# Architectural Diagrams / Effective Sketches

**Session 1** (1 hour) – **Intro and initial attempt at scenario**

1. Explain benefits of diagrams – what value do they add – **10 minutes**
   1. Makes the system easy to understand
   2. Contains information the code alone doesn’t
   3. Allows new people joining the team to get up to speed a lot quicker
   4. Enables you to identify risks
2. Outline the scenario – **5 minutes**
   1. Imaginary system?
   2. Existing system?
   3. System the developers are currently working on?
3. Ask participants to team up into groups of 2 or 3 and draw some architectural diagrams – **45 minutes**

**Session 2** (1 hour) – **Critique of diagrams & introduction to types of diagram**

1. Go round in groups and review diagrams – **15 minutes**
   1. 3 good and bad things about each diagram
   2. Ask them what they think is useful and not useful about each other’s diagrams
2. Now explain the different types of diagram – **45 minutes** (15 minutes per type of diagram)
   1. Context – shows the systems
      1. Shows the system from the highest level – what is it (will it be)?
      2. Shows where the system fits into the overall context
      3. Services it depends on (internal & external)
      4. Consumers of it (end users, staff, etc)
      5. Helps dev understand where this project will fit in (or does fit in)
      6. Non-technical people can also make sense of these
   2. Give some examples of systems that might be shown on a context diagram
   3. Containers
      1. Zoomed in from the context view
      2. A more technical diagram
      3. Shows the containers the system is made up of
      4. How the containers interact
      5. Helps developers understand
   4. Give some examples of systems that might be shown on a containers diagram
   5. Components diagram
      1. Shows you have thought a little how it might be implemented
         1. N-Tier
         2. CQRS

**Session 3** (1 hour) – **Second attempt by teams and risk analysis**

1. Ask the teams to have another go and draw the diagrams – **45 minutes**
2. Ask the teams to identify risks using their diagrams – **15 minutes**
   1. Post-its on their own drawing for 10 minutes
   2. Post-its on other people’s drawings for the next 5 minutes
   3. Stick them on the drawings with post-it notes
3. Review the diagrams again and ask what they think this time – **15 minutes**
   1. Ask them if they genuinely see value in their sketches
   2. Do they agree with the benefits outlined at the start?

## Questions to ask them

* How do you ensure each of the functional requirements are met?
* How have you ensured each of the non-functional requirements have been met

## Critiquing the diagrams

## Materials

* Flip charts or big whiteboards – maximum of 4 per group
* Marker pens
* Post-it notes
* Camera to take photos
* Printed scenario/requirements sheets
* Help sheets for each type of diagram