Escuela de Ingeniería Informática
Universidad de Oviedo

ON THE ROLE OF A SOFTWARE ARCHITECT

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1. WHY DO WE NEED DESIGN?

PLAN

How a new feature affects old ones

ONGOING TASK

Not only done at the beginning

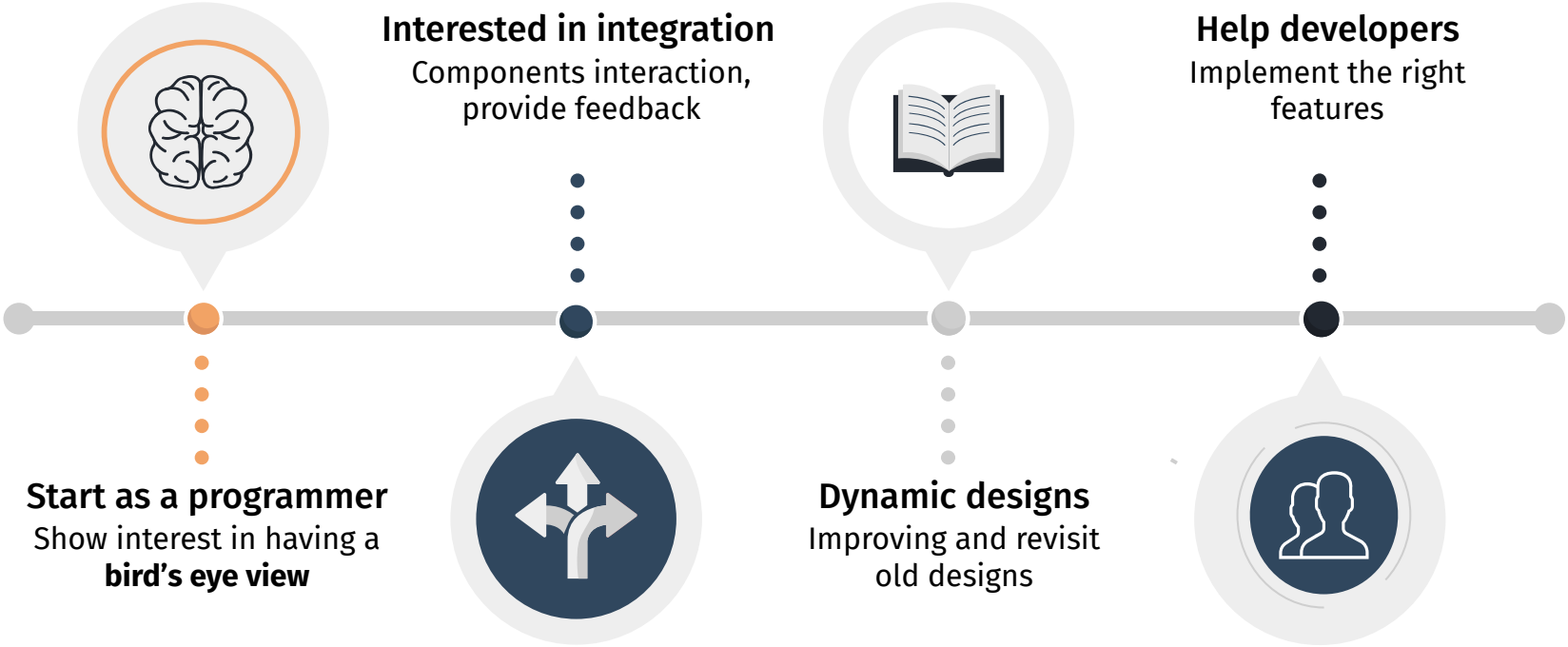
PREVENT

Code breaking when adding a new feature

COLLABORATION

All development team should be involved

2. HOW DO YOU BECOME A SOFTWARE ARCHITECT?



3. SKILLS OF A SOFTWARE ARCHITECT

SOFT SKILLS

- People skills
- Person that everybody comes to for help
- Good listener + mediator
- **Translate between technical and non-technical**

