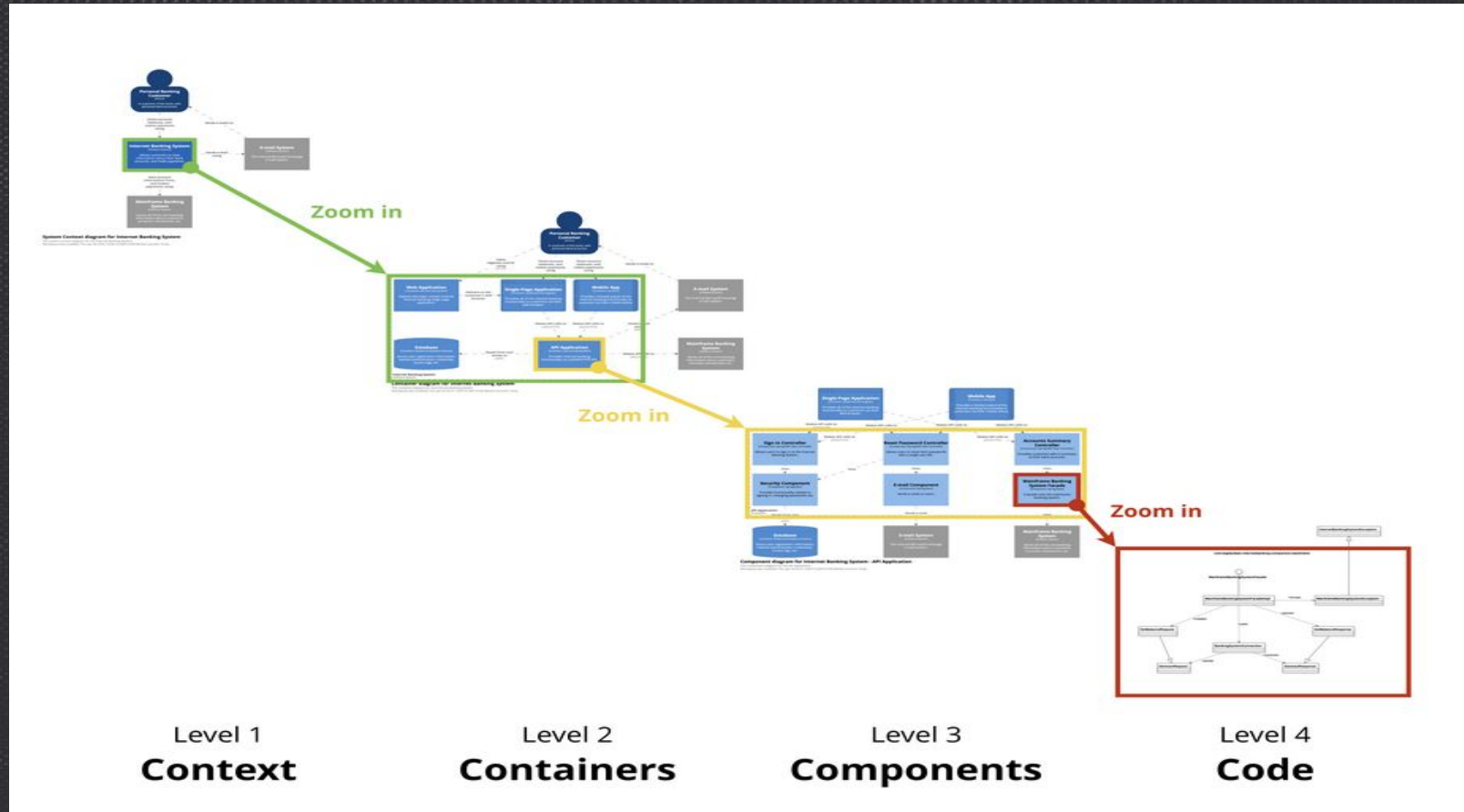
Gary wants to know if he is over / under at a plant



