C4 Model

2021-08 @Guzhongren

Game Time

Please introduce us your former project in 5 mins?

Architecture Is In Our Heads

Why
When you try to share a system architecture, what will you do?

- Mess of boxes and lines

- Mixed abstractions

- Ambiguous Naming

- Unlabelled relationships

- Inconsistent notation

- Missing technology choices

"Good software architecture diagrams help to align everybody's understanding"
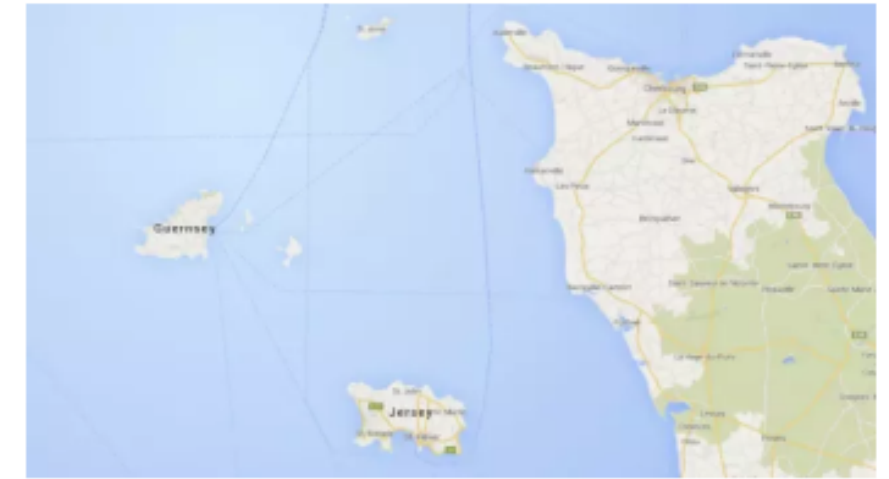
– Someone

What
C4 Model

- System **C**ontext

- **C**ontainer

- **C**omponent

- **C**ode

Abstraction-First

Different levels of detail, telling different
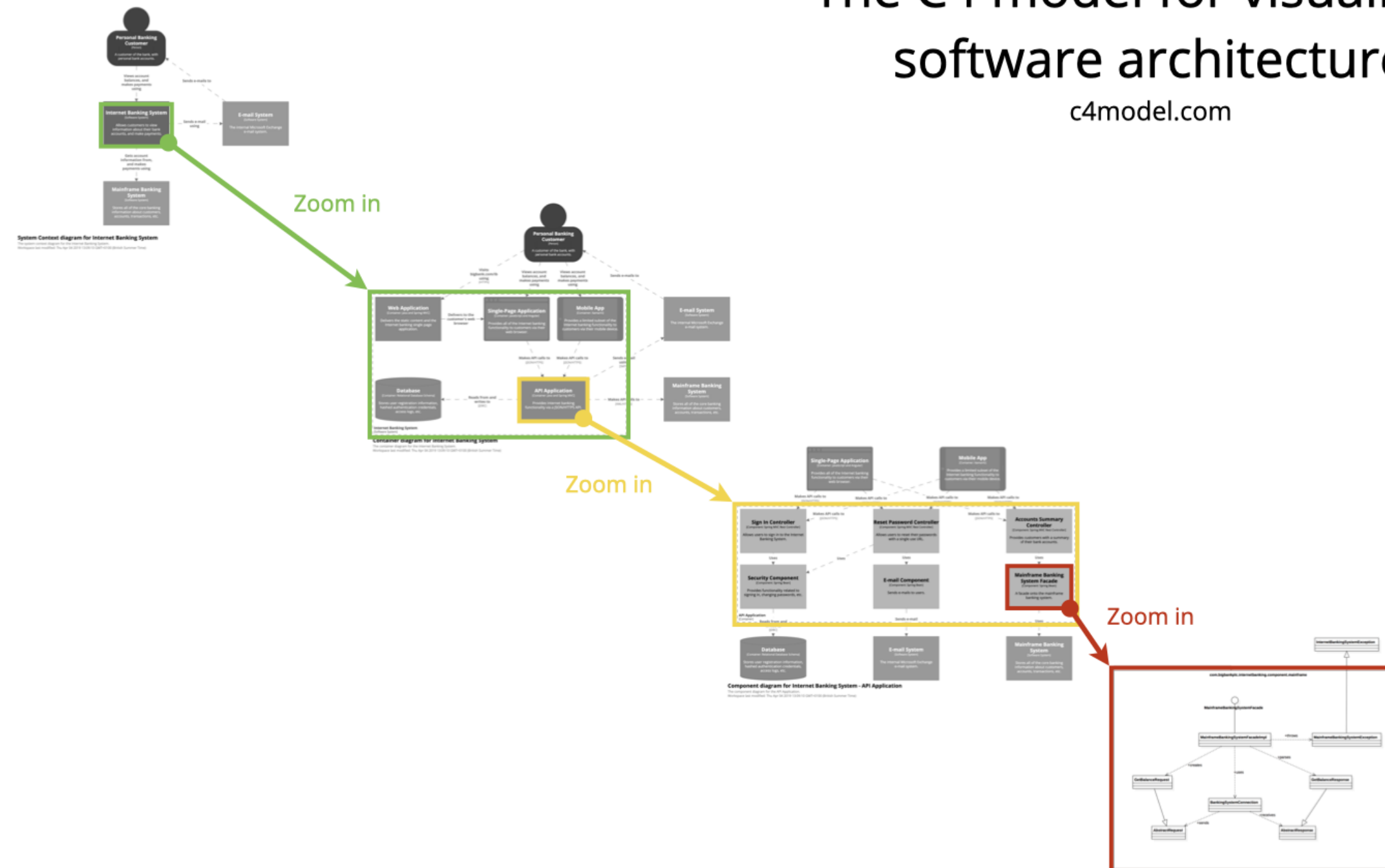stories to different types of audience

