Universidad Rafael Landívar
Tradición Jesuita en Guatemala

Análisis y Diseño II

Modelación, liderazgo y carrera

¿Qué es lo que más agradezco del curso?

Responder con respeto y profesionalismo.

Students, write your response!

Agenda

1. Bienvenida.
2. Microenseñanza.
3. Mini-casos.
4. RAP finales.
5. Pasos siguientes.

Microenseñanza

SOA

PREGUNTAS

Para el invitado

Students, write your response!

2

Mini-casos

Aplicaciones

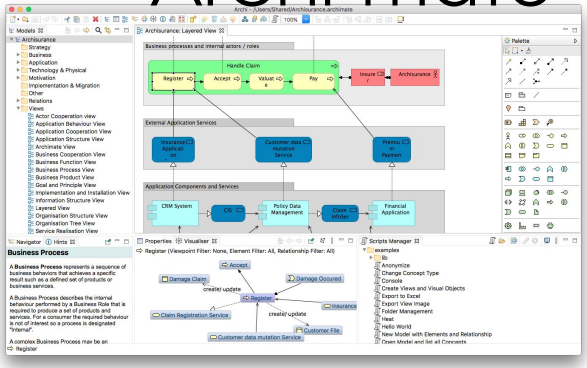
¿Cómo se modela una arquitectura?

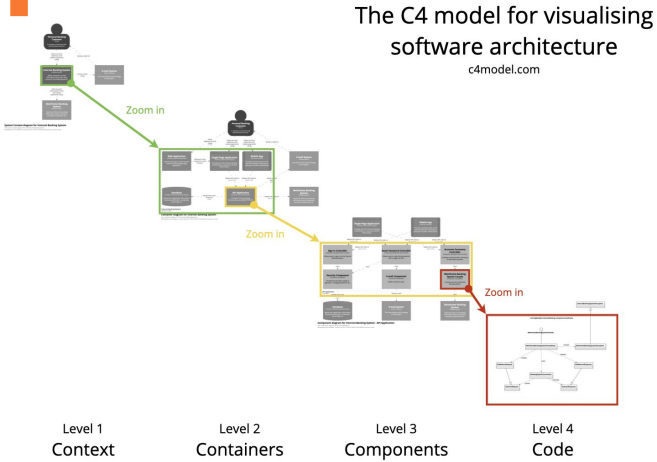
Students, write your response!

Modelación de arquitecturas

UNIFIED MODELING LANGUAGE

Archi-mate





¿Quién es un líder?

Students, write your response!

El arquitecto de software como líder

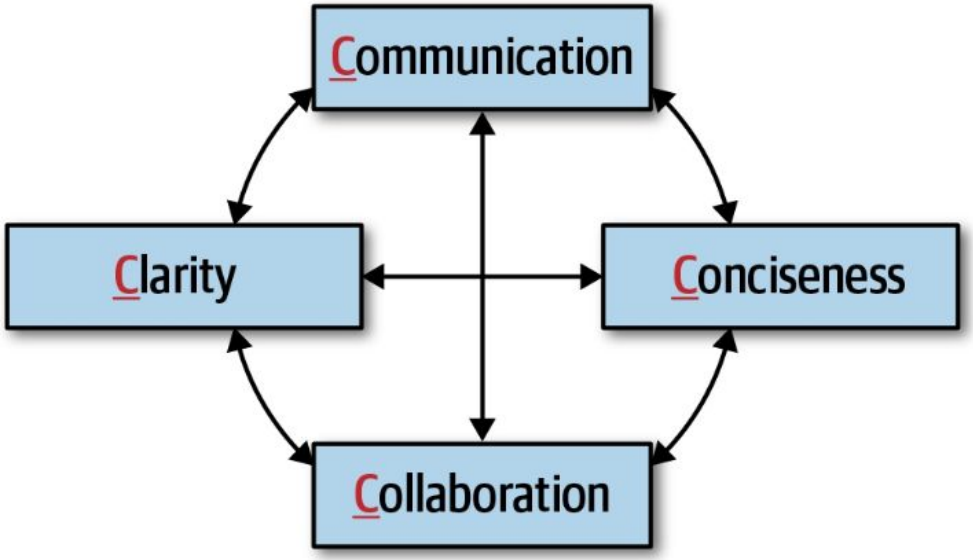


Figure 23-2. The 4 C's of architecture

Escenarios de negociación (stakeholders)

The senior vice president project sponsor is insistent that the new trading system must support five nines of availability (99.999%). However, the lead architect is convinced, based on research, calculations, and knowledge of the business domain and technology, that three nines of availability (99.9%) would be sufficient. The problem is, the project sponsor does not like to be wrong or corrected and really hates people who are condescending. The sponsor isn't overly technical (but thinks they are) and as a result tends to get involved in the nonfunctional aspects of projects. The architect must convince the project sponsor through negotiation that three nines (99.9%) of availability would be enough.