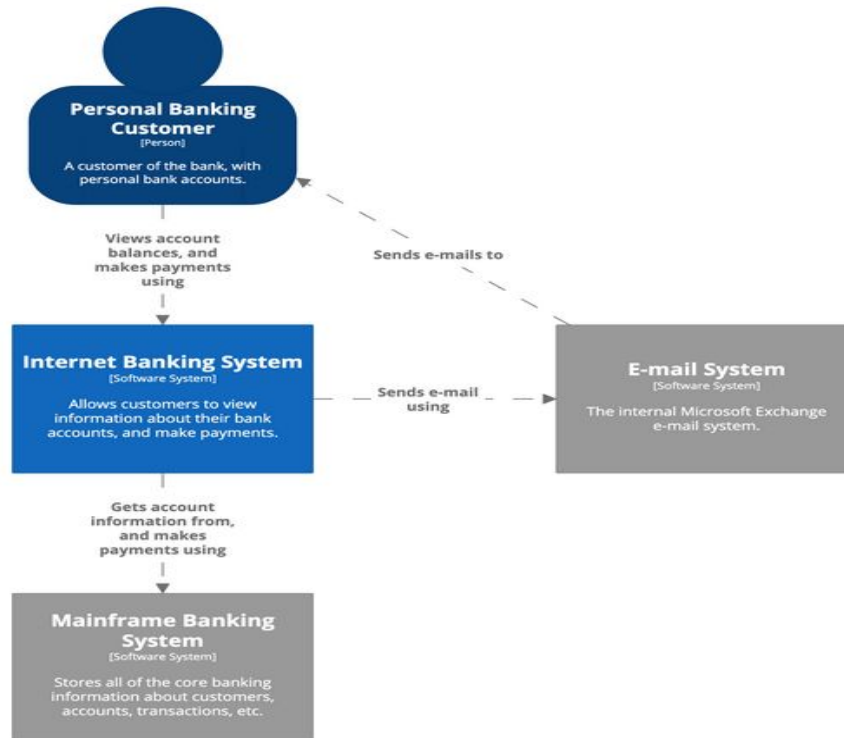
MICROSERVICES



DOESN'T FEEL ARCHITECTY



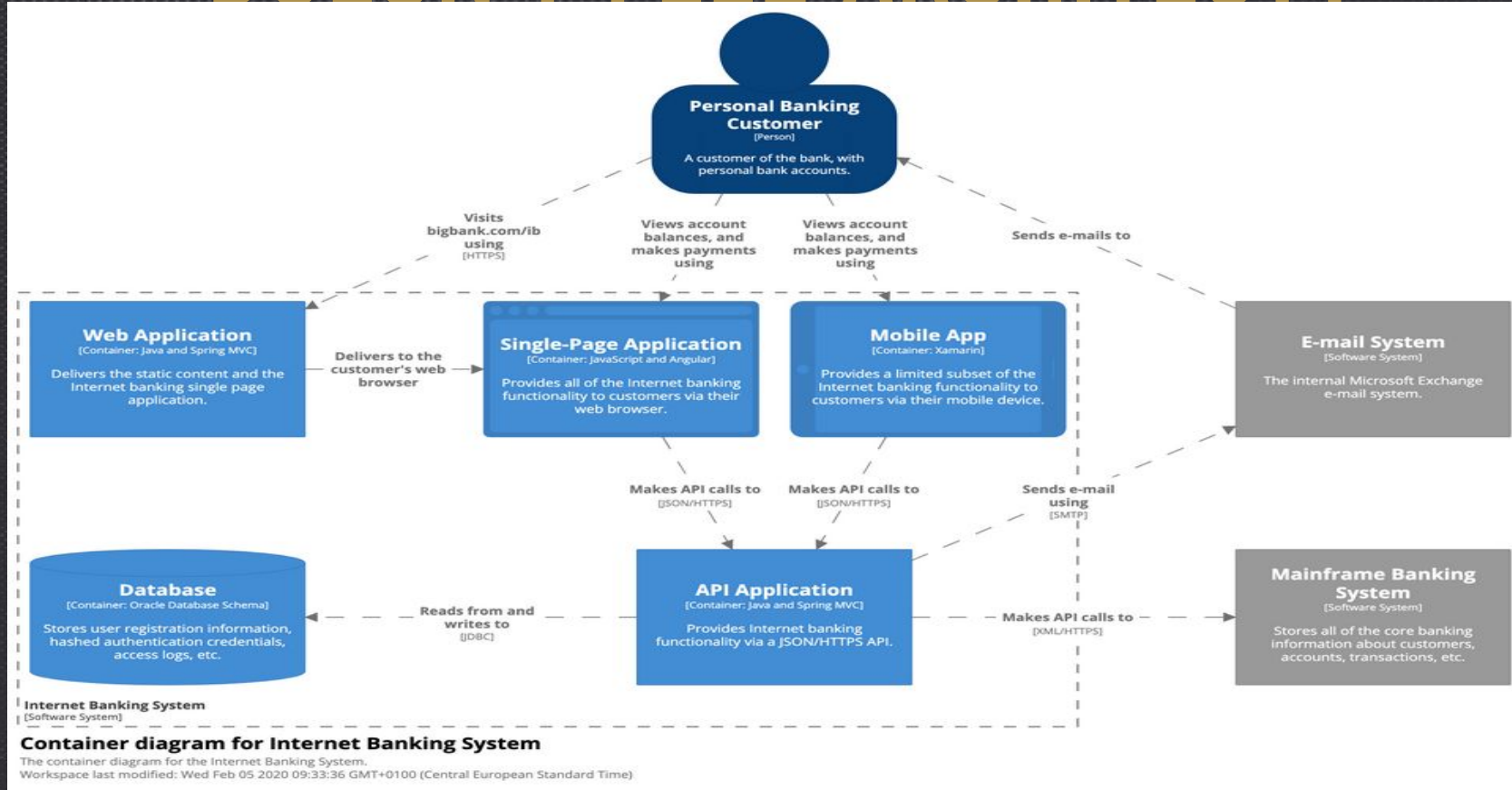