国家级

省级

市级

道路级

The C4 model for visualising
software architecture

c4model.com

Zoom in

Zoom in

Zoom in

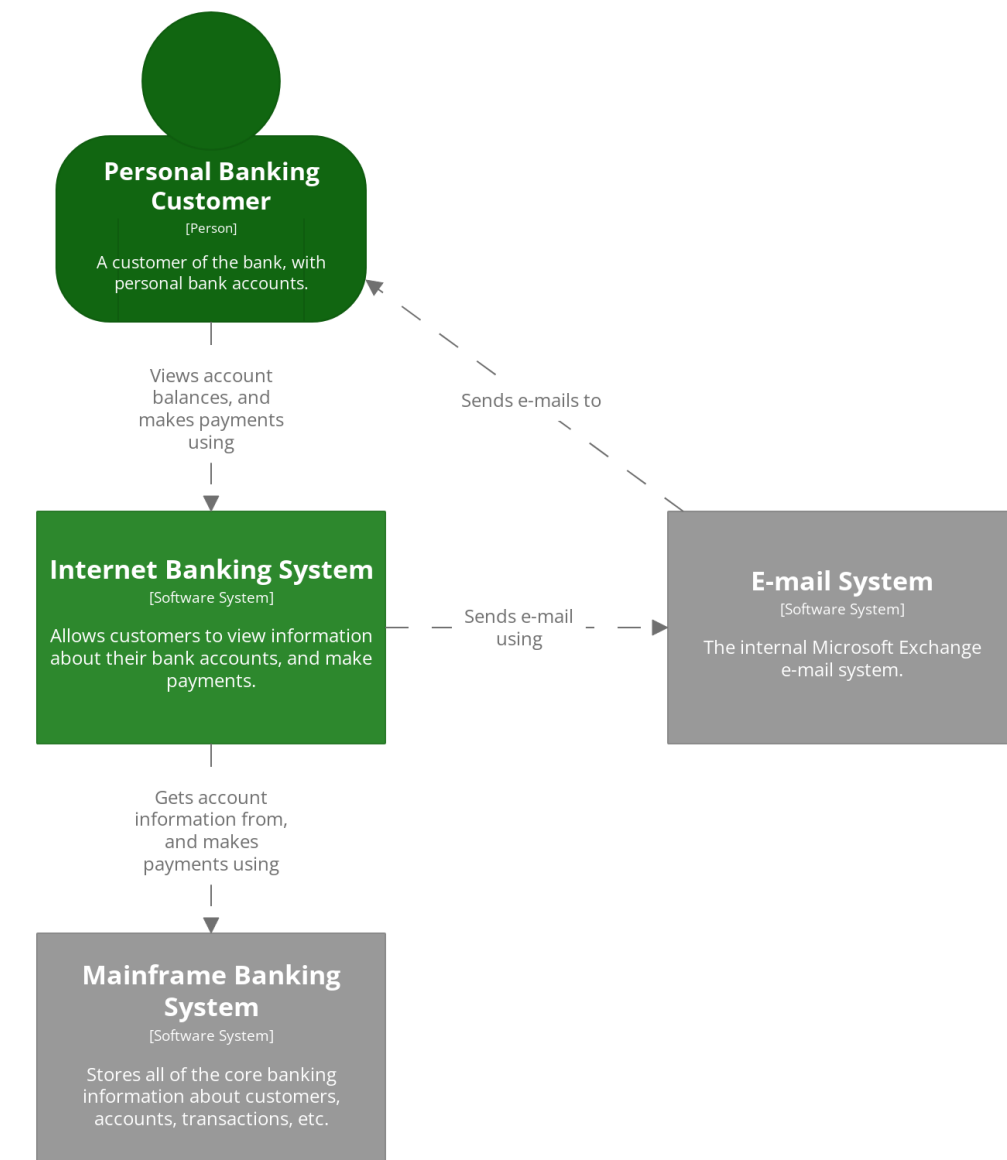| Level 1	Level 2	Level 3	Level 4
Context	Containers	Components	Code