Students, write your response!

Escenarios de negociación

> **TIP**
>
> Gather as much information as possible *before* entering into a negotiation.

Table 23-1. Nines of availability

Percentage uptime	Downtime per year (per day)
90.0% (one nine)	36 days 12 hrs (2.4 hrs)
99.0% (two nines)	87 hrs 46 min (14 min)
99.9% (three nines)	8 hrs 46 min (86 sec)
99.99% (four nines)	52 min 33 sec (7 sec)
99.999% (five nines)	5 min 35 sec (1 sec)
99.9999% (six nines)	31.5 sec (86 ms)

Escenarios de negociación (arquitectos)

The lead architect on a project believes that asynchronous messaging would be the right approach for communication between a group of services to increase both performance and scalability. However, the other architect on the project once again strongly disagrees and insists that REST would be a better choice, because REST is always faster than messaging and can scale just as well ("see for yourself by Googling it!"). This is not the first heated debate between the two architects, nor will it be the last. The lead architect must convince the other architect that messaging is the right solution.

Students, write your response!

Escenarios de negociación

TIP

Always remember that *demonstration defeats discussion.*

Escenarios de negociación

TIP

Avoid being too argumentative or letting things get too personal in a negotiation — calm leadership combined with clear and concise reasoning will always win a negotiation.

Escenarios de negociación (devs)

Architect: "You must go through the business layer to make that call."
Developer: "No. It's much faster just to call the database directly."

Students, write your response!

Escenarios de negociación

TIP

When convincing developers to adopt an architecture decision or to do a specific task, provide a justification rather than "dictating from on high."

Architect: "Since change control is most important to us, we have formed a closed-layered architecture. This means all calls to the database need to come from the business layer."
Developer: "OK, I get it, but in that case, how am I going to deal with the performance issues for simple queries?"

TIP

If a developer disagrees with a decision, have them arrive at the solution on their own.

Escenarios de negociación (devs)

Developer: "So how are we going to solve this performance problem?"
Architect: "What you need to do is use a cache. That would fix the problem."
Developer: "Don't tell me what to do."
Architect: "What I'm telling you is that it would fix the problem."

Students, write your response!

Escenarios de negociación

Developer: "So how are we going to solve this performance problem?"
Architect: "Have you considered using a cache? That might fix the problem."
Developer: "Hmmm, no we didn't think about that. What are your thoughts?"
Architect: "Well, if we put a cache here..."

Escenarios de negociación (devs)

Architect: "I'm going to need you to split the payment service into five different services, with each service containing the functionality for each type of payment we accept, such as store credit, credit card, PayPal, gift card, and reward points, to provide better fault tolerance and scalability in the website. It shouldn't take too long."
Developer: "No way, man. Way too busy this iteration for that. Sorry, can't do it."
Architect: "Listen, this is important and needs to be done this iteration."
Developer: "Sorry, no can do. Maybe one of the other developers can do it. I'm just too busy."

Students, write your response!

Escenarios de negociación

Architect: "Hi, Sridhar. Listen, I'm in a real bind. I really need to have the payment service split into separate services for each payment type to get better fault tolerance and scalability, and I waited too long to do it. Is there any way you can squeeze this into this iteration? It would really help me out."
Developer: "(Pause)…I'm really busy this iteration, but I guess so. I'll see what I can do."
Architect: "Thanks, Sridhar, I really appreciate the help. I owe you one."
Developer: "No worries, I'll see that it gets done this iteration."

Mantenerse actualizado

Mantenerse actualizado

https://www.thoughtworks.com/radar

Mantenerse actualizado

DZone Refcardz

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https://dzone.com/refcardz

RAP

Kahoot + Pares

Pasos siguientes

- Actividades finales.
- Requisito del curso: Google Cloud Developer + Blockchain.

Balance del curso

¿Qué me gustó del curso?

¿Qué fue lo que **no** me gustó del curso?

¿Qué se me facilitó del curso?

¿Qué resultó difícil del curso?

Students, draw anywhere on this slide!

Créditos

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