DOESN'T FEEL ARCHITECTY



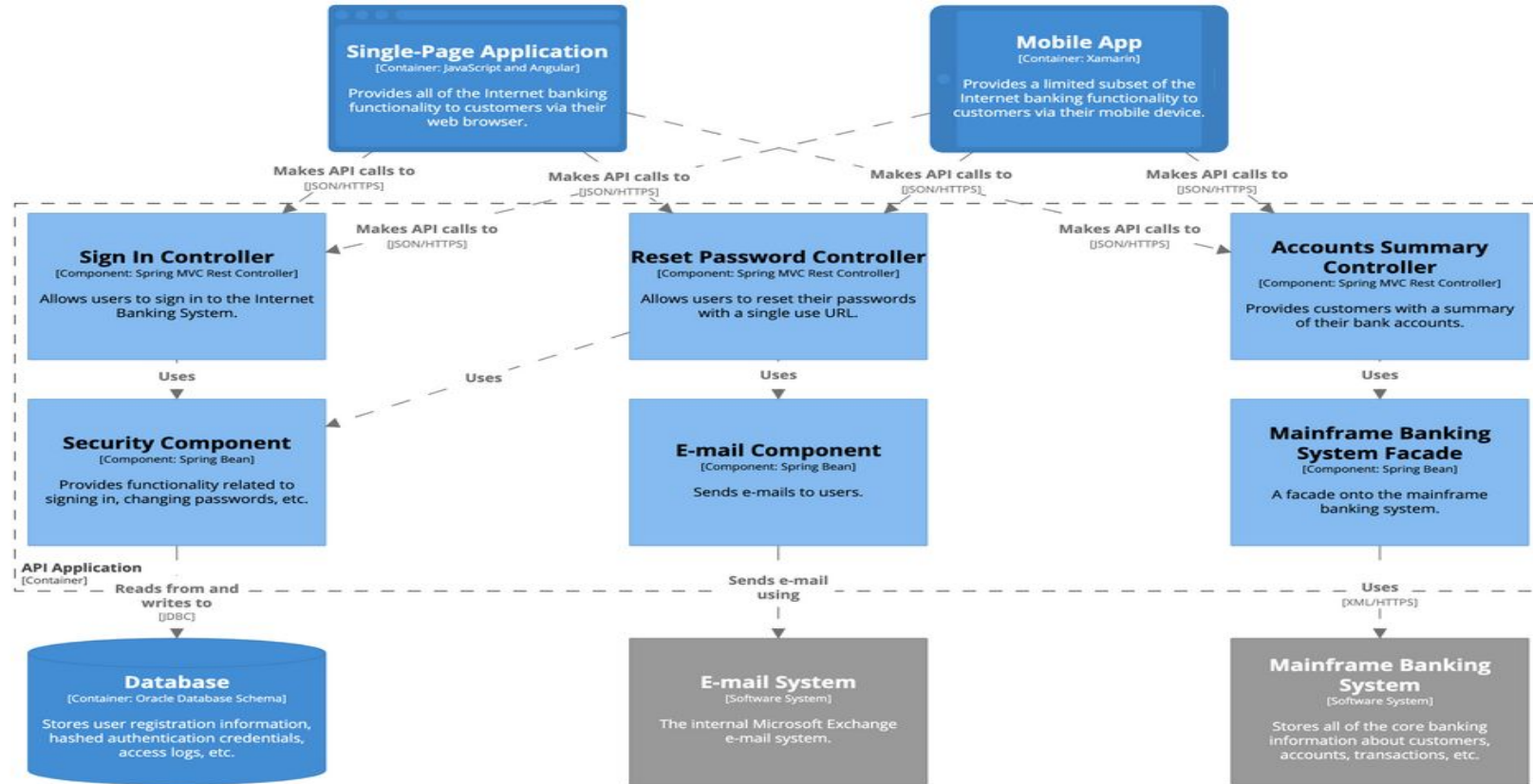
System Context diagram for Internet Banking System