How

Level 1: A System Context diagram [low-level details]

Provide a starting point, showing how the software system in scope fits into the world around it.

Intended audience:

Everybody, both technical and non-technical people, inside and outside of the software development team.

[System Context] Internet Banking System
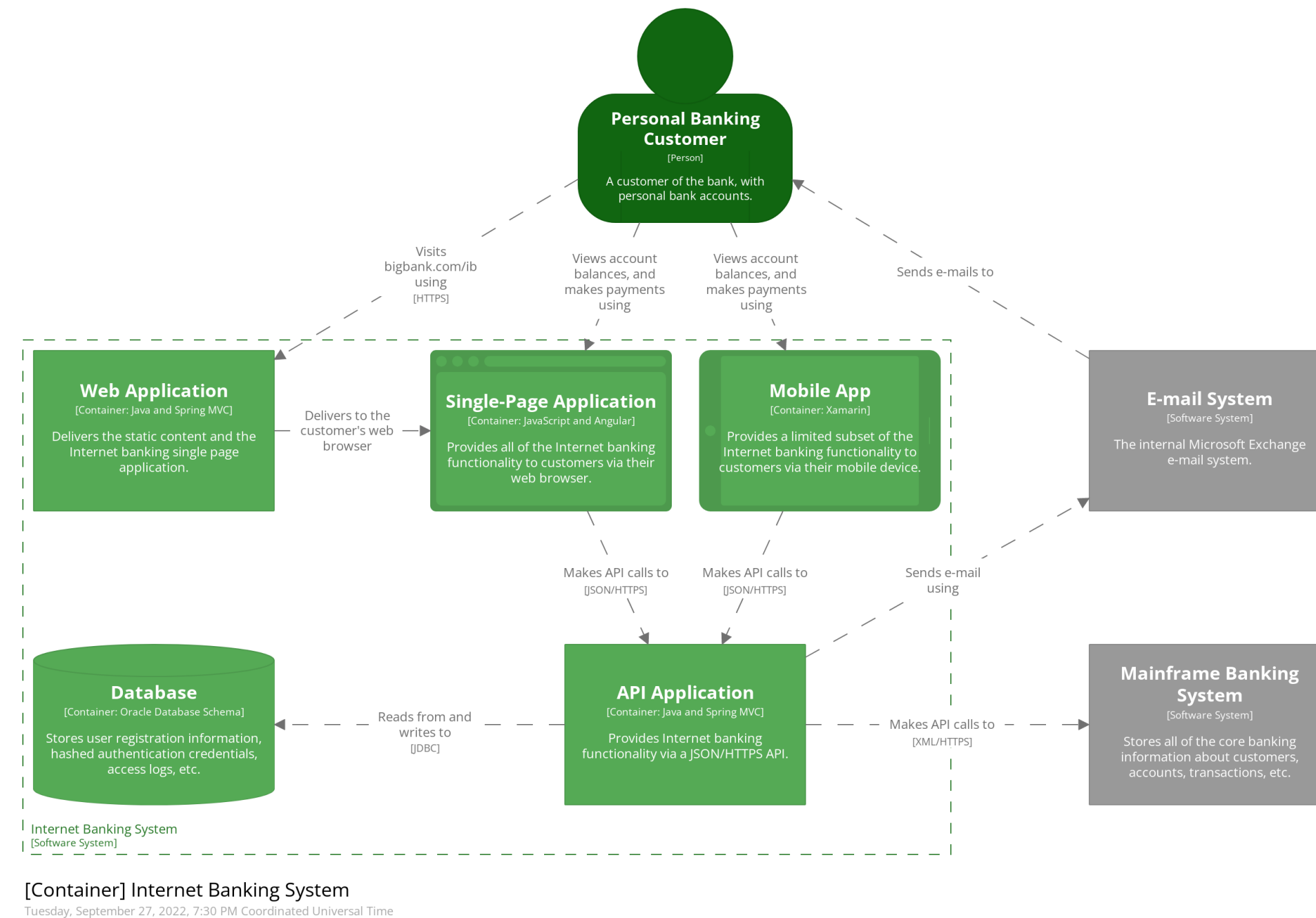Tuesday, September 27, 2022, 7:30 PM Coordinated Universal Time

How
Level 2: A Container diagram

Zoom into the software system in scope, showing the hight-level technical building blocks.

