

## Research Proposal Review

### 1. Which of the methods described in this week's reading would you think would suit your purpose?

**Mixed Methods Approach** would be most appropriate. It allows a combination of qualitative insights (e.g. industry needs, architectural challenges) and quantitative validation (e.g. performance benchmarks, modularity improvements).

### 2. Which data collection methods would you consider using?

- **Document analysis** of existing microservices implementations in the construction domain.
- **Semi-structured interviews** with software architects or developers in construction-related tech.
- **Case studies** of current or past projects in the construction industry.
- **Surveys** targeting IT professionals in the construction domain to gather broader input.

### 3. Which required skills will you need to have or develop for the chosen project?

- **Software architecture and design** skills, especially in microservices.
- **Qualitative research techniques**, such as interview transcription and thematic analysis.
- **Quantitative analysis skills**, such as using benchmarking tools or evaluating software performance.
- **Knowledge of construction industry workflows**, to contextualize the technical design.
- **Research and academic writing** skills, to structure and present findings effectively.