The system context diagram for the Internet Banking System.
Workspace last modified: Wed Feb 05 2020 09:33:36 GMT+0100 (Central European Standard Time)

DOESN'T FEEL ARCHITECTY



DOESN'T FEEL ARCHITECTY



Component diagram for Internet Banking System - API Application

The component diagram for the API Application.

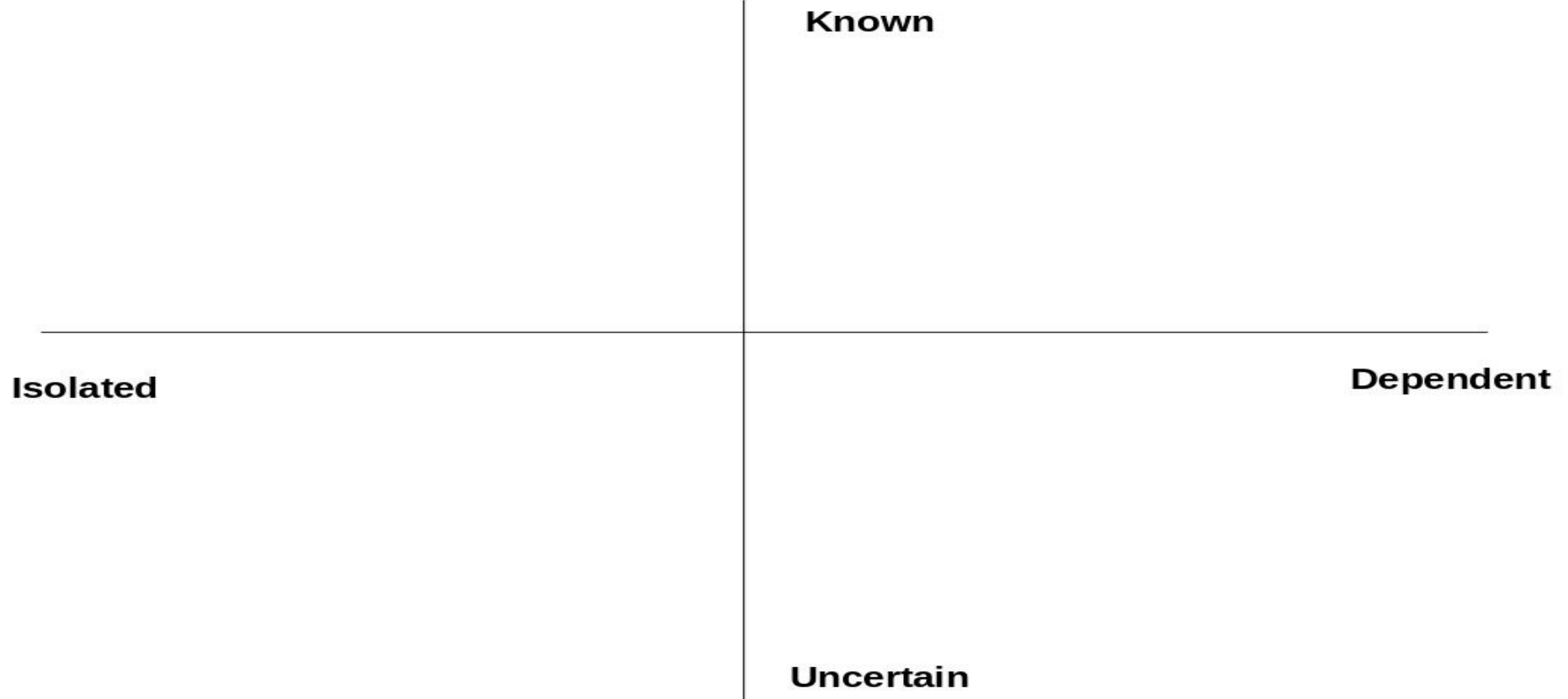
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YOUR JOB IS NOT STICK FIGURES AND BOXES

