

Candidate Technical Toolkit

Software Developer



Why this toolkit and what is it?

This is a toolkit that can help you in preparing on specific topics that are important at Thoughtworks, in particular when facing the technical interviews.

We want to stress out that *it's not mandatory to read this document*; it's addressed to candidates who feel they need extra preparation and would like to get some more knowledge/details before the interviews on some topics.

Table of contents

Architectural Design	<u>05</u>
Domain Driven Design, Domain modelling and Object Oriented Design	<u>06</u>
SOLID Principles	<u>07</u>
Functional Programming	<u>08</u>
Tech Skills in Pairing Interview	<u>09</u>
Object Oriented Programming and Test Driven Development	<u>10</u>
Soft Skills in Pairing Interview	<u>11</u>
How to prepare for this interview	<u>12</u>

Table of contents (continued)

Collaboration Skills	<u>13</u>
Collaboration in teams and beyond	<u>14</u>
Consulting Skills	<u>15</u>
Consulting Skills	<u>16</u>
Tips on how to prepare for an interview	<u>17</u>
Before the interview	<u>18</u>
What type of questions can I be asked	<u>19</u>
If the interview is remote	<u>21</u>



Architectural Design

At Thoughtworks we value a lot Agile Architecture, which is a set of values, principles and collaboration that support the active and evolutionary design and architecture on a system. We have listed in this section some topics that are related to this.



Domain Driven Design and OOP

Domain Driven Design and Object Oriented Programming can help handle complex behaviors when building software and in Thoughtworks they play a very important role.

Here you can find a very easy and direct explanation of the concepts behind OOP:
[Object Oriented Programming Concepts](#)

**Get more details
about [Domain
Driven Design and
Domain Modeling](#)**

**Some more
information on
[Object Oriented
Design](#)**

**Another article:
[Principles of OOD](#)**

Solid principles

In object-oriented computer programming, SOLID is a mnemonic acronym for five design principles intended to make software designs more understandable, flexible and maintainable.

- [Design Principles](#)
- [Solid Principles](#)
- [12 Factors App](#)



Functional Programming

Functional programming is the process of building software by composing pure functions, avoiding shared state, mutable data, and side-effects.



[Podcast on
functional
programming](#)



[Series of articles
on functional
programming](#)



Technical Skills in the pairing interview

During the pairing interview we assess how you code but most of all, how you face a problem and how you try to solve it. Here are a few concepts that can help you before coming for the pairing interview.



OOD, test pyramid and Test Driven Development

These are topics that are important for us when coding.

The Principles of
Object Oriented
Design

Testing Strategy

Test Driven
Development



Soft Skills in the pairing interview

Pairing can promote communication, thoughts alignment and knowledge sharing. Here is some information on what you can expect to be assessed on.



Soft Skills in the pairing interview

Our colleagues Raul and Jonathan have written [a very interesting article](#) about it.

Check pairing preparation deck for more tips regarding pairing interview.





Collaboration Skills

In Thoughtworks, collaboration skills are very important. For us, collaborating in multi-functional teams enables us as a company to move and innovate in our projects.



Collaboration in teams and beyond

Here is an
article about
collaboration
in teams and
how we do it at
Thoughtworks

It's also true
that we don't
always agree
with people

How to foster
collaboration
skills

How to
collaborate
successfully



Consulting Skills

In Thoughtworks we work with clients and for this reason it's very important to know how to collaborate with external parties (even if, let's be honest, we're on the same team!).



Consulting Skills

How to
communicate
effectively

Tips to make
yourself understood

Delivery with value:

How do you
measure value?

Exploring
value-oriented
delivery



Tips on how to prepare for an interview

Going through an interview process can be very challenging at times. Here are some tips that can help you in easing the nerves or just to have a better perspective on what you can expect.



Before the interview

Typically the buildup to an interview is much more nerve-racking than the interview itself. We know that.



It's easier said than done but try to get some good sleep the day before your interview.



Browse through [Thoughtworks website](#) and other resources to get informed.



Got some questions after your research? Write them down and have at hand for the interview: it will help you to ask everything that's important to you.



You don't have to worry about dress-code. Come as you are, be it with sporty clothes, a suit, a dress, a pair of jeans... What's important is that you feel comfortable!

What type of questions can I be asked?

During interviews, you can be asked different types of questions but the ones that we feel are better to get prepared are the following:

- **Behavioural questions:** This type of question includes "Can you give me a specific example of how you did that?" and "What were the steps you followed to deliver that result?" The purpose is to objectively measure past behaviors as a potential predictor of future results.
- **Opinion questions:** This type of question includes "What would you do in this situation?" and "What is your greatest weakness?" The purpose is to subjectively analyze how you would respond in a series of scenarios.

What type of questions can I be asked? (Continued)

- **Competency questions:** This type of questions includes "Can you give me a specific example of your leadership skills?" or "Explain a way in which you sought a creative solution to a recent problem you needed to solve." The purpose is to align your past behaviors with specific competencies which are required for the position.
- **Case questions:** This type of question includes problem-solving questions ranging from: "How many gas stations are there in Europe?" to "What is your estimate for the global online retail market for books?" The purpose is to evaluate your problem-solving abilities and how you would analyze and work through potential case situations.

If the interview is remote

A remote recruitment process can be much more demanding than a presencial one. So what could help?



Internet connection: it seems obvious but it isn't: having a good internet connection really helps. It can be a very bad experience if your screen freezes up and there is delay in the conversation.



Listen actively and take into consideration that **there could be a slight delay in the conversation** so when you finish talking about a concept, leave a small amount of time for comments.



Install the scaffolding that has been sent to you on your laptop so that you can be ready for when the interview starts.



Check out [tips from a candidate](#) who did interviews remotely and got hired at Thoughtworks.



[Here](#) you can find more suggestions on how to prepare for remote interviews.

Do you have any questions?

Do not hesitate to contact your Recruiter!

We are all here to set your up for success and we'll be happy to answer any questions :)