HARD SKILLS

- Focused on the technical and design skills

Most architects lack soft skills, but they can learn both

4. CHALLENGES OF SOFTWARE ARCHITECTS

TIME
Not taking enough time to design

CONSTRAINTS
Not-negotiable, one of them: **quality**

NOT BEING LISTENED TO
Team starts coding too fast instead of designing

TIME ON DOCUMENTATION
It should be quick and clean

5. PROBLEMS OF NOT HAVING A SOFTWARE ARCHITECT

NO PLANNING

· Technical debt
· Less organized

GONE TOO SOON

· Lose continuity
· Lack of ownership and pride

WATERFALL

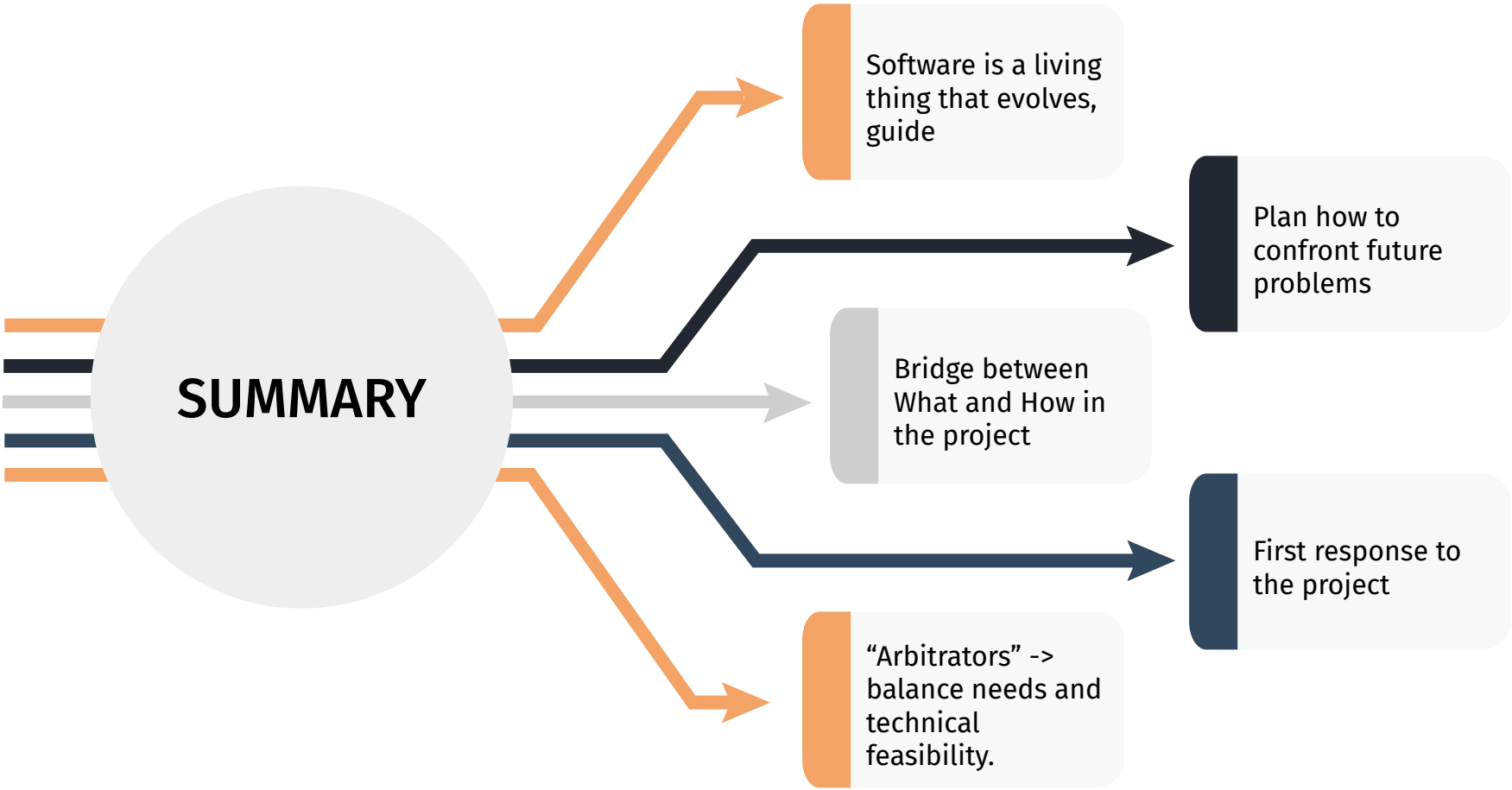
· Role of architect was clearer
· Were involved

AGILE

· Less need for architects apart from initial design

CRUCIAL

· Must be involved through entire cycle


SUMMARY
Software is a living thing that evolves, guide
Plan how to confront future problems
Bridge between What and How in the project
First response to the project
“Arbitrators” -> balance needs and technical feasibility.

THANK YOU FOR YOUR ATTENTION!

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