

Architectural kata



Prof. Paolo Ciancarini
Corso di Architettura del Software
CdL M Informatica □
Università di Bologna

"How do we get great designers? Great designers design, of course."

Fred Brooks

"So how are we supposed to get great architects, if they only get the chance to architect fewer than a half-dozen times in their career?"

Ted Neward

Agenda

- We give the rules and the tasks
- You work in groups
- Each group presents its proposal
- All vote

1. Split in groups 2-3 people
2. Take 40 minutes to create an architecture
3. Present your architecture to the class
4. Be prepared to defend your ideas
5. Ask questions to the other teams

Preparation

The first step is to assemble your project team. There are only a few rules regarding the composition of your team:

- Make sure you're sitting a little distance from any other project team.
- None of you will really need a laptop. The point of this exercise is not to spend the entire time looking stuff up on StackOverflow or on Google/Bing/Yahoo.
- Procure supplies: pens and paper should suffice

Get your goal

- Get one randomly from
www.architecturalkatas.com or
www.nealford.com/katas/index.html
- Your choice must be unique
(all groups work on different systems)

Work

- Ask questions to the instructors
- Focus on **non functional** requirements
- Identify stakeholders and concerns
- Use one or more context diagrams
- Make and clearly define assumptions about the technologies
- Make sure everyone's ideas are used

Presentation

During this phase, your team will present to the rest of the class, or will listen to other groups' presentations. If you are presenting, you must...

- **... present a vision of your proposal to the rest of the class.**
Remember that "brevity is the soul of wit", and keep the presentation to a speedy minimum. The Moderator can describe the requirements of the project to the rest of the class if necessary, and will speak with the customers' voice during your presentation if required.
- **... answer questions from the others about your proposal.**
Remember, these are questions about the project, not about you or your overall technical skills. try to remember that these are not personal assaults, but attempts to find the holes in your thinking that you'd rather be found *before* the project ships.

Listening to a presentation

- If you are listening to the other groups, then your job is to ask questions of the project team currently presenting.
- Please try to keep the questions constructive, but feel free to openly question any choice or decision that you think might not have been carefully examined or thought out.
- Remember that project teams may assume anything about a technology they don't know well, so long as that assumption is clearly spelled out; if they assumed something that you know to be false, by all means inform them of that, but bear in mind that someone else in the room may have different experience with it than you, and keep an open mind.

Voting

After each project team has finished their presentation, then we move to the voting phase. You will each individually give the project team a vote:

- **Thumbs up:** You thought they nailed it. They had answers for all of the obvious questions, they had chosen tech that at least seems credible and feasible, and they have a basic vision.
- **Thumbs "meh" (out to the side):** You thought they missed a few things, enough to make you a bit uncomfortable that they really have a clear vision of what they're trying to build. They forgot some key questions, they forgot some important aspect
- **Thumbs down:** You thought they missed it, badly. They made major assumptions that you think had no validity to it. They really bungled the job, and you would never want to work on this project.
- The project team departing the stage chooses the next project team

References

- www.architecturalkatas.com
- blogs.tedneward.com/post/architectural-katas/
- www.nealford.com/katas/index.html
- blog.adrianbolboaca.ro/2013/01/architectural-kata/

Questions?