Intended audience:

Technical people inside and outside of the software development team; Including software architects, developer and operations/support staff.
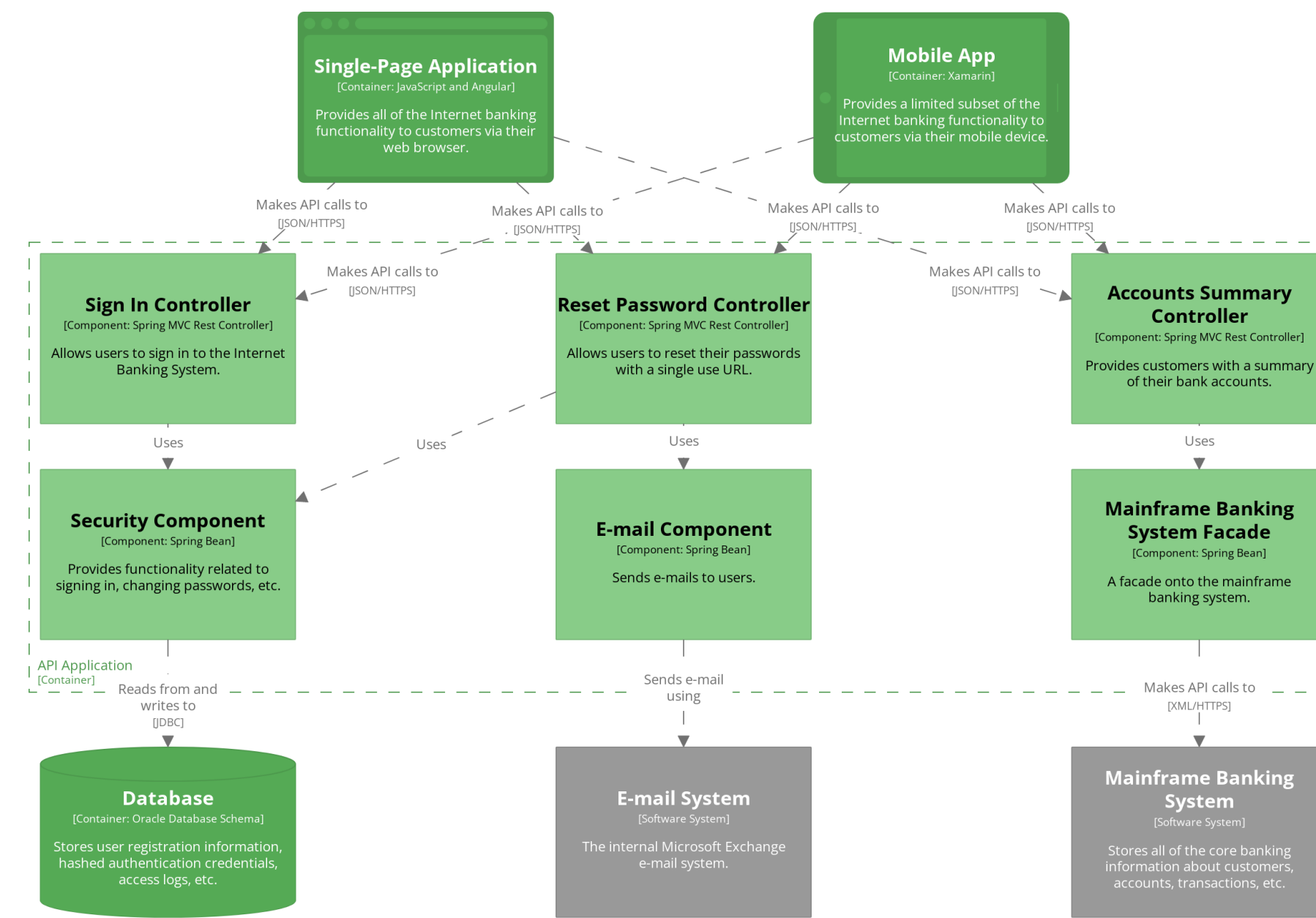

[Container] Internet Banking System
Tuesday, September 27, 2022, 7:30 PM Coordinated Universal Time

How
Level 3: A Component diagram

Zoom into an individual container, showing the components inside it.