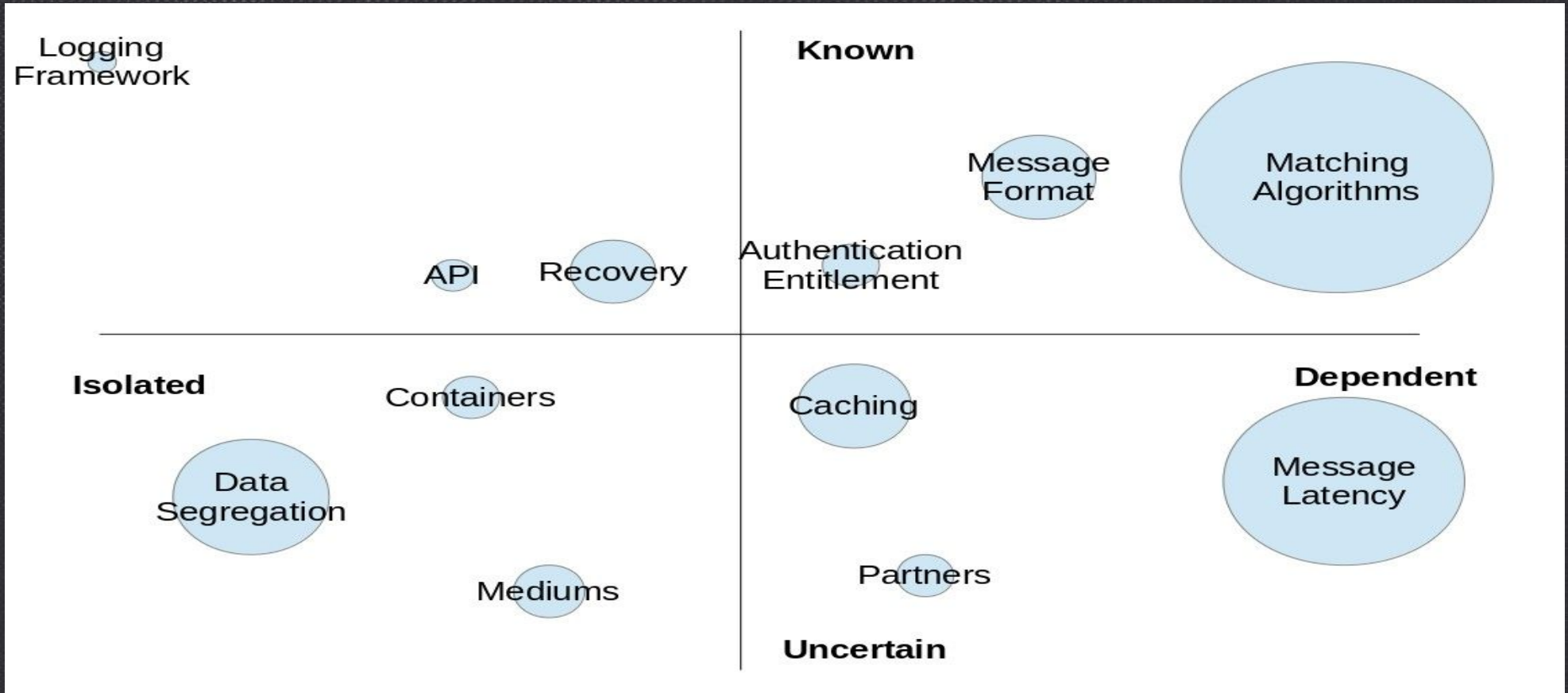
**PROVIDE MODELING BASED IN CONTEXT,
HELP PEOPLE REASON, WRITE LESS**

EXPLORE WHAT TO MOVE

DETERMINING DECISION POINTS



SAMPLE MARKET DATA



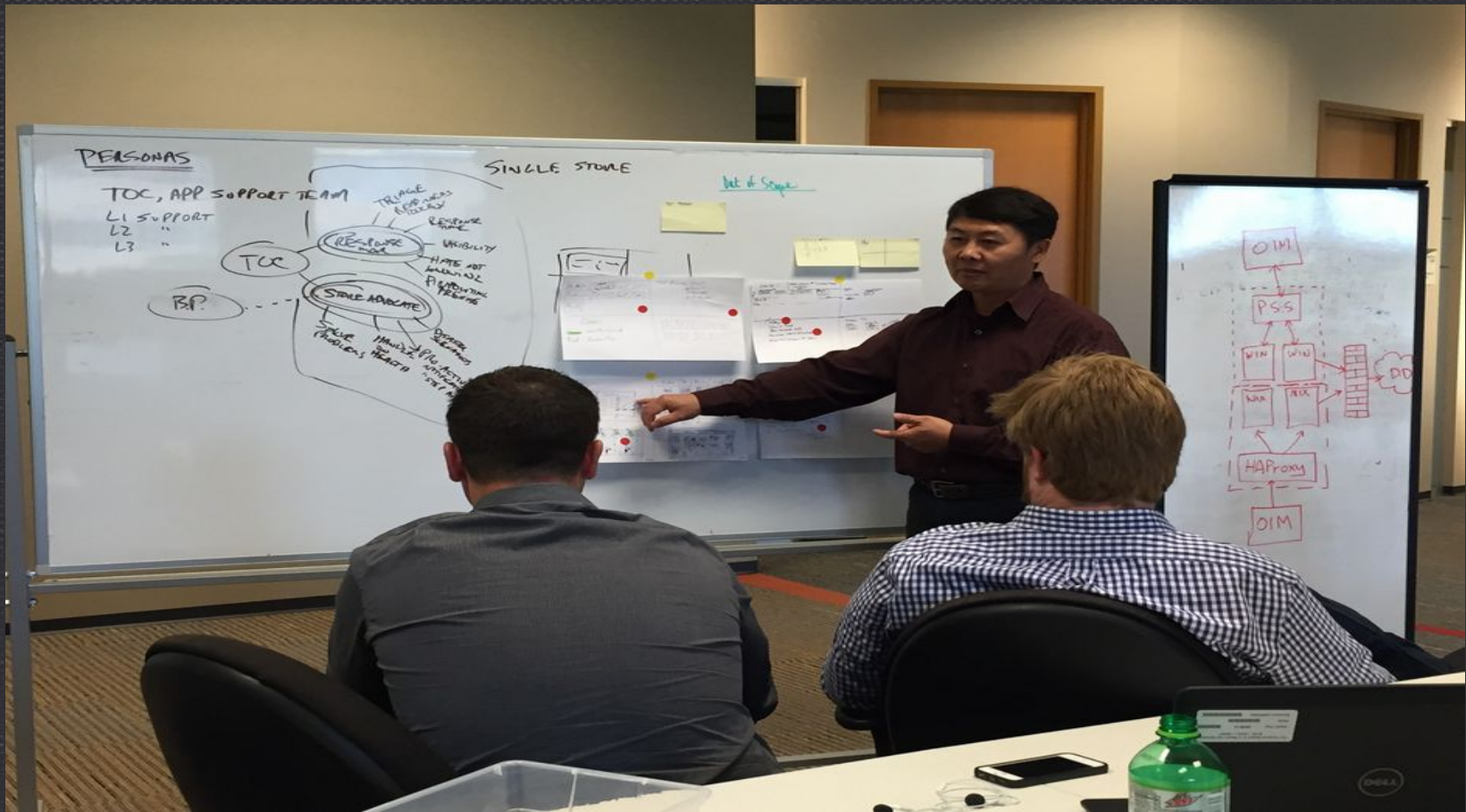
KNOW WHERE YOU ARE

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EXPLORE EXPAND EXTRACT

Credit – Kent Beck

IN ACTION




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DOCUMENTING THE ASSUMPTIONS OF YOUR ARCHITECTURE

ARCHITECTURE DECISION RECORDS

<https://cognitect.com/blog/2011/11/15/documenting-architecture-decisions>

 **Nat Pryce** upgrade date format in the project's own ADRs Latest commit edb7175 on Dec 7, 2017 [History](#)

0 contributors

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2. Implement as shell scripts

Date: 2016-02-12

Status

Accepted

Context

ADRs are plain text files stored in a subdirectory of the project.

The tool needs to create new files and apply small edits to the Status section of existing files.