Intended audience:

Software architects and developers.

[Component] Internet Banking System - API Application
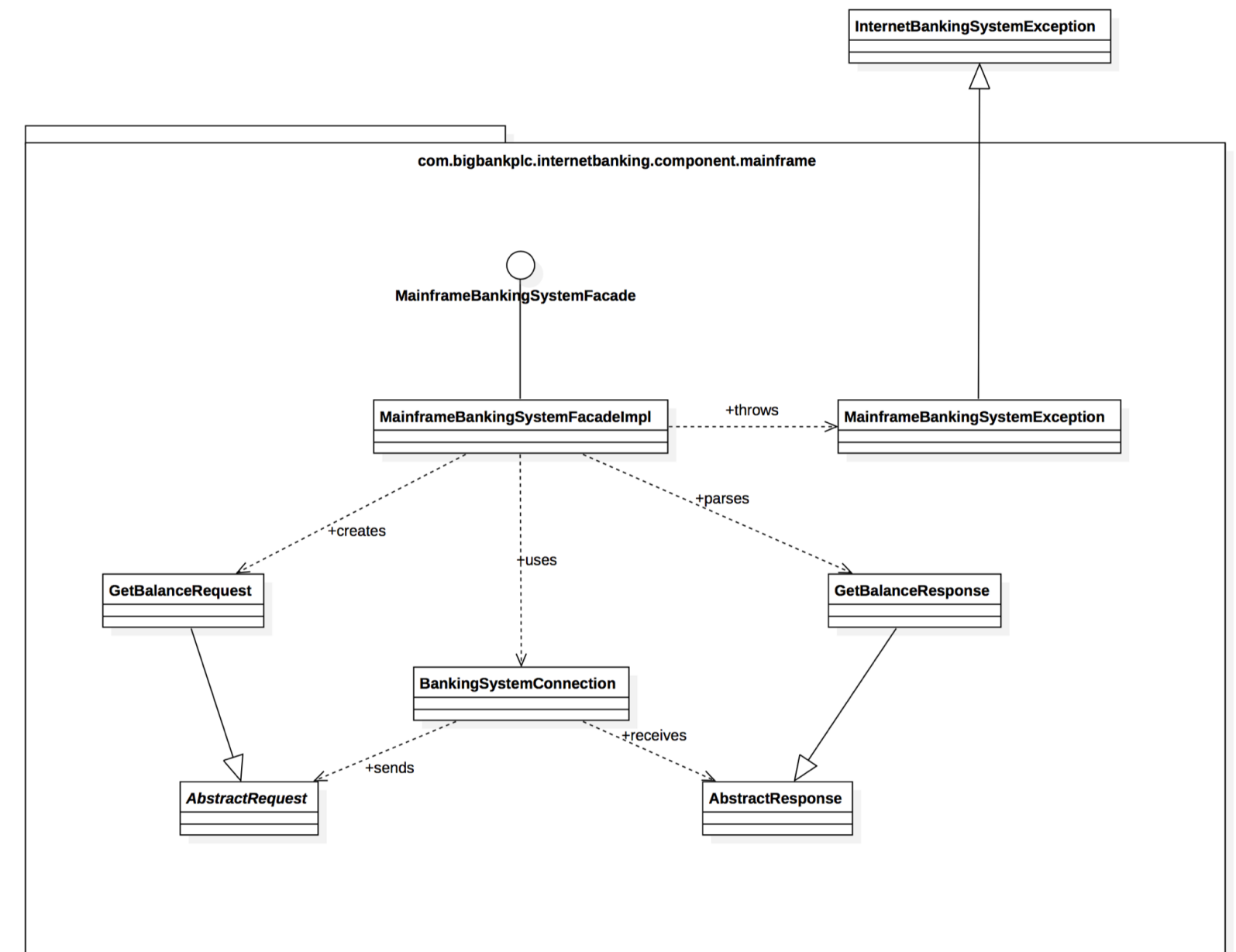Tuesday, September 27, 2022, 7:30 PM Coordinated Universal Time

How
Level 4: A Code diagram

Can be used to zoom into an individual component, showing how that component is implemented.

Intended audience:

Software architects and developers.

When
When to use C4 Model

- Up-front design in inception

- Retro/introduce existing project

- Onboarding new staff

Practice

Please introduce us your former project in 5 mins?

Q & A

Thank you!