Decision

The tool is implemented as shell scripts that use standard Unix tools -- grep, sed, awk, etc.

Consequences

The tool won't support Windows. Being plain text files, ADRs can be created by hand and edited in any text editor. This tool just makes the process more convenient.

Development will have to cope with differences between Unix variants, particularly Linux and MacOS X.

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TRY THIS

Document Product Assumptions You Are Making

Document Technical Assumptions You Are Making

Think of 3 Ways You Might Be Wrong

For Each Learning Opportunity, What Would Change?

OUR JOB

Take a World of Possibilities...

Apply Proper Product Understanding and Constraints...

To Deliver Maneuverable Systems

That Bring Joy

RECAP

Be aware of models and dependencies

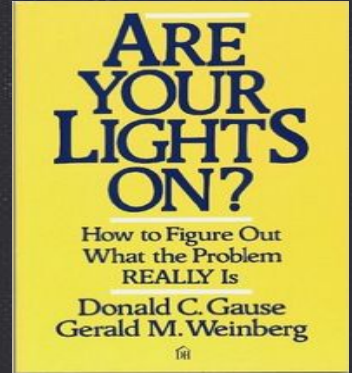
Use Product Discussions to avoid architecture bias

Use Journeys to find when decisions can be made

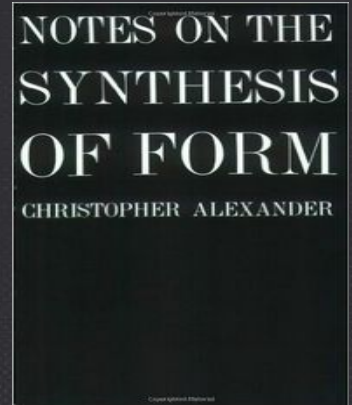
Understand parts of the system need to be right / emerge

RECOMMENDED READING

Jerry Weinberg – Are Your Lights On?



Christopher Alexander -
Notes on the Synthesis of Form



"I've seen firsthand the profound inspiration and improvement that Joel and Dion's dojo approach has brought to companies. They go beyond coaching and workshopping to help organizations build competence with deliberate practice and reflection. Creating a "learning organization" has been an aspirational goal for many companies. Joel and Dion finally provide an approach for doing just that."

—JEFF PATTON, AUTHOR OF USER STORYMAPPING

Transforming a company's digital product development capabilities is a monumental task. Keeping teams up to date with modern software engineering and product discovery practices is daunting enough, but when you add in adapting agile and lean methods, operating model changes, and cultural transformation, it's easy to see how even the most seasoned leaders feel completely overwhelmed.

Traditional approaches to training—from one-day workshops to week-long trainings—fail to have the impact you want. Instead of transformation, you get piecemeal improvements that don't lead to significant change.

Here's the truth: if you want learning that sticks, you need a dojo.

In *Creating Your Dojo*, experienced dojo coaches Joel Tosi and Dion Stewart guide you through creating a dojo—an immersive learning environment—within your organization. The dojo enables your teams to learn new skills within the context of doing their real-world work. You'll create a thriving product development culture where team members feel empowered to solve their own problems. Your organization will improve the quality of the products they deliver, reduce delivery cycle time, and create innovative products with better product/market fit.



Dion Stewart and Joel Tosi are the co-founders of Dojo and Co.

DION STEWART has coached software teams at Fortune 50 companies in multiple domains over the past twenty years: healthcare, finance, investment banking, retail, entertainment, and more. Given his developer's background and transformation consulting experience, Dion is both a highly effective coach and a sought-after speaker. He's given talks at QCon, Agile Development West, Craft Conf, and DDD Europe. He lives in rural Pennsylvania with his wife and enjoys playing and recording music.



JOEL TOSI worked as an engineer and architect at the Chicago Mercantile Exchange, leaving after ten years and kickstarting their evolution. He then spent a few years as the lead North American architect for Red Hat Middleware. He's been coaching software teams and organizations on improving product development capabilities for fifteen years. An in-demand speaker, Joel has spoken at the Agile Alliance Conference, DevOps Days, SGE Agile Development West, and Dev Nexus. He lives in Chicago with his wife and three children.

CREATING YOUR DOJO

Upskill Your Organization
for Digital Evolution

DION STEWART & JOEL TOSI

WHAT ARE YOUR QUESTIONS?

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THANK YOU

Joel Tosi

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